

ONLINE MEDIA AS GATEKEEPERS
IN THE 2016 PRESIDENTIAL DEBATE

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at the University of Missouri-Columbia

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Master of Arts

by
YIZHU WANG
Professor Barbara Cochran: Project Supervisor

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Chapter 1: Introduction

The 2016 presidential election is the first American presidential election that I have been able to experience in person. When both parties started organizing debates in early fall in 2015, it interested me to see how debates delivered messages about candidates' policies and personalities. Not only are those debates important, media coverage also set up the agenda for the audience. I decided to take a close look at what role journalism plays in the election from the angle of a specific debate, the third Republican debate on CNBC.

Conducting this research has been a great experience for me. I've watched the rise and fall of candidates, and have been able to connect the dots into a big picture while seeing how stories flow. The Republican debate on CNBC was only the third debate of the party in this long journey.

At that time, there were some general questions among media and the broad audience, which I was personally curious about. Would Donald Trump stay on top and win the nomination finally? Among many non-traditional candidates from outside the Washington mainstream, who else could stand out and how? Media shed most lights on Jeb Bush, Ben Carson and Marco Rubio in the CNBC debate, but now, all have opted out and only three candidates survived the fierce competition.

My study in the Missouri School of Journalism prepares me to complete the research. Out of my passion in understanding how Americans choose their top leader, I attended the school's Washington, D.C. program and spent a semester in the political heart of the country. In the weekly seminars organized by Professor Barbara Cochran, we

met experts from various backgrounds in politics. Mike McCurry, one of our speakers and the co-chairman of the Commission on Presidential Debates, said that from his experience, voters usually do not decide their choice by watching debates. Through the debates, the audience tend to find more reasons to support candidates for whom they are already in favor.

As McCurry said, bias is so ubiquitous that it is even hard to determine that bias exists. Is it also the case for journalists? Many courses that I took in the school led me to think it through. We discussed the standard of good journalism in a Mass Communication seminar instructed by Professor George Kennedy, and looked at how journalism should enhance democracy in Philosophy of Journalism taught by Dr. Ryan Thomas. In Qualitative Research Method, Professor Cristina Mislán taught us how to generate valuable and practical research questions and how to find out the answers.

In this research, I use the framework of gatekeeping to assess how journalists reinforce or reduce gatekeeping bias in the coverage of the CNBC debate.

Another sequence to which I am dedicated is digital journalism. Traditional media and digital media have their own advantages and disadvantages. The transition from printing to digital media is not only about tools and platforms, but about how news is produced. I study printing and digital journalism with an emphasis on business and economics reporting. We got precious opportunities to practice our knowledge in real-world publications. I spent 18 months in Missouri Business Alert as a staff reporter. It is a complete digital publication on campus covering business news in the state. Professor Randy Smith launched this platform in 2012 for students in business journalism. I worked

with the managing editor Michael Stacy and learned hands-on skills in digital news production.

Thanks to my experience in Missouri Business Alert, I adapted quickly to the internship in Scoop News Group. I wrote about how technology is changing education in America and legitimate issues under this topic. Editors Corinne Lestch and Wyatt Kash introduced me to various types of stories, encouraged me to generate ideas, and taught me in every step of digital news producing, from crafting ledes and structure of web stories, to promoting on multiple social media platforms.

I learned from the internship about day-to-day operations of a digital publication. This experience provided me insight in the research, where I compared the media coverage on the CNBC debate between traditional media and digital media. I collected 156 stories about this specific debate from The New York Times and USA Today, representing traditional media, and Politico and Slate, representing digital media.

I used discourse analysis and tried to answer the question: Between coverage of traditional media (USA Today and The New York Times) and of online media (Slate and Politico), what are the differences in genres, discourses and styles?

In this report, I employed all the work that I have completed in the D.C. program, including field notes of the internship, and analysis and findings of the report.

Chapter 2: Weekly Field Notes

Week 1 (Jan.25)

I'll be working with Scoop News Group until late April or early May. Founded in 2008, it's a small business with about 25 people. The group focuses on how policymakers are utilizing technologies to influence the communities nationwide. It has three branches: FedScoop, StateScoop and EdScoop. FedScoop and StateScoop reported federal and local government IT news, including cybersecurity, technology policies and tech innovations.

I work for EdScoop, writing web stories about educational technologies, ed-tech policies and STEM education, referring to Science, Technology, Engineering and Mathematics education. So far, I wrote about a White House hearing on the Obama Administration's Every Student Succeed Act, ed-tech issues discussed in the State of Union, and a White House initiative promoting Wi-Fi in public libraries across the country. I also attended the Conference of Mayors to report a speech of the new Acting Secretary of the U.S. Department of Education. Many tech giants also have special initiatives in education, such as Google, Apple, Microsoft, AT&T, etc.

It's very interesting to experience how a fully digital media operates. Reporters here come from legacy media of all kinds, including NPR, BBC, New York Daily News and local TV stations. They didn't necessarily deal with websites before came here but have profound experiences in reporting and storytelling. When reporters edit my stories, they told me how to polish the lede and the nut paragraph. They teach me to keep precise and wisely organize the story flow. The techniques and standards in the journalism part are kept and I'm glad to utilize what I learned from Mizzou.

Practices in Missouri Business Alert help a lot as both of newsrooms are fully digital.

I'm expected to write an article every day.

You can check my stories here: <http://edscoop.com/people/yizhu-wang> It will keep updating as long as I publish new stories.

The weekly seminar is about polls this week. Peter is very enthusiastic and professional in polling. It's very impressive that he went much further than numbers and facts, and elucidated the logic between questions and behind the phenomenon. Many of his examples are very easy to understand. For example, when he talked about the real problem of candidate Hillary Clinton in the election, he asked us to think a role that Clinton might be if we knew this person, and pointed out that like in many focus groups that he held, many of these roles are not close to people, like a stern mom, a teacher, or a boss. Also, he combined data and interviews from focus group together to analyze the election. Data provides a big picture, but votes are about decisions of diverse individuals. Interviews can tell the dynamic of people's feeling about candidates and parties. That's also a good methodology for news storytelling.

In terms of the professional project, I haven't really started my research as I just settled down in D.C. I'll begin with looking at articles this week.

Week 2 (Feb.1)

This week, I wrote a profile of the president of Hispanic Heritage Foundation, Antonio Tijerino. He received an award for his efforts on closing the digital divide for minority youth. The award itself is not a story, but his personal passion and experiences are really impressive. I read lots of his previous blogs and interviews before our phone

call. He was a bit emotional when he heard that I asked about his immigrant experience when he was young. It was a tough experience for him and became his incentive to help more kids like him as a career. I felt that our communication turned to more personal and human after this question. He talked about his kids and philosophy, and many details added colors to the article.

Another story that I learned a lot from is about an educational tech product. I attended a webinar where companies introduced their products. I noticed a very interesting classroom collaborative system, and conducted an interview with a school principal who has applied this system in her school. She talked about some projects that students completed through this system. It's always good to hear real experiences from people. Companies always say that they are making social impact, and customers can tell how much the impact is.

I'm also trying to utilizing social media to promote the stories. It works well so far. Sources' retweeting helped a lot thanks to their network.

I found it difficult to pitch stories as I don't have sources. This is how we deal with it now: the reporter forwarded me press releases and links to webinars. I do some research and then we discuss if there are stories and what angles I can take. I also sorted out a list of sources by reading previous stories, so that I know what organizations generated surveys or held events of our interest. Reporters are very generous to share their knowledge with me.

I started my research analysis this week. I read many previous projects through the library's database and noticed that a professional project really needs information from the industry backed by solid evidence, like interviews or articles. I feel that I need to

add what I learn in internship and in seminar into my analysis, and shouldn't stick to my current proposal too rigidly. I attached a timeline, structure of the analysis component and this week's research note.

In the seminar, we had an intriguing discussion about the landscape of political reporting in D.C. I didn't know many of the rules that my classmates confronted when they needed access to departments. I'm glad that we can exchange our knowledge in the classroom.

We also visited the Newseum, the new museum of journalism and news. The museum is not only about history, but also records how journalists explore the new frontier of creativity and innovation. It is also a collection of intelligence.

I saw the *Missourian* in the Newseum's daily collection of front pages.

Week 3 (Feb.7)

Today is the first day of Chinese New Year. I just spent a very warm weekend talking to families on the phone. Happy New Year to you as well!

I reported an event organized by Center for American Progress this week. It was about gender equality in computer science education. While tech companies are blamed for lack of diversity, Google researchers and advocates think that more girls should be encouraged to take computer sciences courses, and it can also solve the problem of lack of workforce in tech industry. I visited Google's D.C. branch for the event, took notes, took pictures and talked to people.

<http://edscoop.com/diversity-in-the-computer-science-industry-starts-from-diversity-in-classroom>

Another story is about a newly released database developed by a NPO Blended Learning Universe. I spent some time understanding how it works, and talked to the director and a tech person. We usually promote stories on Twitter. This one is retweeted by the education section of Cisco and Lenovo, which I'm happy about because it gives me more followers.

<http://edscoop.com/what-works-and-what-not-in-blended-learning-check-out-this-directory-to-see-others-lessons>

I also wrote about a UNICEF funding project. The director talked to me in an interview about how it works, and explained some jargon. I learnt a lot from this story. UNICEF requires that the projects must be “open-source” and “working prototype.” I felt that I understood these two concepts and searched online about what exactly these words mean. But my supervisor still encouraged me to ask them to explain again, in case that they have different definitions. I find it very important because I shouldn't assume. Preparation is definitely important but I must make sure everything is accurate and correct through interviews.

<http://edscoop.com/unicef-is-funding-open-source-ed-tech-products-all-over-the-world>

For the seminar, we visited Bloomberg and talked to Angela Keane. She said that what happened in White House is implausible for business reporting, because businesses need to know the dynamics of power. She taught us many hands-on skills, which I feel that I can apply tomorrow in the office. The includes thinking about questions of logics behind facts, and that a reporter should know what she is planning to write when news breaks.

I watched the two debates before the primary this week. The two Democrats emphasized real issues and methods to solve them. In my research so far, I've found that when media highlight debate points, the items on top of the list are always the most controversial and dramatic ones, but not necessarily the most insightful ones.

I feel that the battles between Republicans are too fierce and cruel that they don't have enough room to elucidate their policies in detail. They have to create drama sometimes to draw attention, or they will be ignored by the media.

The more I look into presidential debates, the more I understand how American democracy shapes the society. It's dynamic, and everyone has to make responsible decisions.

To be honest, I dislike GOP candidate Donald Trump. I feel that I just can't accept his manners, such as disparaging women, or dismissing Jeb Bush in the debate. But I see that Trump has ardent supporters. It sounds horrible to me because under this political structure, Trump has the chance to be the next president. If that's the case, that means that the majority of voters might hate immigrants and be unfriendly to China.

But when I read more articles and think about it from a broader view, I feel that it's so important to hold my own position, and at the same time, to think from other points of view. If everyone is being responsible, the whole system will be balanced. Everyone is different, but difference doesn't mean exclusiveness or hostility. It's so important to understand and respect the difference between genders, races, social classes and even countries and ideologies.

Week 4 (Feb. 14)

This week I wrote a profile story about the new executive director of a national educational technology organization: State Educational Technology Director Association. What I learned from it is that I sometimes focus too much on anecdotal stories and miss basic details of a person. I did a follow-up interview to fill in information like how the new director will work – remotely or move to the headquarters, and her age. I'll pay attention to it. Going beyond the story itself is needed, but it should not be too far.

<http://edscoop.com/north-carolina-edtech-leader-tracy-weeks-to-lead-setda>

Also, I wrote a story about a recent published report, which assessed the four main online assessments broadly used by over 30 states. It was a difficult article for me because the report is very academic and there are many terminologies about standards of state tests. Before the media call, I spent time reading through the report and writing the first draft. My editor read that version and suggested me not to focus only on the report, but to think from a broader view – what other test developers, educators and state policymakers can take away from this report. It took me two days to finish this story, including waiting for the author getting back to me.

<http://edscoop.com/online-assessments-meet-academic-standards-but-editorial-issues-founded>

As I'm getting more familiar with the edtech beat, I'm feeling more comfortable with communicating with sources and finding out stories from press releases and events. I hope that I can get more long-form stories.

We met Mark Hamrick with Bankrate.com and Sarah Spreitzer with the UM System. Mark gave us useful suggestions as a young journalist. He talked about personal brand, and suggested we write blogs regularly to show our passion and expertise in a

field. I don't have such a blog, but I plan to build one. It doesn't necessarily mean that I've taken in the knowledge unless I can express my own understanding of it.

Sarah's presentation is very interesting to me as we don't have professional lobbyists in China. I noticed that Sarah's title is "director of federal relations for the University of Missouri system." It occurred to me that I saw similar titles before in the Google event. The mission of Google's D.C. office is "government relations." I didn't think much about lobbying before. I just realized that lobbying for the tech giant must be one of the important jobs of "government relations."

Regarding the progress of research, I did analysis on Slate's coverage of candidates' performance on stage in the CNBC debate. I attached the research note here.
Week 5 (Feb. 21)

We took Monday off for President's Day – a bonus for working in D.C. -- so I only worked three days this week.

This week, I wrote my first long-form story. It's about a school district in Pennsylvania where they created a system of gaming courses. President Obama promoted computer science education very hard in the recent years. He kicked off a Computer Science For All Initiative on last month. This school district was recognized in the White House's press release of this Initiative for their efforts on building up computer science courses.

The assistant superintendent I talked to mentioned data like dropout rate and the rate of economically disadvantaged students. I checked all of them on the website of state department of education (do you mean federal). It helps a lot because it turns out that the

new curriculum system didn't reverse the dropout rate as much as the assistant superintendent said. They're indeed getting better, but data help me to keep fair.

I also checked the academic performance of the school. The state used different metrics in different years. So I can't put any comparable data in the article. It reminds me of a hot issue in the education reform that state agents should make data understandable to the public. They can't just pull the numbers up onto the websites but don't care if the numbers make sense.

We didn't have seminar this week. I went to see a rally near the Washington Monument about Peter Liang's case this Saturday. Chinese American gathered and protested that former NYPD officer Peter Liang was treated as a scapegoat in the conflict between white police officers and black victims. I didn't know exact details about the case, so decided not to take a stance. But I think this case deserves more attention among various groups.

I attached my research note this week. I analyzed Politico's coverage on candidates' performance in the debate. Politico is the only one among the four publications I'm looking at which sheds considerable attention on Trump. Many of the stories don't seem newsworthy to me.

Week 6 (Feb. 28)

This week, the firm held one of the most significant events of the year— Adobe Digital Government Assembly. Adobe in partnership with our firm, invited people working in the government and tech companies discussing cybersecurity, government IT and entrepreneurship in this field. It was really interesting to me. Some impressive speakers include the former director of National Security Agency, CFO of FBI, Art

Director of CIA, and an outsourcing digital strategy company of GSA. The topics were so cool. Agents from the government talked about how they transformed the communication methods with the public through websites and applications. Tech companies Adobe and Amazon talked cloud services and strategies that they've provided to government agencies. In a speech, the former CIA director said that he was "kind of with Apple" regarding the recent contention between Apple and FBI.

The editorial team lined up with guests for broadcasting interviews and profiles. I was helping with the social media team. I took pictures with a camera for social media. The android camera can connect to Wi-Fi and Bluetooth. After I took the picture, I can directly publish it on Twitter through the application in the camera.

It was also a great opportunity for me to learn about the business model of the Scoop News Group. Editorial stories are part of products of the firm. They call it business-to-business news. In the case of EdScoop, we have a very specific audience who care about ed-tech news. They can be policymakers, startups and businesses in this field. The firm holds events like this and webinars to promote discussions and make profits to support the company. Involvement of business doesn't hurt the news part from what I observe now. The news team and the event team are separated, and I feel that articles on websites don't necessarily to recast the only form of stories. Events and panels are other forms to enhance discussion and spread information.

We visited the Foreign Press Center this week. I'm glad to know this great resource. I was thinking that now I know where to look for information if I work for a foreign media in the future. Our host, Mary Katherine Ream, mentioned that they don't censor what reporters write before the story gets published. It reminds of a discussion this

week with my editor that if I should show the quotes to sources for fact checking. At the Missouriian, we were asked to do fact check. But my editor suggested me not to. I'm glad that she trusts my reporting and writing. I should be more confident in my judgment as well.

Week 7 (Mar. 6)

I attached my research note here. This week I analyzed The New York Times' coverage on the contention between CNBC and Republicans. Here is a brief plan for the following six weeks:

- March 13, finish the analysis on Slate and Politico's coverage on this specific contention,

- March 20, finish the analysis on informational news of the four publications,

- March 27, aggregate all findings and finish the conclusion part.

We met Donna Leinwand from USA Today in the seminar this week. "Hurricane Donna" is an amazing reporter. She got this nickname because she worked in the disaster beat in Miami Herald and hurricanes were so common there. In war zones, she is professional and has a clear boundary of her role as a reporter. She is considerate – never created burdens for other people and never took away victims' resources like food. She is detail-oriented and well-organized – went to beauty parlors for local news on the ground. She keeps decent (not a good term; explain this) under pressure, uncertainty and even fear. She is adaptable – adjusting to local culture quickly and dropped stereotypes, like attending the local wedding. She is just so great.

She is professional but not cold-blooded. She respects, and cares about lives, and felt depressed for the victims. All the emotions were transformed to strong sense of

responsibilities as a journalist but not sadness. Her experiences make me think that how significant it is to be a good person with conscience and sense of responsibilities in daily lives. Some characters won't show up until extreme conditions, but humanity could save lives in emergencies.

This week is productive.

White House organized an event to promote STEM education. Students can visit federally funded labs for free to see how researchers and scientists in the STEM fields work.

<http://edscoop.com/white-house-kicked-off-weekatthelabs-to-promote-stem-education>

I wrote a story on digital tests with the help of my editor. I got to talk to an expert at the last minute before we scheduled to publish the story without talking to him. It felt great that we made it.

<http://edscoop.com/next-gen-assessments-are-designed-for-all-report>

My editor brought me to a public hearing in the Department of Education, about updates in the new education law. She wrote this article and I helped in interviews and transcription.

<http://edscoop.com/edtech-groups-put-pressure-on-elected-officials-to-fund-tech-in-essa>

I also attended an event where school tech leaders talked about what threats they've met in student data breach, and what lessons they've learned. They talked about many interesting cases and it's a long story written in few hours. It's bad that I got a correction in this article. I made a mistake on the number of students in a school district. My editor was nice to me but it was definitely a lesson to me that double-check is very important, especially for a long story finished in a short time.

<http://edscoop.com/hackers-find-school-districts-weak-spots>

I also wrote two short stories on edtech products. It's like curations. The challenge is to understand the technologies and explain them succinctly.

<http://edscoop.com/realtime-cloud-tech-driving-boon-in-edtech-apps>

<http://edscoop.com/math-cms-lets-students-learn-on-their-own-pace>

Week 8 (March 13)

Time and location of my oral defense have been confirmed. It will be held at 1 p.m. April 26, Tuesday, at Gannett 179D. It would be great if you could mark it on your calendar. I attached my updated research note here.

This week we visited NPR. I thought that diversity must be a matter of the operation of a media company, and it is about equal quality in employment. But Keith's suggestions were very practical to journalists. He reminded us to keep in mind that we are limited by our experiences, so that we must think about own bias and limitations, and try to avoid them by sourcing and interviews. Diversity is not a strategy of a company, but a pursuit of every single person.

I was wondering whether promoting diversity is getting easier or harder these days. Though the society looks more liberal on issues like LGBT and gender, there are still lots of contentions between people of different interest and different races. In our J-school, I didn't meet many African-American professors and classmates. I really look forward to the symposium next week. And it's great that we met Keith right before the event and start to think about this issue in advance.

This week in the newsroom, SXSWedu became the main agenda. It was not easy to find news and even sources because most of the organizations were busy with their events in SXSWedu.

I did a political story about a protest in NYC. Advocates were not happy with the governor's budget on education.

<http://edscoop.com/advocates-and-parents-in-new-york-demanding-more-school-aids-in-the-states-budget>

A White House agency promoted deeper learning through the micro-credentials.

<http://edscoop.com/contest-encourage-educators-to-share-experiences-in-classrooms>

Education Secretary John King initiated a series of events to advance Career and Technical Education.

<http://edscoop.com/john-king-kick-off-national-challenge-to-advance-career-and-technical-education>

I helped in social media in another event held by our firm and Hitachi, [Hitachi Social Innovation Summit](#). It was about how government agencies utilize technologies in social media, to promote internal management and communication to the public.

I published photos with quotes on our official account @fedscoop The event flows very quickly. I was able to sit in front of the stage, so got more photos published.

Week 9 (March 20)

For the research, I've almost finished the whole discourse analysis, and will pile up conclusions this week, which means that the first draft will be ready in the next update. I look forward to writing the conclusion part very much, because I've found many interesting characteristics in the analysis and can't wait to connect the points into a

complete picture to show how digital media and traditional media performed differently in reporting the CNBC debate.

I think that the symposium last Thursday was very successful. I'm glad to listen to such a panel in diversity because as far as I can recall, there is only one African-American classmate in our graduate class. I was confused if it's just a normal situation in America. But KOMU reporter Morgan Young talked about how they operated the association for African-American students, and this was kind of new to me.

There were many emotional moments when alumni shared their own stories about how they felt pressure on campus decades ago because they were the few "chocolate chips" in the school. What impressed me most is Morgan Young's point: black students on campus are actually tired of the term "diversity," because they don't want to feel different. They just want to do good stuff. They're normal students, and everyone should simply treat them equally, but not specialize them. Their situations should be the same as anyone else on campus, but not slogans in campaigns or protests.

Also, many guest speakers said how social media surprised and confused them. Tim Tai said that the video on social media made him famous over night. He had over 9,000 followers on Twitter now but he was concerned if he looks interesting enough to meet followers' expectations.

This week in the newsroom:

I attended an event in the D.C. office of Microsoft on Thursday about STEM education. It was very interesting to hear examples about how manufacturing companies are hungry for computer science students.

<http://edscoop.com/computer-science-promotes-real-world-skills-beyond-panel>

Researchers found that most of the edtech companies aim at improving achievement performance in math and literacy, but ignore the social and emotional skills:

<http://edscoop.com/social-and-emotional-learning-needs-more-attention-from-edtech-stakeholders>

This is a story about a digital platform where the U.S. Department of Education provides information to students and parents about universities, especially those for-profits. Fake information of universities could mislead parents and seriously interrupted students' career path. For example, Missouri Tech suddenly shut down last summer without notifying students.

<http://edscoop.com/education-department-scrubs-closed-schools-from-college-scorecard-adds-caution-flags-to-others>

And also, while the bipartisan Congress is struggling in confirming the new Supreme Court nominee, lawmakers confirmed the education secretary nominated by Obama, which is seen as a rare compromise.

<http://edscoop.com/senate-confirm-john-king-as-the-u-s-education-secretary>

Week 10 (March 27)

I have finished the first draft of the analysis component. I attached the document in this email. The first part was discourse analysis on specific stories, and then I have a list of findings in the second part. Please throw suggestions and questions at me. I still have one month until my oral defense at April 26. Will try my best to craft it and would really appreciate your help!

I checked the requirements on professional projects. It seems that I also need to aggregate my weekly reports, evidence of work completed, and evaluation of my

internship. As I can sort out these materials by myself and you've already many of those materials, I'll add them after I wrap up my internship on April 21.

For the seminar, Chris Hamby taught us many hands-on skills in the lecture. It was interesting to hear how he changed his role as a reporter from the Center for Public Integrity to BuzzFeed, as the style of the two publications seemed so different. He said that interviewees might be less cautious when hearing that the reporter was from BuzzFeed, because it didn't sound like a place where reporters would make them look bad. But as Chris said, reporters pursue truth, no matter who they work for.

This week in the newsroom, I did some stories about how edtech is making an impact on school districts, and reported on a hearing held by the House. The Congress listened to representatives of parents, researchers, advocates and state tech leaders to assess the pros and cons of blended learning.

California elementary school sees reading gains with blended learning program
<http://edscoop.com/blended-learning-tool-improve-students-reading-skills-in-california-elementary-school>

Edtech startups can compete for investments
<http://edscoop.com/join-your-peers-of-edtech-startups-in-village-capital>

Congress seeks to update student data privacy law
<http://edscoop.com/congress-seeks-to-update-federal-law-to-protect-student-data-privacy>

Curriculum Associates CEO wins edtech award
<http://edscoop.com/executive-of-edtech-company-recognized-in-the-annual-edtech-digest-awards>

Teachers can control students' iPads with new Classroom app

<http://edscoop.com/apple-release-new-app-for-classroom-collaboration-on-ipad>

Week 11 (April 3)

I just compiled all the documents needed for a professional project and submitted to my committee chair, Professor Barbara Cochran. According to the school's guideline, we'll work together to edit it and I'll send the final version to you a week before the oral defense at April 26. Really appreciate all of your help and patience!

This week in the newsroom, I interviewed Ted Dintersmith, executive director of a documentary Most Likely to Succeed, in which he and the director envisioned an education system without tests and accountability built upon project-based learning.

<http://edscoop.com/documentary-explores-project-based-learning-to-boost-innovation>

<http://edscoop.com/producer-of-film-shares-views-on-education>

I also interviewed a superintendent in a school district in San Jose, Calif. The school won a competition and will receive about 200 Chromebooks as an award. The school is located in an underserved community and many students don't have access to computer at home to do assignments, so these Chromebooks will help these students out.

<http://edscoop.com/california-high-school-raised-fund-for-edtech-by-crowdfunding>

Last Tuesday, my editor brought me to a conference in Baltimore, Md. Bringing leaders in cyber security in higher ed institutions. We met chief information or security officers from universities all across the country, including Cornell, Columbia, Wisconsin, James Madison and Georgetown, among others. The organizer was not sure whether media were allowed to cover this event. But we showed up in Baltimore and negotiated with them directly. They finally let us in and we had a very good conversation with the guests.

<http://edscoop.com/faculty-and-students-could-make-troubles-for-cyber-security-in-higher-ed-institutions>

I also did a story about a recent survey. Researchers found that 45 percent of students perceive themselves as “highly digitally literate,” but only 14 percent of faculty would agree.

<http://edscoop.com/faculty-and-students-disagree-on-each-others-level-of-digital-literacy-survey>

I've talked to my supervisors and the internship will end on April 21, so that I can have few days to go back to Columbia for my oral defense.

Week 12 (April 10)

We visited the newsroom of CBS this Sunday, and watched how producers and directors worked together to producing an episode of Sunday morning show Face the Nation. I noticed that although it's a live show, the core of it is far more than the 60-minute program that the audience watch on television. Every one has tons of work to do prior to that, from pitching story ideas and researching contexts of a certain topic, to reaching out to guests and pre-taping. What we've seen in 60 minutes is actually the whole team's work in a week.

Also, the atmosphere in the studio during the broadcasting was so exciting. In the seminar on Friday, we discussed that there were too many advertisements the live show targeting the audience, especially from companies like GE or defense corporations. I noticed that in the studio, advertisements were necessary breaks. Directors and producers needed to confirm the order of graphics that planned to display for the last time, and it

gave them room to communicate and remind each other of something that need improving in the last section.

This week in the newsroom, I covered an edtech conference in Washington Hilton with my editors. It was organized by Consortium for School Networking, known as CoSN, one of the largest national networks of education technology leaders.

In one session, a researcher from the Smithsonian Institute introduced an online learning tool that they established for K-12 educators and students, which allowed the public to use digitized materials in the collection of 19 museums of the Smithsonian Institution. I caught the speaker and interviewed him and his director after the presentation.

<http://edscoop.com/build-your-exhibition-in-smithsonian-learning-lab>

I wrote a story about another session. A director of an Indiana virtual school provided tips for designing online courses.

<http://edscoop.com/tips-for-designing-an-online-course-from-a-nextgen-leader>

I also wrote a profile about a teacher who was dedicated to promote technology in rural Wyoming.

<http://edscoop.com/travis-eldridge-tech-integration-specialist-helps-connect-students-in-rural-wyoming>

I did a short piece about a cyber security summer camp held by Vermont military college Norwich University.

<http://edscoop.com/vermont-military-college-offers-cyber-security-summer-camp-for-high-school-students>

Week 13 (April 17)

We had a great visit to the investigative unit of the Washington Post this Friday. We met Steven Rich and Amy Brittain. Steven analyzed data for stories ideas and big pictures. As he said, he might only be able to contribute one sentence to a story, but that sentence is usually the highlight that everyone can remember, because it is supported by hard and concise numbers. Amy investigated in a more old-school manner – checking police records and business records, but she also did amazing stories. Both emphasized the importance of reporting. Talking to people is the best way to get the investigation started, and readers tend to see personal stories and what the numbers actually mean.

It's also amazing to see the intimate relationship between reporters and their editors, including Jeff Leen. Jeff encouraged us to try in various things and not be afraid of failures, so that we'll know what we're really good and passionate about.

For my internship, I did a story on how libraries serve students and the communities with digitized contents and tools these days.

<http://edscoop.com/libraries-transform-from-quiet-reading-rooms-to-digital-hubs>

I also wrote about a broadband consortium purchase in New Jersey, where the state's education department and 145 schools strike deals to slice broadband costs by \$89 million and boost broadband capacity over three-and-a-half years.

<http://edscoop.com/new-jersey-consortium-purchase-of-broadband-drove-down-the-internet-price-for-schools>

Another noteworthy event event in social media this week is the last White House Science Fair hosted by the Obama Administration. Obama invited young kids who had their own inventions or research in the field of science, technology, engineering and mathematics to the White House, as a promotion to STEM education, which he has

advocated for a long time.

<http://edscoop.com/president-praises-students-stem-projects-at-white-house-science-fair>

The last story I have this week is an incoming update of Microsoft Windows and Office 365, the flagship products of the tech company. The new version will feature many tools especially for educators and students.

<http://edscoop.com/microsoft-to-release-new-educational-services-in-summer>

Chapter 3: Evaluation

In the Washington, D.C., program, I worked four days each week for EdScoop, and attended seminars on Friday. Both of the experiences were rewarding.

For the weekly seminars, we met at least 11 guest speakers from newspapers, radio and broadcasting. They work in different positions representing the broad landscape of the Washington media environment. They included journalists in business, military and investigative reporting in D.C., experts in the election regarding polls and presidential debates, public relation experts working for the government, and a lobbyist working for the University of Missouri System.

I learned about how to be a better journalist from their speeches. I remember that Mark Hamrick with Bankrate.com talked about his transformation from an AP reporter covering various beats to a business journalist in D.C. He suggested us to build up our personal brand and develop deep connections in a beat.

Mary Katherine Ream with Foreign Press Center introduced how international reporters can look for sources and story ideas through their services. We also visited newsrooms of National Public Radio, CBS News and Washington Post.

I have also seen the spirit of them as journalists. Donna Leinwand with USA Today talked about her experience in covering the Iraq War, where she had to balance complex emotions and be professional as a reporter. Chris Hamby, an investigative reporter with BuzzFeed and formerly with Center for Public Integrity, talked about his Pulitzer-winning story regarding black-lung issues among coal miners. They care about and fight for ordinary people, which drive them to go far.

For my internship, I spent a rewarding 14 weeks with EdScoop, a branch of Scoop News Group in Washington D.C. I learned much from my supervisors Corinne Lestch and Wyatt Kash. Both have abundant experiences in traditional newspapers, and are now exploring new digital opportunities.

Scoop News Group provides business to business news to an interested in information technology in government agencies. The team I worked for, EdScoop, focused on how technology is changing the landscape of education. I interviewed school districts' leaders, advocates, entrepreneurs and government experts who are dedicated to advancing day-to-day teaching through technology, promoting equality for underrepresented groups. I visited technology corporations' D.C. offices for Microsoft and Google, and reported on projects and research related to computer science education and workforce. I also attended five national conferences in Washington D.C. and Baltimore, Md., respectively, about government IT or edtech, meeting top technology leaders in universities and K-12 school districts.

I got solid training in reporting and writing under deadline. I had an average of one story published daily. The publication aims at adding values to readers through original reporting or research, but not simply aggregating what has existed on the Internet.

I can tell how passionate my editors are about journalism. They applied skills and standards that were set up in legacy journalism into digital news. They taught me how to craft attractive and informative ledes and nut graphs, how to make the story flow better and wrap up the stories.

Here is the evaluation written by my supervisor Corinne Lestch.

April 15, 2016

To Whom It May Concern:

Yizhu Wang has proven herself to be an exceptionally competent, curious and motivated reporter during her internship at EdScoop. She was willing to take on any challenge for a story, whether that meant interviewing a documentary filmmaker or networking with college security officials. Yizhu has been a quick study, absorbing feedback and constructive criticism in order to improve her writing. She is invested and passionate about journalism, and it was a pleasure to work with her. Please feel free to contact me if you have any further questions.

Corinne Lestch

Reporter, EdScoop

corinne.lestch@edscoop.com

914-522-0217

Regarding the research, I kept a close eye on the election coverage. Political reporters and experts in the presidential election who presented at the weekly seminar provided many valuable insights about the election. I made a plan at the beginning of the semester, categorizing the stories in my sample pool into three sections. Every week, I completed the analysis on one section, so that I kept pace to finish the analysis component at the end of March. I had sufficient time to think my results through without any rush.

I enjoy analyzing the media coverage all the way. It showed me how the largest democracy in the world worked, and what the role of journalists was in this process. Reading election news and op-eds made me think about the standard of good journalism. Journalists have to have a stance under some circumstances, but the arguments in stories should be responsible and reasonable.

Chapter 4: Evidence of Work

I worked with EdScoop, a branch of Scoop News Group for the semester. It was a great experience and I got a chance to dive deeply in the education technology industry, known as edtech. My stories vary from different fields, including new education law Every Student Succeed Act, and new Education Secretary John King, edtech entrepreneurship, state and federal leadership in edtech, and events held by tech corporations like Google and Microsoft. I got dedicated help from my supervisors Lestch and Kash.

In this section, I include a list of the titles of my story, and the full-text stories that I published on EdScoop.com.

1. Wiring your school district: outsource or DIY?
2. Kids should be exposed to STEM at earlier age – officials
3. NYC approves \$30 million deal with Amazon
4. Texas school districts explore blended learning
5. Students can 'ink' their tablets with new Microsoft feature
6. Obama praises students' STEM projects at White House Science Fair
7. New Jersey school consortium bags big broadband savings
8. School libraries are transforming into digital hubs – report
9. Vermont military college offers cyber camp for HS students
10. Tips for designing an online course from a NextGen Leader
11. Build your own exhibit in Smithsonian Learning Lab
12. Travis Eldridge helps connect students in rural Wyoming

13. Producer of film “Most Likely to Succeed” shares views on education
14. Documentary to screen at CoSN challenges traditional education system
15. California high school turns to crowdfunding for Chromebooks
16. Higher ed CISOs try to enforce security policies on campus
17. College faculty, students disagree on each other's digital literacy levels – survey
18. Curriculum Associates CEO wins edtech award
19. Congress seeks to update student data privacy law
20. Edtech startups can compete for investments
21. Computer science expertise boon for manufacturing industry
22. Edtech companies should develop kids' social, emotional skills – report
23. Education Department scrubs closed schools from College Scorecard, adds
“caution flags”
24. Senate confirms John King as education secretary
25. King approved by Senate committee for top education post
26. Contest offers prizes to educators for sharing practices in classrooms
27. Advocates slam New York governor's proposed education budget
28. Interactive math platform lets students learn in 'bursts'
29. Real-time data network aids evolution of edtech
30. Hackers find school districts' weak spots
31. White House kicks off #WeekAtTheLabs to promote STEM education
32. Publishing association opens Center for Innovation & Digital Learning
33. Experts offer tips to protect student privacy
34. Pennsylvania district uses gaming to help kids stay in school

35. Computer-based state tests align to Common Core – report
36. North Carolina edtech leader Tracy Weeks to lead SETDA
37. Blended learning site offers new tools to find resources
38. Diversity in computer science starts in classrooms – panel
39. Edtech tools can help developing countries with UNICEF money
40. Students bounce ideas off new classroom collaboration system
41. 3 students among recipients of White House computer science award
42. Nicaraguan immigrant wins digital equity award for exposing minority youth to tech, coding
43. Nanotechnology initiatives aim to get big reaction from kids
44. Calling all edtech ventures: applications open for AT&T Aspire Accelerator
45. School, public libraries should be reimagined as digital hubs – officials
46. Educators, advocates hope Obama talks about STEM education at SOTU
47. Tech over teachers? Parents, educators express concerns with ESSA
48. Parents struggle to monitor kids' Internet use with tech - study
49. California elementary school sees reading gains with blended learning program
50. Education groups pressure elected officials to fund tech in ESSA
51. Computer-based tests can help at-risk students – report
52. Tech groups eager for ESSA guidance as King prepares to go before Congress
53. For John King, personal struggles fuel passion for equity in education

Wiring your school district: outsource or DIY?

School districts can now get dark fiber through the federal E-rate program, which allows them to lease unused fiber from a provider and construct their own lines to transport data.

By Yizhu Wang

APRIL 25, 2016 9:00 AM

<http://edscoop.com/wiring-your-school-district-outsource-or-diy>

Fiber optic cables connected to Washburn University's core router. (Aaron Hall/Flickr)
School districts can now get federal dollars for two types of fiber for their networks, which could make technology directors rethink how to wire their facilities.

Districts like Miami-Dade County Public Schools, the fourth-largest in the country with 350,000 students, use lit fiber – faster and more stable than copper networks, especially with regular hurricanes. But starting this year, the Federal Communications Commission added dark fiber as an eligible service in the E-rate program, which subsidizes telecom services for schools.

While schools using lit fiber outsource the network operations and maintenance to service providers like AT&T or Verizon, for dark fiber, school districts lease unused fiber from a provider and construct their own lines to transport data.

“When you have a dark fiber network, you basically have an unlimited supply of bandwidth,” John Harrington, CEO of Funds for Learning, said in an interview. “If you need a faster network, you don’t have to go to the vendor that is leasing you that fiber optic network. You just simply change the flashlights on either end. That is really an advantage.”

The alternative solution was added as an eligible service on E-rate to "expand access to low-cost fiber," according to the FCC.

But school districts still typically use lit fiber for their networks, according to a recent report by CoSN and the Berkman Center for Internet and Society at Harvard University. Possibly one deterrent to using dark fiber is that schools would need to provide more information on their E-rate applications to receive funding for those services, according to the report. The agency that administers E-rate recently had to extend the deadline because of mountainous and often confusing paperwork.

Miami-Dade has used the lit fiber service provided by AT&T for the last two decades to connect the 400 schools and administrative buildings in the district. According to a survey from CoSN, 26 percent of districts still used copper as of 2013.

“Fiber is obviously more stable than [copper],” said Douglas Galbraith, supervisor of infrastructure and technology support at the district. “It is very reliable, and we really haven’t had that many issues.”

Galbraith added that outsourcing the work helps him balance many other responsibilities.

“Our core business in the school district is education,” he said. “Therefore, we didn’t want to get too tied up with the transport mechanism. So we let the professionals, AT&T, do that for us.”

AT&T’s lit fiber service includes installing the network, activating the service and maintaining the network and bandwidth speed. They also monitor and test the functions, and repair any problems with the network, said Kevin Carman, the director for education marketing at AT&T.

For school districts, the lengths of the fiber loops tend to be larger based on geographic characteristics. Miami-Dade currently uses six-strand fibers at 250 Mbps in each location. The monthly median cost for Florida school districts to access internet is currently \$7 per Mbps, and \$1,761 per connection in a 1 Gbps Wide Area Network, according to a report from EducationSuperHighway, an organization that tracks broadband use and price.

Schools have more wiggle room negotiating costs with lit fiber vendors, said Harrington. Schools can also save money by telling vendors to slow down the network during summer and other breaks. But schools that run their own networks with dark fiber often just pay for one-time equipment costs, and contracts to lease the fiber usually have lower monthly costs.

“It’s less about the technology, but more about the individual schools’ needs,” said Harrington. “Like what their adoption curve looks like [and] how quickly they’re moving to a digital classroom.”

Now that dark fiber has been added to the list of options for E-rate, a program that started in 1997 and recently got a major overhaul, schools have more leverage when deciding how to run their networks.

Dark fiber “wasn’t really as much needed when [the FCC] wrote the rules 20 years ago,” Harrington said. “They really didn’t expect that somebody else could come in and just put the fiber optic connection between two buildings.”

Kids should be exposed to STEM at earlier age – officials

The White House hosted a symposium on early STEM education on Thursday, where panelists suggested that parents play a bigger role in encouraging their kids.

By Yizhu Wang and Corinne Lestch

APRIL 21, 2016 5:30 PM

<http://edscoop.com/parental-guidance-and-brain-science-supports-stem-at-early-ages>

Parents need to play a bigger role in getting their children – especially girls – involved with STEM at an early age, federal officials said Thursday as they announced a slew of new initiatives, grants and partnerships.

The White House Symposium on Early STEM brought together entrepreneurs, educators and researchers to figure out how science, technology, engineering and math can be introduced to children whose brains are still in the early stages of development.

“This work on early STEM experiences is not just about ensuring a strong academic foundation,” Education Secretary John King said at the event. “It’s about the joy that comes in learning about and coming to understand how the world works.”

Organizations that are designing STEM curricula and launching new outreach and educational programs include Nickelodeon, the Bay Area Discovery Museum in Sausalito, the Early Math Collaborative at the Erikson Institute in Chicago, Girl Scouts of the USA and the Jim Henson Company.

Education Secretary John King spoke at the the White House Symposium on Early STEM on Thursday.

The Department of Agriculture is also partnering with NASA to create modules for students to teach them about astronaut training.

Debbie Sterling, founder of GoldieBlox, which makes toys for young girls to develop engineering skills, said parents have major influence in shaping their kids' interests and proclivities.

“It’s funny, I think of my mom,” she said. “When I told her I was going to major in engineering, she said, ‘Why?’ These are subtle messages that you hear from your role models early on that start to make it less and less accessible to you.”

She added that girls show just as much talent and interest in playing with construction toys and video games as boys do.

"I'd noticed that boys would take construction toys, build them up as high as they could and usually smash them against the wall," Sterling said. "When I saw girls playing with them ... they put something together and wanted to know the narrative and the context. They'd want to know who the characters were and what the point is – are we fixing something or solving a problem? This idea of storytelling really fascinated me."

Sterling said she was advised to target high school-aged girls with her company, but she decided to stick with earlier grades, before kids become more impressionable and pressured to play with certain toys.

“The research that I did actually shows that kids start to form their gender identity around [ages] 3 and 4,” Sterling said. “This is when boys and girls are figuring out what’s appropriate for a girl and what’s appropriate for a boy. I actually think that is where the problem starts.”

Researchers said studying how infants' and toddlers' minds work is important, so that educators can adjust educational curriculum and more fully develop certain areas of kids' brains.

“I think we all know that children in a very early period learn like sponges, but we can go beyond what our grandmothers know,” said Patricia Kuhl, a professor studying brain science at the University of Washington.

Marina Bers, a professor at Tufts University, said that more research could also help educators figure out whether computer science is actually a language or a science.

“We’re making an assumption that computer science goes with STEM, but, there is another hypothesis that might say computer science has something to do with language,” she said.

The Department of Education and Department of Health & Human Services are expected to release guidance later this year on the role of technology in early learning.

New Jersey school consortium bags big broadband savings

New Jersey education department and 145 schools strike deal to slice broadband costs by \$89 million and boost capacity over three and a half years.

By Yizhu Wang

APRIL 12, 2016 1:00 PM

<http://edscoop.com/new-jersey-consortium-purchase-of-broadband-drove-down-the-internet-price-for-schools>

A consortium of 145 K-12 schools in New Jersey proved that when it comes to buying broadband, banding together pays off.

Led by the state Department of Education, the group succeeded in negotiating a deal that will save the schools \$89 million over the life of a three-and-a-half year contract — and provide 2.5 times more bandwidth for the schools.

“We created this partnership to just give [school organizations] a chance to come together and make one large buy, and drive down the overall price,” said Laurence Cocco, director of the Office of Educational Technology in New Jersey Dept. of Education. “The concept was to use cooperative purchasing to combine statewide buying power.” He shared the experience in a webinar held Monday by the State Educational Technology Directors Association.

Cocco said the consortium will expand to include more districts, as well as charter and private schools in the fall of 2016. Within three years, the department plans to create a

statewide network including the majority of schools to purchase internet services cooperatively.

The initiative began in July, 2014, when Middlesex Regional Educational Services Commission, a public education agency and partner of the project, issued a request for proposals to Internet vendors. Thirteen vendors submitted their bids and were able to choose the regions where they have geographic strength to provide services. Five of them ultimately secured consortium contracts including Comcast, Lightpath, Affiniti, DNS and Sunesys.

By last April, 145 school organizations signed up for the \$20.6 million consortium contracts, which started in July 2015 and will last three and a half years, resulting in total savings estimated at \$89 million. The average Internet capacity of participating schools increased to 718 Mbps in fiscal year 2015 from 284.4 Mbps in 2014, according to the state education department.

Also, Cocco estimated that there are about 248 additional districts, charter schools and private and non-public schools which were able to benefit from the contracts. Knowing the price and bandwidth offered in the consortium contracts, those schools were able to negotiate better deals with their providers, according to Cocco.

In general, the contracts made the marketplace more transparent, and drove down the average Internet price for all K-12 schools from \$31.50 in 2014 to \$14.22 per Mbps per month in 2015, while participating schools benefited most. Various schools still required additional services beyond the consortium's contract deal. "For instance, if they were looking to increase their bandwidth and purchase Internet service, but they want to add voice over IP, that would be off-contract," Cocco said.

The project was a result of the partnership between the state education department, a consulting firm Dellicker Strategies, as well as Middlesex Regional Educational Services Commission and Bergen County Technical Schools.

"I can't emphasize enough the importance of the partnerships and collaborations," Cocco said. "It wasn't something that we could have done on our own."

The broadband initiative is a part of the state's three-step project in K-12 digital learning called New Jersey Digital Readiness for Learning and Assessment Project-Broadband Component. As a result of the other two projects, the state now has a digital learning portal called NJTRAx. Also, 98 percent of students across the state now take PARCC online.

Producer of film 'Most Likely to Succeed' shares views on education

Ted Dintersmith talked to EdScoop before his documentary screens at CoSN's annual conference.

By Yizhu Wang
APRIL 1, 2016 12:00 PM

<http://edscoop.com/producer-of-film-shares-views-on-education>

Ted Dintersmith, executive producer of the documentary, "Most Likely to Succeed," doesn't think schools are succeeding.

The former venture capitalist-turned-education philanthropist explored how project-based learning can be a better approach to education, rather than having kids answer multiple choice questions or checking off a list of content covered in class.

The film, which is screening at CoSN's annual conference next week, follows ninth-grade students at High Tech High School in San Diego, Calif.

Dintersmith sat down with EdScoop for a Q&A, which has been edited and condensed, about his views on the state of education in the country.

EdScoop: Is technology helping or hurting education?

Ted Dintersmith: I think it's both. I think a lot of what's going on in education technology is just misguided. For example, an app that you look at on your tablet or on your smartphone is the equivalent of a flashcard that helps you memorize atomic numbers of the elements. Why would I want to memorize the atomic number of copper on a smartphone? What I have to do is say, 'Siri, what is the atomic number of copper?'

So, much of the edtech that schools in our country use today is the equivalent of electronic flashcards. It's [about] definitions and low-level math procedures. Nobody has to do these anymore because they are always at your fingertips. The thing is not to teach obvious content more efficiently through technology. What we need to is to understand that technology makes so much of what kids are doing in school irrelevant, rather than doing things that are far more valuable and important.

ES: Why do you think standardized education doesn't work?

TD: It's a lot easier to design a test. [For example], 'Question number 17: What is the atomic number of copper?' A much harder and more interesting test is something that requires thinking, and the problem is that you can't standardize it. You can't really do anything in scale that values and appreciates creativity in the answer.

Somebody says, 'Yes you can.' I say, just look at the sorry history of the SAT essay questions. They tried for dozens of years, and they finally gave up. Even something as simple as writing an essay on a topic turned out to be very difficult, because they insisted that they had to take the essays and turn them into a specific number – that means you're going to be graded. You have to ask the question, 'Why did the College Board feel

compelled to reduce the kid's essay to a number?' Why didn't they just let the [college] admission officers see the essays? I think the answer is, if you just let the admission officers see the kid's essay, written without any adults' help, it would highlight how much of a college essay is actually done by the parents and coaches.

ES: What kind of education did you want your kids to have?

TD: My son is 19 years old and taking a gap year. He's doing concert photography. He is learning how to do it by himself. That's the thing – kids learn so much on their own. Part of the learning is by accessing things online. You can go online and look at a bunch of different people's perspectives on how to do it. If you look at his work, nobody needs to grade it. You just look online, and you either say, 'I love them, or I like them, or they're okay, or I don't like them.' So what he doesn't need to do is a laborious course on photography on Coursera that replicates a tedious course in lecture halls on photography.

ES: What can we do to fix the problems you have perceived in education? Who should lead the way?

TD: This is a system issue. I think the good news is, so much can be done locally. What we really push for is schools to just step back and say, 'What are we supposed to accomplish with our kids?'

What we've said is, 'How can we take the grossly obsolete education model, and make it better by more testing and more accountability?' That is, in a nutshell, U.S. education policy. It's failed in every way that you could have imagined. It will continue to fail because it misses the point. The point is that what teens need to be good at today has nothing to do with what they need to be good at in the last century. The more we test, the more we hold our teachers accountable to it, and the more we're actually hurting our kids and teachers.

I love teachers. They're really dedicated. We all too often blame teachers for what's going on in school without knowing, behind the scene, the twists and demands that we place on the teachers.

Read more about Dintersmith's documentary.

Documentary to screen at CoSN challenges traditional education system

Ted Dintersmith, executive producer of the documentary, "Most Likely to Succeed," will screen his film April 4 at the CoSN conference.

By Yizhu Wang
MARCH 31, 2016 5:00 PM

<http://edscoop.com/documentary-explores-project-based-learning-to-boost-innovation>

How can students deal with real-world challenges after spending years in school answering multiple choice questions?

For Ted Dintersmith, the answer is simple – they can't.

The executive producer of the documentary, "Most Likely to Succeed," and co-author of a book with the same title, Dintersmith addresses the achievement gap that he says is caused by a dangerous testing culture, where students are pushed to score high marks on exams rather than solve problems.

“When I thought about what I can do, I really did believe that a powerful and emotional film has the ability to make an impact on people,” Dintersmith said in an interview with EdScoop, days before his film screens at CoSN's annual conference in Washington, D.C. He will participate in a Q&A discussion afterwards with Sheryl Abshire, chief technology officer of Calcasieu Parish Public Schools in Louisiana.

The film shows examples of project-based learning, where educators design personalized learning projects and then guide students, who typically work in teams. One case study shows students at High Tech High School in San Diego, Calif., comparing hypotheses for the rise and fall of ancient civilizations, and working together to build a "wheel" that shows different trends and characters in history.

A still from the film "Most Likely to Succeed." (Screenshot/Most Likely to Succeed) Dintersmith, a father of two and former venture capitalist helping fledgling entrepreneurs, said there is a perilous disconnect between what schools are teaching and what employers are looking for in their staffs. The current education system was built on an emerging manufacturing industry decades ago, he says, when employers mainly looked for assembly line workers.

“If our schools in 10 years are still pretty much like what they are today, then I don't believe society will survive,” Dintersmith said.

Dintersmith is now in the middle of his so-called “No States Left Behind” campaign. He has toured 48 states since September, showing his film and visiting schools, government agencies, homeless shelters and rehabilitation centers to talk about the state of education.

He aims to provoke people to think beyond their perceptions about what school can look like, and encourages them to form their own “Committee of Ten,” which established the standard curriculum that is used today. But unlike the one formed by the National Education Association in 1892, the new committee should help kids build character, Dintersmith said.

“I don’t just present my views [and] the film and give books away,” Dintersmith said. “I also learn from people everywhere about what the challenges are for them and what’s working for them.”

In the meantime, Dintersmith is steadily making his way through the rest of the country. He plans to visit Alaska in April followed by Hawaii, and expects to turn his travel experiences into another book.

He is also supporting two other documentaries, "She Started It," about women entrepreneurs, and "They Call Us Monsters," about juvenile incarceration.

California high school turns to crowdfunding for Chromebooks

Overfelt High School in California won about 200 Chromebooks for students to check out of the library through GoFundMe's Chromebooks Challenge.

<http://edscoop.com/california-high-school-raised-fund-for-edtech-by-crowdfunding>

By Yizhu Wang
MARCH 30, 2016 6:00 PM

Ninth-grade students using Chromebooks at Overfelt High School. (Courtesy of Vito Chiala)

Students will soon not just be able to borrow books from the library at Overfelt High School in San Jose, Calif.

They will also be able to check out Google Chromebooks after winning a national fundraising contest sponsored by GoFundMe, a crowdfunding website for everything from medical bills to college tuition to educational materials.

The Silicon Valley high school received donations of about \$13,000 from alumni, community members, current staff and students, and even anonymous donors. The school will purchase about 100 Chromebooks with the donations and some matching funds from GoFundMe, which is also giving the school another 100 of the laptops.

With the generous contributions, Overfelt's library will boast about 200 Chromebooks that students can check out and bring home. The school already provides laptops, PCs and about 800 Chromebooks in classrooms – but many students don’t have access to computers at home. Closing the "homework gap" has been a major issue for top associations and government leaders, who say that low-income students need access to broadband and Internet at home.

“Ninety-two percent of our students are at the federal poverty level,” Vito Chiala, the principal, said in an interview with EdScoop. “This will give them the ability to use their computers at home, so that they can complete their school work.”

Among 1,447 students enrolled in the 2013-14 school year, 1,325 were eligible for free or reduced-price lunch, according to the National Center for Education Statistics.

The GoFundMe Chromebooks Challenge kicked off March 8 with nine schools across the country competing for the tech swag. Within 15 days, more than 12,000 people shared the school's campaign page on Facebook.

Overfelt won the challenge by accumulating the most Facebook shares, and received the money to support the school's Chromebook purchase from about 180 people. GoFundMe still gave the other eight schools \$5,000.

Chiala was already familiar with GoFundMe – he made a few personal contributions on the website to support students paying for college tuition and trips. But this was the first time that Chiala got involved in a crowdfunding campaign for the whole school, and he plans to do more online fundraising in the future.

“It was pretty amazing how it generated funds,” Chiala said. “That was a really good surprise to have so much support.”

Most teachers and students use Google's applications, including email, calendar and Google Drive. Google's products make it easier for students to collaborate on their work and for parents to monitor their kids' learning process, Chiala said.

For example, using Google Docs, students and teachers can work on the same document at the same time, and they can see the real-time changes made by others as long as their devices are connected to the campus-wide high-speed Wi-Fi.

The school used to purchase software they had to pay to renew, but decided to switch to Google apps, which are cheap or free to use.

“We don't just look at the price in terms of the cost of the product,” Chiala said. “We have to look at the price to maintain the product and how useful it will be in the classrooms.”

Higher ed CISOs try to enforce security policies on campus

Chief information security officers and other IT leaders have to navigate, at times, confusing Internet activity from faculty and students on college campuses.

By Yizhu Wang
MARCH 30, 2016 12:00 PM

<http://edscoop.com/faculty-and-students-could-make-troubles-for-cyber-security-in-higher-ed-institutions>

CISOs discussed their challenges and successes of keeping college networks safe at the Cyber Security for Higher Education conference Tuesday. (Flickr)

BALTIMORE, MARYLAND – Sometimes, Internet searches by college faculty – even when it's for academic purposes – could threaten the network of the entire institution.

Robert Turner, chief information security officer at University of Wisconsin–Madison, found out the hard way when he and his team found that faculty had downloaded large volumes of inappropriate material – including pornography from websites in other countries – through the university's network.

It turned out that the professors and researchers had been collecting samples for a study about the correlation between pornography and rape rates. Though the download, in this case, was legitimate, the potential security risks and legal issues made the IT team very nervous.

“Here is how you do it next time: Tell us you’re going to do that [beforehand],” Turner recalled advising one of the researchers.

Robert Turner is chief information security officer at the University of Wisconsin–Madison.

Turner was among more than 10 university security officers gathered Tuesday for the first annual Cyber Security for Higher Education conference hosted by the International Quality & Productivity Center. During the intimate meeting, experts spoke to EdScoop about how to enforce the policies that prevent cyber attacks, data breaches and violations of privacy.

Many security chiefs agreed that written university regulations can hardly ensure people will follow them, an issue when it comes to enforcing cybersecurity policies. Regulations like the federal Family Educational Rights and Privacy Act tell people what to do, but aren’t clear enough about the consequences if people violate the rules, several IT leaders said.

“FERPA is there, but it doesn’t have real teeth,” said Joseph Lee, chief information security officer at Georgetown University. “I mean, no one has ever been sued, for example, for not following FERPA.”

Congress is seeking to overhaul FERPA, and lawmakers heard from parents, advocates and state tech leaders this month about how to adjust the federal law to accommodate new technologies in schools while still preserving students' privacy.

Some violations could be unintentional. For example, instructors might ask students to post photos of themselves online, so that the professors know what their students look like. It seems like an ordinary request, but it increases the chance for others to identify the students, and could be a concern for those who don’t want to be recognized.

“That’s an example of an unintentional breach,” said Matt Morton, chief information security officer of the University of Nebraska at Omaha. “It’s still under discussion in many states as to whether the picture is shareable.”

Turner said he is building a risk management framework for his Wisconsin school. In his proposal, he is looking for a balance between giving researchers autonomy to conduct their studies, and keeping them abreast of safe Internet protocols.

“I don’t write policies I know people won’t follow,” he said.

But Morton said strong policies should go beyond the necessary protocols to ensure that everyone on campus, from leadership to students, adjust their online decisions and behaviors.

“You have to set the policy as an aspiration, even though you know you’re not going to reach 100 percent compliance with that,” Morton said. “But if you don’t try, then you’re not going to get anywhere.”

IQPC is hosting its second annual Cyber Security for Defense Summit in June. For more information, visit www.CyberSecurityforDefense.com.

College faculty, students disagree on each other's digital literacy levels – survey

The survey by Videoblocks showed that 45 percent of students perceive themselves as “highly digitally literate,” but only 14 percent of faculty would agree.

By Yizhu Wang
MARCH 28, 2016 5:00 PM

<http://edscoop.com/faculty-and-students-disagree-on-each-others-level-of-digital-literacy-survey>

Students and faculty at higher education institutions don't see eye to eye when it comes to digital literacy, according to a recent survey from the company Videoblocks.

Among over 300 respondents to the survey, 45 percent of students perceive themselves as “highly digitally literate,” but only 14 percent of faculty would agree with that statement. Meanwhile, 49 percent of faculty thought that they were in the same category, while only 23 percent of students thought so.

Over 90 percent of faculty thought that using digital media in classes improved the learning outcomes of students, and about 75 percent of students said that multimedia helped them stay engaged in the curriculum. But faculty and students still confronted barriers to effectively implement digital media in class.

Lack of access, training and funding were among the “biggest frustrations with digital media in higher education,” according to the survey.

The analysis was conducted by Videoblocks, a company that provides online subscriptions to stock videos, graphics and music. The results showed that digital media help improve teaching and learning, but both faculty and students still need to learn how to incorporate audio and video materials in their classes. Students and faculty are also often confused about digital media copyright policies.

While 31 percent of students thought that they were very knowledgeable about copyright and fair use of digital media, only 5 percent of faculty agreed, and 23 percent reported that their students had no knowledge about this topic at all.

Respondents were split evenly between educators and students, and associated with more than 12 academic majors, including liberal arts, business, science and engineering.

About one-third of college instructors and one-fifth of students use resources provided by their institutions. Faculty and students mainly use resources from digital media license-based services like Creative Commons and online materials that don't require copyright.

Respondents also said that copyright could be confusing, and searching for relevant and downloadable materials was time consuming.

“I know I am uninformed about digital copyright,” wrote one of the respondents in the survey. “I am not sure how to learn more and where to find appropriate [digital media].”

Curriculum Associates CEO wins edtech award

Rob Waldron, CEO of education publishing company Curriculum Associates, won the EdTech Leadership Award from EdTech Digest.

By Yizhu Wang
MARCH 23, 2016 12:00 PM

<http://edscoop.com/executive-of-edtech-company-recognized-in-the-annual-edtech-digest-awards>

Rob Waldron, CEO of Curriculum Associates, a K-12 education publishing company, won the EdTech Leadership Award through the 2016 EdTech Digest Awards Program.

Curriculum Associates, based in North Billerica, Mass., provides both printing and digital materials for instruction and assessment in 11 categories, including Common Core, language arts, math and early childhood education. The company's products have helped 3 million elementary, middle and high school students across the county.

Waldron joined the company in 2008, and has a 20-year employment contract. Revenues have quintupled under his leadership, according to the company's website.

The EdTech Digest Awards recognize executives and entrepreneurs in the edtech field, as well as companies that advance education through technologies that revolve around academic gaming, blended learning and next-generation tools for assessment.

“The edtech sector has experienced tremendous growth in the past several years, and there is also tremendous quality of products and very talented people out there,” Victor Rivero, who oversees the program at EdTech Digest, said in a press release. “These honorees are among edtech's best and brightest.”

Congress seeks to update student data privacy law

The House Committee on Education and the Workforce heard from parents, researchers and state tech leaders about an update to FERPA.

By Yizhu Wang
MARCH 22, 2016 4:00 PM

<http://edscoop.com/congress-seeks-to-update-federal-law-to-protect-student-data-privacy>

From l to r: Rachael Stickland of the Parent Coalition for Student Privacy, Neil Campbell of the Foundation for Excellence in Education, Jane Hannaway of the American Institutes for Research and Robert Swiggum of the Georgia Department of Education testified before lawmakers Tuesday.

Federal lawmakers are intent on updating an education privacy law that hasn't been overhauled in more than 40 years – but they are unsure about how to go about it.

The House Committee on Education and the Workforce held a hearing Tuesday with state technology leaders, education researchers, parent groups and advocates, to gather information about how schools are protecting student data and the vulnerabilities that still exist. Legislators specifically addressed the Family Educational Rights and Privacy Act, which was established in 1974 and revised in 2012 to protect kids' emails and other means of online identification.

“Student privacy protections are woefully outdated,” said the committee chairman, Rep. John Kline, R-Minn. “Long before online learning tools and cloud-based computing systems were the norm, Congress passed the Family Educational Rights and Privacy Act. But that was 1974. A lot has changed since then.”

Just last year, a House subcommittee held a similar hearing about whether the existing law applies to most schools anymore. Advocates have argued that an update of the law is

long overdue as products from technology and software companies increasingly find their way into classrooms and pick up kids' data.

A technology official testified Tuesday that Georgia has seen positive outcomes of statewide efforts to collect and use data. Schools and districts collect student data, and the state then aggregates the information into a digital database called the Statewide Longitudinal Data System (SLDS).

If teachers want to learn about their students' academic backgrounds and performance, they don't need to dig through reams of papers, since they have the information "at the touch of a button," said Robert Swiggum, the deputy superintendent of technology services for Georgia's Department of Education.

Since SLDS was launched in 2006, the high school graduation rate in the state increased to 78 percent in 2015 from about 50 percent in 2009, Swiggum said.

Databases like SLDS can improve classroom efficiency, but parents don't always fully understand how the data dumps work. Rachael Stickland, co-chair of the Parent Coalition for Student Privacy in Colorado, said that parents should have the right to know why certain data on their children is collected, who it is shared with, what security protections are in place, and when the information gets destroyed.

"I think FERPA should require schools to tell parents how information is being used, and, certainly, at any point possible, the ability to have consent to opt out," Stickland said in the hearing.

"The term 'education records' gives parents a very false sense of assurance," Stickland said, adding that parents often don't know that sensitive information, like medical stats, disability records and criminal histories, is included.

Another law, the Education Sciences Reform Act, is also due for reauthorization. Lawmakers debated researchers' roles in protecting students' privacy when using their data for research purposes.

Dr. Jane Hannaway, a fellow at the American Institutes for Research, explained that when states give data sets to researchers, all the data are "de-identified" so that researchers are not able to figure out which specific individuals the data describes.

Many of the representatives agreed that research in education is necessary to improve practices in classrooms. But they stressed that educational research should take student data privacy into consideration.

"We're certainly not here debating the value of educational research," said Rep. Suzanne Bonamici, D-Ore. "But at the same time, we're very concerned about...the sensitivity of the data."

“With technology changing faster than policy, we really need to have a way to get the balance so that we safeguard privacy and make sure that we get the research that we need,” Bonamici added.

Edtech startups can compete for investments

Village Capital and AT&T is calling for edtech ventures to develop technology-driven solutions for students.

By Yizhu Wang
MARCH 21, 2016 6:00 PM

<http://edscoop.com/join-your-peers-of-edtech-startups-in-village-capital>

Companies like the Workers Lab, which provides financial resources and training to fledgling edtech entrepreneurs, is mentoring startup competitors. Emerging edtech companies are in high demand.

Village Capital, an organization that helps entrepreneurs get their businesses off the ground, and AT&T Aspire, the education arm of the telecom company, announced a program on Monday to boost edtech entrepreneurs in Chicago and Baltimore.

The three-month program, called Village Capital Education US 2016, calls for edtech ventures that offer technology-driven solutions to develop students' academic skills and help them get ready for careers. It will launch in June, according to a press release.

The program features three week-long workshops in which entrepreneurs can seek advice from mentors in their fields, and meet potential strategic partners and investors. Women and minority-led ventures are especially welcomed.

“Entrepreneurs play a major role in empowering student success and helping young people across the world prepare for the jobs of tomorrow,” Anne Wintroub, director of social innovation of AT&T, said in a statement. “Village Capital’s programs strengthen the entrepreneurial ecosystem in the US, and we’re thrilled to collaborate with them.”

Two winning companies among approximately 15 competitors will receive money from Village Capital’s peer-selected investment model. At the end of the program, participants will rank each other according to six criteria, including product refinement, team-building and financials. Village Capital will offer the top two peer-selected companies \$100,000 each in pre-committed investment.

Fifteen veteran investors and experts in edtech will comprise the advisory board, including Stacy Childress of NewSchool Venture Fund, Greg Gunn of Lingo Ventures, and Carmen Rojas of The Workers Lab.

Local startup incubators in Chicago and Baltimore will convene the program, including Impact Engine, 1871, LEAP Innovations and Towson University Incubator.

"Chicago and Baltimore respectively are growing cities and possesses rich opportunities for entrepreneurial innovation in the education sectors," Nasir Qadree, Head of Village Capital's Education practice, said in a statement. "Both cities are fully prepared to provide the best possible environment for entrepreneurs."

Applications, which will be reviewed on a rolling basis, are due on April 22.

Computer science expertise boon for manufacturing industry

Employers are looking for computer science skills, but not necessarily degrees.

By Yizhu Wang

MARCH 17, 2016 5:00 PM

<http://edscoop.com/computer-science-promotes-real-world-skills-beyond-panel>

From left to right: James Brown of STEM Education Coalition, Christine Scullion of National Association of Manufacturers, Constance Thompson of Society of Black Engineers and Cameron Wilson of Code.org. (Yizhu Wang/EdScoop)
Expertise in computer science is a crucial skill across more industries, including manufacturing — and experts say you don't need an advanced degree.

Instead, the ability to understand and apply STEM concepts in day-to-day work is now more attractive to employers, according to experts. Computer science and STEM education in K-12 schools, and more certificate programs in community and technical colleges, would help fill the skills gap.

"You don't need to be a lab researcher, but you need to understand basic skills in order to succeed," said Christine Scullion, director of human resources policy for the National Association of Manufacturers, said during an event at Microsoft's policy headquarters in Washington, D.C. Thursday.

Christine Scullion, of the National Association of Manufacturers, said the perception of manufacturing needs to change. (Yizhu Wang/EdScoop)

About 75 percent of manufacturers reported a moderate-to-severe shortage of skilled workers, and the dearth can cost up to 11 percent of revenue each year for a manufacturing company, Scullion said. The lack of workforce impairs productivity and puts a strain on human resources specialists to search for qualified employees.

Scullion said that the image of manufacturing, typically the mass producing of materials and goods, needs to be updated for the 21st century.

“Manufacturing doesn’t have the most positive public perception,” Scullion said in an interview with EdScoop after the event. “It’s not just working on the line. It’s automated tooling. It’s automated machining. All of these things require coding and computer science to get to them.”

For example, Caterpillar Inc., a construction machinery manufacturer, has developed electronic control modules on large mining trucks that have more than 500 million lines of software code. The computational power is similar to avionics on an Air Force fighter jet, Scullion said.

The National Association of Manufacturers also puts on something called "Manufacturing Day," a series of events across the country where manufacturing companies open the facilities to local students from high schools or colleges. More than 400,000 students and parents got involved in more than 2,000 events last year.

The nonprofit Code.org is also heavily involved in engaging students and families in computer science education — the organization has trained about 25,000 teachers so they can teach programming courses in local communities.

Cameron Wilson, chief operating officer and vice president at Code.org, said the attention around computer science through President Obama's new initiative and the Every Student Succeeds Act, which gives states more flexibility to advance specific programs, will hopefully expose more students and adults to the field.

“Now there is a chance to leverage all of that momentum by helping fund computer science education locally, through the federal government and local resources,” Wilson said at the panel.

Edtech companies should develop kids' social, emotional skills – report

Researchers at Boston Consulting Group found that edtech companies should invest in developing social and emotional skills in students.

By Yizhu Wang
MARCH 15, 2016 5:30 PM

<http://edscoop.com/social-and-emotional-learning-needs-more-attention-from-edtech-stakeholders>

Edtech isn't helping students develop emotional skills, according to a report.

While most products on the market currently focus on boosting literacy and numeracy skills, researchers say there is a lack of tools that help students foster social and

emotional learning (SEL) skills, which will be needed in jobs of the future, according to a report from Boston Consulting Group.

There is an emphasis on teaching students how to collaborate, communicate and solve problems through SEL skills. But a survey conducted by BCG shows that only 5 percent of all edtech funding from 2011 to 2015 went to companies that create products “directly or tangentially involved in SEL.”

Many parents and educators don’t fully understand the benefit of SEL, and don’t view SEL as important as other education skills, according to the report. There are also several terms used to describe social and emotional skills, like "behavioral skills" or "soft skills," which can be confusing.

The report suggested that developers embed SEL features into their current products, as investors are more interested in edtech with SEL features over SEL-only products.

About \$5 billion has been invested in K-12 edtech companies in America over the four-year period. Seventy percent of the money flowed to four categories: multimedia content delivery and platforms, online courses and tutoring, foreign language and literacy products and next-generation tests, according to the report.

Education Department scrubs closed schools from College Scorecard, adds 'caution flags'

The agency updated its interactive college database, wiping out 135 institutions that have closed down in the last several months.

By Yizhu Wang
MARCH 15, 2016 2:30 PM

<http://edscoop.com/education-department-scrubs-closed-schools-from-college-scorecard-adds-caution-flags-to-others>

DeVry University is one of the schools that the Department of Education took off of its College Scorecard after four campuses shut down.

The Department of Education has removed more than 100 closed-down schools from its recently released College Scorecard, an online database for students and parents, and added "caution flags" next to institutions that are facing financial or federal compliance issues.

The scorecard, which offers helpful information about annual costs, graduation rates and average salaries after matriculation, launched in September with about 7,000 colleges in its database. Most of the schools were four- or two-year institutions.

But later in 2015, the department added institutions that awarded certificates, as long as they had at least one program offering an associate's or a bachelor's degree, according to an agency spokesperson.

Since then, about 135 schools, many for-profit, have closed down because of shady practices or shaky finances. The department has scrubbed from its scorecard schools like the New England School of Communications, Hair Dynamics Education Center, Strayer University-King of Prussia campus, four campuses of DeVry University, and Missouri Tech.

Missouri Tech, a for-profit school, shut down in August without any warning after going bankrupt, leaving students scrambling to find other alternatives, according to the St. Louis Post-Dispatch. The Federal Trade Commission sued for-profit DeVry University and its parent company, DeVry Education Group, in January for exaggerating the employment of its graduates in advertisements.

Agency officials are cautioning parents and students to check the validity of certain colleges.

"We think it's important to provide updated information about institutions under review by the U.S. Department of Education for those deciding where to attend school," Michael Itzkowitz, director of the scorecard, wrote in a blog post on the agency's website. "These data help ensure accountability for schools and protect the interests of both students and taxpayers."

In the updated version of the scorecard, the department also added a feature to display the schools' compliance status, aligned with records from the agency's Federal Student Aid office. About 70 institutions are marked with "caution flags" after being placed by FSA on Heightened Cash Monitoring 2 status. That means they could have accreditation issues, late or missing annual financial statements or audits, outstanding liabilities, or denial of re-certifications.

"The department is essentially saying, 'We don't trust you quite as much, so we're going to make you prove to us that you're requesting dollars for eligible students,'" said Ben Miller, senior director for postsecondary education at the Center for American Progress, which released a report about the scorecard. "Being on Heightened Cash Monitoring 2 is a pretty good indicator of serious problems."

But the scorecard hasn't been revised with the latest data. As of December, 86 schools are being monitored, according to FSA.

Miller said the department should update the scorecard more frequently.

"They don't update this scorecard very often," he said. "They tend to publicly update the list of schools that [are being monitored] maybe once every few months. It could very well be changing faster than that."

The department is scheduled to take a look at the scorecard again this summer.

Senate confirms John King as education secretary

The Senate voted 49-40 in favor of confirming King, a former New York education commissioner.

By Yizhu Wang
MARCH 14, 2016 8:00 PM

<http://edscoop.com/senate-confirm-john-king-as-the-u-s-education-secretary>

John King has officially been confirmed as education secretary. The Senate voted 49-40 to confirm John King as education secretary Monday night, a swift approval for a frequently gridlocked Congress.

President Barack Obama nominated King Feb. 11, about two months after predecessor Arne Duncan stepped down. King most recently served as deputy secretary in the federal agency.

“I applaud the Senate for confirming John King as Secretary of Education,” Obama said in a statement after the confirmation. “His experience, counsel, and leadership couldn’t be more valuable to me and to our country as we work to open the doors of opportunity to all of America’s children.”

Sen. Patty Murray, D-Washington, said prior to the vote that the Department of Education needs strong leadership – and King is the right man for the job.

“Dr. John King has a long standing commitment to fighting for kids,” she said on the Senate floor. “Through his personal background, he knows the first-hand power that education can have in a student’s life.”

But King’s experience as New York education commissioner, from 2011 to 2014, came under fire from some lawmakers. Sen. Mike Lee pointed out that many parents, teachers and advocates were opposed to a series of new policies that he championed in New York, such as a new teacher-rating system that factored student scores for the first time, and the rollout of the controversial Common Core standards.

Before his state post, he was managing director of a charter school network.

“The problem is not that Dr. King lacks of experience... but do we really think that someone who spent more time in a government agency than in a classroom is best suited to oversee federal education policy?” said Lee, R-Utah.

King, who was approved last week by the Senate Health, Education, Labor and Pensions Committee by a 16-6 vote. will oversee the department as the new Every Student Succeeds Act begins to get implemented.

King approved by Senate committee for top education post

John King was approved by the Senate Health, Education, Labor and Pensions Committee by a 16-6 vote.

By Yizhu Wang
MARCH 9, 2016 4:30 PM

<http://edscoop.com/john-king-kick-off-national-challenge-to-advance-career-and-technical-education>

Acting Education Secretary John King, Jr., received a thumbs-up vote by a Senate education committee Wednesday, recommending that he be confirmed as the next U.S. Education Secretary.

King's nomination, approved by the Senate Health, Education, Labor and Pensions Committee by a 16-6 vote, now moves to the full Senate for final approval.

The news came on a day when King called on Congress to reauthorize an education act that supports technical education programs in U.S. schools, and in which he also announced a new challenge program to help educators be more creative when teaching creativity.

King urged lawmakers to reauthorize the Carl D. Perkins Career and Technical Education Act, which provides more than \$1.1 billion annually for the nation's career and technical education programs in grades 7-12, as well as in post-secondary institutions.

He also announced the Career Technical Education Makeover Challenge, a nationwide challenge aimed at encouraging teachers to design spaces where students can create and make things, blending technology and craft in classrooms or libraries.

"Today, every job that leads to a secure future requires critical thinking, problem solving and creativity, as well as some postsecondary education or training," King said in prepared remarks delivered Wednesday in Baltimore at the Digital Harbor Foundation Tech Center. "The best career and technical education programs help students prepare for this future once they graduate from high school."

Digital Harbor Foundation Tech Center is a community center that's seen as a role model for providing so-called maker programs to students from elementary to high school. Students can experience 3D printing, coding, circuits and electronic techniques in the Tech Center's maker camps.

The technical education makeover challenge builds upon the White House's Nation of Makers initiative, a maker movement that the Obama administration launched in 2014 to enable "more Americans to design, build and manufacture just about anything," according to a White House statement.

King also announced a National Week of Making from June 17 to 23, which coincides with the National Maker Faire on June 18 and 19 in Washington, D.C. Makers around the country will convene in Washington to showcase their projects across the spectrum of science, engineering, art, performance and craft.

The Education Department will invite as many as 10 winners of the CTE Makeover Challenge to the National Maker Faire and award a total of \$200,000 divided equally.

The first round of application ends on Apr. 1. Award recipients will have from June to September to implement their design plans, and will showcase their constructed makerspaces in October at the World Maker Faire.

Contest offers prizes to educators for sharing practices in classrooms

Credentialing program aims to reward educators for sharing daily practices that help students to develop deeper learning skills.

By Yizhu Wang
MARCH 8, 2016 3:30 PM

<http://edscoop.com/contest-encourage-educators-to-share-experiences-in-classrooms>

A micro-credentialing service for educators is raising the stakes for teachers to document their efforts to promote deeper learning in classrooms.

Educators can team up to enter the Deeper Learning Micro-credential Challenge and compete for prizes up to \$10,000, simply by logging how they help students to develop deeper learning skills in class and reflecting on what the teachers learned from the process.

"We really want to use it as an opportunity to engage educators in deeper learning, to capture really compelling stories about people's learning and implementations in the classroom," said Jennifer Kabaker, director of educator micro-credentials at Digital Promise, which is a non-profit aiming to improve learning and teaching through technology and the organizer of the challenge.

Digital Promise launched the micro-credentialing platform last November, with Bloomboard, a company for teacher development. Currently, the platform provides about 125 micro-credentials. Deeper learning is the largest module with 40 options, including

skills in design thinking, leadership and communication. The platform has drawn tens of thousands of visits since it was launched November.

“We’ve been really excited by the amount of traffic that the platform has gotten,” Kabaker said in an interview with EdScoop. “At this point, we want to start addressing getting educators to start earning the micro-credentials, and the challenge will be a big part of that.”

The competition is between teams with two or more educators from various grade levels, subject matters and locations. Each team needs to list all the micro-credentials that team members has earned, and compose an impact reflection discussing their goals to attend the challenge. They must also report on what they learned from the process and what else they expect from the micro-credentialing platform.

Participants have until May 1 to apply for the micro-credentials that educators want to include in the challenge. The application window for the challenge program closes on May 15.

To earn micro-credentials in deeper learning, instructors must demonstrate how they help students to develop skills in “collaborative problem solving,” “resolving conflicts” and “analyzing media impacts,” for example.

The micro-credentials program focuses on how an educator can demonstrate they’re learning in their practices, Kabaker said. “It’s sort of like a performance activity after the educator has learned something.”

A panel of 10 experts from school systems and non-profits will score each submission based on the average number of points that team members have earned in micro-credentials, and on the quality of their reflections on the program, based on a rubric.

Teams with highest scores will be awarded a range of prizes up to \$10,000. Digital Promise will also recognize the team with most micro-credentials with a prize of \$5,000. The results will be released on June 15.

Advocates slam NY governor's proposed education budget

New York Governor Andrew Cuomo proposed \$2.1 billion more in his education budget over the next two years, which sounds far from adequate to advocates.

By Yizhu Wang
MARCH 7, 2016 6:00 PM

<http://edscoop.com/advocates-and-parents-in-new-york-demanding-more-school-aids-in-the-states-budget>

Advocates and parents in New York protested last week demanding more education funding in Gov. Andrew Cuomo's budget, which could be used for badly needed resources like technology.

Organized by the Alliance for Quality Education, a union-backed advocacy group, demonstrators rallied outside five schools in New York City and held "walk-ins" to talk to families inside schools. They called for community members to put pressure on lawmakers, criticizing the state's insufficient investment in education.

In his budget, Cuomo proposed a \$24.5 billion education budget, increasing it by \$2.1 billion over two years. About \$1 billion would be available this year. But the New York State Board of Regents estimated that districts will need about \$2.4 billion more, according to the Regents' budget proposal.

"What [Cuomo] put out is woefully inadequate for children," Zakiyah Ansari, advocacy director of AQE, said in an interview with EdScoop.

Ansari said schools will have to slash resources, staff and after-school programs if they don't have sufficient funding. The money is also significant for districts to maintain and upgrade their technology infrastructures. In high-needs districts, many students don't have computers at home and can only access devices in school, Ansari said.

"Many schools lack up-to-date technology, working computers, working printers – all those things that students need to be globally competitive," Ansari said. "That is missing in a lot of our schools, as well as infrastructure like Wi-Fi."

Her organization is assembling parents and community members to protest and make their voices heard by Apr. 1, when the legislative phase ends and the new fiscal year begins. Ansari said that they demand \$2.4 billion more in the next fiscal year, and \$1.4 billion out of it should go to Foundation Aid, a funding formula that would benefit high-needs schools.

Cuomo said the Foundation Aid amount promised in 2007 by his predecessor, Eliot Spitzer, was "outrageously high," and that education spending in his administration has increased significantly, the Journal News reported.

"Over the past five years, we've steadily built back to where you have the highest investment in education in the history of the state of New York," Cuomo said last month.

But that didn't comfort Ansari.

"For him to say that he is giving enough money ... is wrong," she said. "He is not catering to the millions of young children who depend on that money so that they can have opportunities and greater education."

Interactive math platform lets students learn in 'bursts'

Cengage Learning released MindTap Math Foundations, a math course management system, which enables students to complete every assignment within 15 minutes.

By Yizhu Wang

MARCH 4, 2016 1:30 PM

<http://edscoop.com/math-cms-lets-students-learn-on-their-own-pace>

A new math course management system helps students divide the time they spend on solving problems.

Cengage Learning, a Boston-based edtech company, on Thursday released a new math course platform with interactive video lessons and games called MindTap Math Foundations. The personalized learning system will be ready for teachers and students starting this summer.

The platform divides course contents into 15-minute sessions, called "learning bursts," to give students more flexibility to personalize the curriculum based on their own needs and pace.

In each session, students watch interactive video lessons and then show what they learned through game-based activities. They can finish the assignments at any time on their phone, tablet or computer.

MindTap Math Foundations was developed based on the company's research on nearly 1,000 students. Students told researchers that time management is a barrier when it comes to completing assignments, and they expressed a desire to manage the workloads by themselves.

"That's why we designed MindTap Math Foundations, to make it easy for students to work through the curriculum and connect with their instructors and other students in a way that fits into their daily lives," Jim Donohue, executive vice president and chief product officer of Cengage Learning, said in a press release.

They can still access help, however. Students can ask their peers or instructors for help by using an interactive whiteboard, and teachers can monitor students' progress using communication and analytics tools.

The subscription fee varies from \$55 to \$120, based on how much material users choose to access. If students use the resources for at least three hours a week and still want to retake the course, they won't need to purchase another access code.

Over 180 institutions will pilot the product this spring. Users can purchase the product with the full range of content in June, and use it in the fall.

Real-time data network aids evolution of edtech

Edtech companies are looking for ways to tap into the growth of Internet of Things, with 6.4 billion IoT devices to be connected in 2016.

By Yizhu Wang
MARCH 3, 2016 3:00 PM

<http://edscoop.com/realtime-cloud-tech-driving-boon-in-edtech-apps>

The Internet of Things is becoming more pervasive in the classroom.

One indication of that comes from PubNub, a global data stream network (DSN) founded in 2009, which reports that more than 60 edtech companies have built real-time technology for students using PubNub's network.

Edtech companies can focus on developing their mobile or web apps, and let DSN service providers like PubNub work on building up the network those apps operate on for the benefit of teachers, students and parents.

A DSN is the fundamental infrastructure to get devices connected and transfer information. Using this network, edtech companies like ClassDojo, based in San Francisco, developed a classroom management tool that the company says is in use in half of schools across the country. Teachers can give students points in the app as an achievement incentive, and send instant messages to parents.

But delivering that information requires the means to ride along a network. The company considered whether to build up and maintain a DSN by themselves, but it meant allocating more money to expand the IT team.

“While real-time [data] was an absolute requirement for our business, we quickly determined that it was not a business challenge that we should have to solve,” Liam Don, co-founder and CTO of ClassDojo, said in a press release.

The company turned to PubNub for the infrastructure of real-time data exchange, with built-in features like network security and browser compatibility.

Consulting firm Gartner Inc. forecasts that about 6 billion objects can be connected, as long as they have a sensor or software embedded, this year, which will support a total services spending of \$235 billion.

Hackers find school districts' weak spots

School technology directors explain how their district networks were hacked, and what they are trying to do to solve it.

By Yizhu Wang

MARCH 2, 2016 5:30 PM

<http://edscoop.com/hackers-find-school-districts-weak-spots>

One Illinois school district with about 12,000 students faces 8 million cyberattack attempts in just a month.

District leaders know that they can't prevent every data breach, but they say it's important to strengthen security measures in order to respond more quickly to emergencies, which seem to pop up routinely nowadays.

Township High School District 214 in Arlington Heights, Ill., has started to receive in-depth firewall data about how many hackers have tried to game the system. According to a recent report from February, millions of data breach attempts were detected.

"There are a lot of scripts that run automatically, or bots that run out on the Internet, that automatically search out networks for holes to come into school districts," said Keith Bockwoldt, director of technology services for the district.

Securing computer networks, building response plans, and educating users are among the top issues that school technology directors face in an increasingly virtual world, they said during an event organized by the Consortium for School Networking on Tuesday.

Hackers are getting more adept and creative at how to steal sensitive information and throw schools into disarray, whether it's shutting down the network during testing or swindling teachers of their salaries – literally.

Last year, seven employees who worked at Denver Public Schools in Colorado were unknowingly trapped in a phishing email scam, and provided their school username and password after receiving an email that contained the district's logo and a link to a phishing website – which looked exactly like the employee online self-service system. Their payroll checks, in total worth \$26,000, were rerouted to a fake bank account.

Officials said the scam, which had been sent to 162 school employee email addresses, alerted them to the weak security protocols they had in place.

"We found, when we understood what had happened, that we didn't have a clear data incident response plan in place to monitor our response," said Sharyn Guhman, chief information officer of DPS.

Guhman said her IT team had noticed the phishing emails when they were sent out to employees, and figured out where they came from, but they decided to wait to do

anything. That decision led to chaos when employees reported that their monthly paychecks weren't deposited into their bank accounts as usual. When the school district and the police tracked the fake bank account, it had been shut down and the money had been moved.

Guhman said that school districts should make sure their IT teams create clear data incident response plans and educate teachers and staff. "The most robust central systems will be insufficient if your users aren't informed," she said.

Bockwoldt said his team noticed that "a huge amount" of IP addresses from Asia kept coming in after the school day. It resulted in the whole network going down.

The hackers' goal was to send random data and connect to the district's server, which exceeded the server's capacity and made it collapse. In this situation, if users install malware from emails, social media or websites, the computer can become infected and controlled by hackers without users' knowledge.

"What they tried to do is to build this network through malicious malware and get out of there," Bockwoldt said.

Bockwoldt and his team consulted with their Internet service provider and blocked the strange IP addresses.

"It's really important for districts to make sure that their computers are patched, and that there is no malware on their network," Bockwoldt said.

The school district now pays about \$40,000 a year to its service provider to monitor the traffic and mitigate threats. They get weekly reports to see what service providers have done to prevent further damage to the school district.

"Yes, that's a little bit of money to pay," he said. "However, it's not impacting the instruction and it works well. We have to be vigilant and constantly stay on top of it."

Risks can even come internally, from students.

At Loudoun County Public Schools in Virginia, a student launched a Denial of Service attack to one of the district's three network hubs, which severely degraded the network performance of 17 schools while students were taking state exams.

"What we found here was that we did not have good controls and processes in place, to protect against that type of security vulnerability within our district," said Rich Contartesi, assistant superintendent for technology services at LCPS.

"That is something that our security coordinator has been working through with our system's team to ensure that those types of events will not happen again," he added.

White House kicks off #WeekAtTheLabs to promote STEM education

During National Week at the Labs, students can visit more than 50 national labs in over 20 states to get a closer look at careers in STEM.

By Yizhu Wang
MARCH 1, 2016 6:00 PM

<http://edscoop.com/white-house-kicked-off-weekatthelabs-to-promote-stem-education>

Labs are the new classrooms.

Students were invited to visit some of the nation's premier labs that are run by the Department of Energy and other agencies and federally funded research centers to get a close look at what it's like to work in STEM fields.

The program was part of a White House initiative called National Week at the Labs, which launched on Monday and lasts through the week. More than 50 science labs opened their doors to students for visits and mentoring sessions. Students are able to try on STEM careers by performing hands-on experiments instructed by scientists, engineers and lab workers.

A group of fifth-graders from Washington, D.C. and Baltimore, Md., got a chance to come to the White House to hear from seasoned science pros, including U.S. Chief Technology Officer Megan Smith, a NASA astronaut and top engineers.

“We’re looking for anything we can do to make you in the audience, and our virtual audience as well, realize that laboratories are places where we discover things,” NASA astronaut Cady Coleman said at the event. “And we need everybody’s imagination to do these kinds of discoveries.”

With photos and videos, Coleman showed kids around the space station where she lived for six months. In the video, Coleman could be seen floating in the air with her hair spread out around her face like a wild mane. Through the window of the space station, green northern lights sparkled above Earth.

“This is what it looks like actually every night when I look out,” Coleman said. “But nighttime for me is every 45 minutes. We go around the earth 16 times every single day. I did that for six months.”

National Week at the Labs was inspired by the White House National Lab Day. Two other organizations, the White House Council on Women and Girls, and My Brother’s Keeper Task Force, coordinated the event.

The White House also announced new STEM and entrepreneurship tracks of President Obama's My Brother's Keeper initiative, which will provide opportunities in STEM education and careers for young students from diverse backgrounds.

Universities and libraries across the country are encouraged to invite local students into their classrooms and labs. Marvin Carr, policy advisor to Smith, estimated that 4,500 kids will get a chance to visit the labs that are opened during the week.

Publishing association opens Center for Innovation & Digital Learning

The center, created by the Association of American Publishers, will kick off with a panel at SXSWedu.

By Yizhu Wang
FEBRUARY 25, 2016 6:00 PM

<http://edscoop.com/edtech-resource-center-will-inaugurate-at-sxswedu>

Publishing is getting another e-makeover.

The Association of American Publishers – the chief trade association for the book publishing industry – has launched a new Center for Innovation & Digital Learning. The initiative is an effort to show that the traditional trade group embraces electronic versions of the printed word, and representatives are getting the word out at SXSWedu in Austin, Texas, next month.

The new center will host forums, webinars and other events, all to promote the use of digital educational resources over the printed form, according to a press release issued earlier this week.

It will also release analysis and reports that track changes in access to educational technology, metadata and other technical issues.

“Learning materials are no longer solely the printed textbooks of generations past,” AAP President and CEO Tom Allen said in the release. “Digital learning materials are increasingly important to improving outcomes throughout a student’s education.”

The center will operate as a nonprofit research branch of AAP with members from the organization's PreK-12 and Higher Education sectors, and will be headquartered in Washington, D.C.

The center will host its inaugural event, a panel on the challenge of bringing new products to market, next month at the annual education conference, joining edtech advocates and experts from across the nation to discuss digital innovation in schools, entrepreneurship and computer science education.

This is not AAP's first foray into e-publishing. Association officials have been working on establishing standards for electronic publications, exploring cloud-based distribution platforms and addressing other issues related to the delivery of digital products.

“While AAP and its education divisions have undertaken many digital initiatives over the past 15 years, our new center will complement existing initiatives and generate new efforts that support our members, educators and students nationwide,” Allen said.

The center will also help organize programs for the Ed Tech Forum at AAP’s Content in Context Conference in Philadelphia this summer.

Experts offer tips to protect student privacy

Organizations focused on protecting student data offer up some suggestions for vendors, schools and other stakeholders.

By Yizhu Wang
FEBRUARY 19, 2016 3:00 PM

<http://edscoop.com/experts-offer-tips-to-protect-student-privacy>

With more than 300 bills related to student data privacy introduced in 49 states since last year, experts say it's more important than ever for educators to understand how to protect kids' personal information.

Should researchers be allowed to access student data? Are the various pieces of legislation interpreted correctly, or do they leave room for ambiguity? What rights do third-party providers have? These are some of the concerns that advocates and educators tried to address during a conversation on Thursday held by the Software & Information Industry Association, the School Superintendent's Association and the National Association of State Boards of Education.

Amelia Vance, director of education data and technology in NASBE, suggested that states, districts and schools be on the same page when interpreting data policies. Stakeholders at every level should understand the following fundamental elements:

The purpose of the law.

Who is in charge of data privacy – schools or service providers.

Statewide transparency plans and data security plans.

“It’s important to remember that what gets passed in the legislature is not the only thing that protects students’ information,” Vance said. “We’ve seen a ton of regulations and guidance and executive orders.”

SIIA touted its student privacy pledge, which has been signed by 240 companies since the guidance was rolled out in October 2014. Here are some tips for vendors:

Vendors should not change privacy policies without notifying parents or students.

Parents and teachers should understand the exact type of personal information that the companies collect.

Students or parents should have the right to access and correct the information.

“Companies should have privacy policies that are really easy to follow ... to understand what is going on there,” said Brendan Desetti, director of education policy of SIIA.

On the school level, firewalls are automatic safeguards for school information – but it they don't go far enough in securing sensitive data, said Vincent Scheivert, chief information officer of Albemarle County Public Schools in central Virginia.

“My greatest concern is all the stuff sitting behind the firewalls,” Scheivert said, adding that guidelines and principles about student data privacy should be incorporated into teacher training programs. Here are some things schools should look out for:

Before signing the contract with a vendor, test the software or app first to ensure teachers understand what the products do.

Discuss and compare the privacy policies of different vendors.

Establish a metric to measure the privacy policies of edtech products. Here is an example from Albemarle County Public Schools.

“We have 250 teachers who have the ability to make decisions, to do things in the right way or, potentially, wrong way without guidance,” Scheivert said. “What we focus on is how do we coach our staff, and how do we provide the capability to our staff to be able to make the best decision possible.”

Pennsylvania district uses gaming to help kids stay in school

A game-based curriculum at Elizabeth Forward School District is helping students apply lessons with real-world experiences and improve school performance.

By Yizhu Wang

FEBRUARY 18, 2016 12:30 PM

<http://edscoop.com/high-school-students-study-game-design-in-classroom>

Math teacher Mary Wilson with her high school students in the Entertainment Technology Academy in Elizabeth Forward High School.

About four years ago, students at Elizabeth Forward High School were still learning typing, Excel and PowerPoint. Now, they work on 3D modeling and games.

The Elizabeth, Pennsylvania, district revamped its curriculum and facilities in 2012 after school leaders decided to take a different tactic in an effort to deter kids from dropping

out, assistant superintendent Todd Kerskin said in an interview. Twenty high school students dropped out in the 2010-11 school year, according to state Education Department statistics.

With a \$10,000 grant from the Grable Foundation, a local organization that provides funding for youth programs, the school created a work space modeled after one at Google, without a teacher's desk in front of the classroom. High school students can choose from nine courses in the school's Entertainment Technology Academy, develop games and apps in labs after school, and even intern for nonprofits in the Pittsburgh area.

"When we first started the gaming academy, the community thought we were teaching kids about casino gaming, not apps and video games," Kerskin joked.

The unconventional curriculum has started turning heads – the district is among about two dozen across the country that were recognized by the White House for aligning with President Barack Obama's Computer Science For All Initiative. The president requested \$4 billion in the federal budget for kids in preschool through high school to get greater access to STEM and computer science classes and programs.

Kerskin said the remodeled courses allow students to think outside the box.

"There is a large group of kids in our high school who love technology, but they weren't able to be creative with technology," he said. "So the gaming academy helped and connected those kids."

About 200 of the high school students are currently enrolled in the elective gaming courses. Students first take an introductory course called "Evolution of Games," researching cultures in ancient Egypt and Rome, and then developing game prototypes based off their studies. Then they can choose from one of three tracks: programming their ideas with a software called GameMaker, using digital storytelling or creating 3D art.

Course content is based on teaching materials provided by Zulama, a gaming education company founded in 2009. Elizabeth Forward district officials bought the annual subscription to Zulama's learning management system, which provides syllabi, sample lessons and assignments, as well as online and in-person training for teachers.

"The entire process is individual work coupled with team projects," said John Super, sales and marketing director of Zulama. "In a team, you get some number of people taking storytelling, and some number of people taking programming. They're all exchanging [ideas]."

The annual subscription costs about \$2,500 for a school with around 200 students, Super said. Elizabeth Forward spends around \$10,000 each year for nearly 800 students.

After students are equipped with hands-on skills, they can take their games and apps straight into the community.

A group of high school students is currently working on apps around national events, including the crash of Flight 93 on 9/11. The tool is aimed at helping young children understand the facts of the tragedy. They reached out to the Flight 93 National Memorial, a national park on the site of where the plane crashed in southeast Pittsburgh, for guidance.

To prepare younger kids for the rigorous high school curriculum, elementary and middle school students become familiar with computers, from typing to programming principles. The district uses robots developed by Carnegie Mellon University, which are equipped with motors, buzzers, accelerometers and sensors. Students learn to control the sound and movement of the robots through several programming languages, including C++, Java and Python.

“I think changing the learning environment of a classroom when you’re implementing these gaming courses is something that I strongly recommend,” Keruskin said last week during a webinar about how schools can utilize products. “It will change the level of engagement of your students.”

In December 2012, inspired by a teen center in the Chicago Public Library that was established by Carnegie Mellon, the district built its own media center inside the high school library with another \$160,000 from the Grable Foundation and help from the university.

The center has a television studio and a sound studio, as well as a stage for performances. The room is furnished with 3D printers, flat-screen televisions and computers that are installed with movie editing and music software.

There's more – the school district also created several labs, including one called the Situated Multimedia Arts Learning Lab and another called the Embodied Learning Lab.

With 34 percent of its students coming from low-income homes, Elizabeth Forward was once considered an unlikely place to transform. The school district serves the Elizabeth borough and the Forward township in Allegheny County, where the median household income is \$35,815 and \$40,921, respectively. That's compared to the state average of about \$53,115, according to U.S. Census statistics.

The district received a “warning” from the Pennsylvania Department of Education for its weak academic performance in 2011. The state has since changed its measuring system on academic performance and scores reflecting recent progress have been uneven.

However, Keruskin said the new curriculum is getting "students that may never engage in school" excited to come to class now.

"We see computer science classes and clubs now after school," Keruskin continued. "Kids don't want to leave when school is off."

Computer-based state tests align to Common Core – report

In a review of the new PARCC and Smarter Balanced assessments, testing experts from the Thomas B. Fordham Institute found that they largely align with new standards.

By Yizhu Wang

FEBRUARY 11, 2016 9:30 AM

<http://edscoop.com/online-assessments-meet-academic-standards-but-editorial-issues-founded>

The new computer-based standardized tests that rolled out in the majority of states last school year largely align with Common Core standards – but developers still need to ensure that the tests are high quality, a new report has found.

Technical and editorial issues, like grammar mistakes and confusing multiple-choice answers, accounted for most of the problems found in tests created by PARCC and Smarter Balanced, two of the main contractors, according to a study released Thursday by the Thomas B. Fordham Institute, a conservative-leaning think tank.

Over the last two years, 32 reviewers composed of educators and experts collected data, and practiced and rated the English Language Arts and math sections for grades 5 and 8 from four assessments: Partnership for Assessment of Readiness for College and Careers, or PARCC; Smarter Balanced; ACT Aspire; and a state assessment in Massachusetts. The reviewers evaluated whether the tests matched benchmarks established by the Council of Chief State School Officers' "Criteria for Procuring and Evaluating High Quality Assessments."

Researchers said that the small percentage of quality issues, which typically affected one item in a test form with 40 to 50 sets of questions, was significant enough to impact the accuracy of the scores.

State are paying millions of dollars for the new tests, and many have been racked with technical glitches that ranged from slow Internet connections to cyber attacks. PARCC tests, which are being used in nine states, cost \$23.97 per student, while Smarter Balanced tests, used in 17 states, cost \$27.30 per student. Last spring, about 40 percent of students in grades 3 to 11 nationwide took one of the four tests.

Experts said the tests could be tightened up.

"Sometimes there might be a slight grammatical error," said Nancy Doorey, project manager and co-author of the analysis. "There might be a word choice that left something slightly ambiguous, or could possibly be interpreted in a different way."

For instance, for an item that was supposed to have only one correct answer, reviewers felt that multiple answers could be considered correct. Reviewers also found minor errors in punctuation and spelling.

In addition, technology-enhanced items, or TEIs, were often not found to be meaningful in improving the quality of the tests. TEIs allow students to perform certain functions, like adding and changing text and navigating menu bars.

Reviewers reported that, in some cases, “TEIs were used seemingly to no advantage.” TEIs tend to cost more to develop than other test formats, which means a higher price overall for the assessments. Researchers suggested that developers use TEIs strategically.

Critics of high-stakes testing have ripped school leaders for focusing too much on testing rather than learning in the classroom. But reviewers found that the test developers managed to align the time spent taking tests with the complexity of the skill sets they assessed.

According to a study by the Council of Great City Schools, students spent up to 25 hours per year on mandatory tests, and many of them are not aligned to state standards. The Fordham Institute reviewers were more optimistic.

“We’ve dreamed of evaluating the tests that go along with those standards,” said Michael Petrilli, president of the Institute. “Many of us believe that [tests] do actually drive what happens in the classroom in terms of the curriculum instruction.”

North Carolina edtech leader Tracy Weeks to lead SETDA

The instructional learning specialist brings 'data geek' convictions to the State Educational Technology Directors Association.

By Yizhu Wang
FEBRUARY 9, 2016 9:30 AM

<http://edscoop.com/north-carolina-edtech-leader-tracy-weeks-to-lead-setda>

Tracy Weeks will take office as the executive director of SETDA Feb. 16. Tracy Weeks is about to impart her love of computers and technology to a wider audience.

The former high school math teacher is gearing up to take on a new role as executive director of the State Educational Technology Directors Association, which she will assume on Feb. 16, she said in an interview with EdScoop.

Weeks will fill the role after a yearlong search for a permanent head of the 15-year-old association, a nonprofit coalition of state agency leaders who advocate for improving

education through technology policy. Doug Levin, now an edtech consultant, stepped down last February and was replaced by an interim director.

Weeks, 42, is currently the first Chief Academic and Digital Learning Officer for the North Carolina Department of Public Instruction, where she has overseen digital learning in the state for the last two years. With more than a decade of experience in instructional technology, she already has a strong grasp of SETDA's mission.

“The North Carolina Department of Public Instruction has always been a strong member and partner with SETDA,” Weeks said. “The cool thing that I’ll be able to bring to the table is that I’m actually coming from the position as a state leader. I come from the perspective of sitting in the seat of the members that we serve.”

SETDA is based in the D.C. area, but Weeks said she will work remotely from North Carolina.

The association, which will hold its next policy conference in April, also works with the U.S. Department of Education on certain projects and initiatives. "Congratulations @tracyweeks on your new role leading @SETDA. Looking forward to working with you!" tweeted Katrina Stevens, deputy director of the Office of Educational Technology. (Stevens declined to be interviewed for this article.)

Weeks, a self-described "data geek," has observed firsthand how hard numbers can measure and improve student achievement through a database she supervised in North Carolina called Home Base.

The personalized learning program serves as a student information, educator evaluation and instructional improvement system, through which teachers can assess the performance of different students and then customize lessons accordingly.

Weeks said that advocating for state agencies to fund and access educational technology is one of the key priorities for SETDA, especially as the Every Student Succeeds Act gets implemented. State officials are waiting to hear more about how to utilize more than \$2 billion in federal funds for professional development and personalized learning programs.

“This is a great time to be transitioning into the new Every Student Succeeds Act,” Weeks said. “We’ll be working with our state agencies, both to advocate for policies and rules that come out of the ESSA, and also provide guidance.”

For Weeks, the key to personalized learning is not to simply replace traditional tools with technology and broadband, but to use technology effectively.

Weeks also spent two years leading the North Carolina Virtual Public School, a supplementary program serving brick-and-mortar schools in the state. Weeks said she doesn’t agree with education advocates who are concerned that students are overloaded with machines.

“Personalized learning does not mean that every student has to be in front of the computer all the time,” Weeks said. “Many of our virtual teachers are reaching out to their students and having individual conversations every single week. They get to know what the students’ passions are, what they like to do and how they learn best.”

Weeks still remembers the thrill she and her fifth-grade classmates got when they first caught a glimpse of the Apple IIe computer in the 1980s. When she was eight years old, she wrote her first program in BASIC, a coding language that was popular back then.

“We always had a computer in our house,” Weeks said. “It’s just something that I grew up with and always enjoyed.”

Blended learning site offers new tools to find resources

Blended Learning Universe upgrades popular online site showcasing schools' blended learning work.

By Yizhu Wang

FEBRUARY 5, 2016 9:00 AM

<http://edscoop.com/what-works-and-what-not-in-blended-learning-check-out-this-directory-to-see-others-lessons>

K-12 schools can now find blended learning resources and modify profiles of their work more easily on a popular online database.

The directory, produced by Blended Learning Universe (BLU), is an online hub designed to showcase schools' edtech resources, including the software and hardware it uses, models of blended learning and demographic information.

BLU launched an upgrade for the directory Tuesday, featuring an advanced search tool and the ability for schools to build their profile and timeline pages directly online. Previously, schools submitted information to BLU, which researchers posted to the website.

“We were looking to connect what we know are similar efforts happening across the country, and provide a database that makes those connections visible and clear to practitioners,” said Julia Freeland Fisher, the director of education research at the Clayton Christensen Institute, which produces BLU.

BLU officials said 27 new profiles were added to the site within two days after it was launched. The directory now contains information from nearly 300 schools from more than 175 school districts across 38 states.

BLU started to catalog emerging blended learning models in 2011, using staff researchers to visit schools and interview and survey school officials.

In the updated version of service, users who want to be part of the directory are asked to take a quick quiz to assess whether the school has applied blended learning by definition. Qualified schools can use the site to illustrate specific practices on their profile page.

“Our hope is that as this site gets more social and more dynamic, more folks will come to it directly to feature the work that they’re doing,” Fisher said.

Schools need to provide demographic information, including students’ grades, enrollment, locations and blended subjects. Geographic information is one of the highest search filters, with most users searching by state, said Clifford Maxwell, research assistant at Clayton Christensen Institute, who oversees BLU.

An advanced search tool now on the site lets educators look for resources that match the demographics of their schools. The new version also features a timeline page for each school to summarize the changes in edtech products and models it has used over time.

“Schools are constantly iterating their blended learning models,” Fisher said. “We want to capture that information so that others in the similar positions can learn from those changes over time.”

The team expects to enhance the site further by linking the directory of school profiles more closely with the resources page on the BLU website.

“Instead of just reading about ‘designing the virtual experience’ in your classroom, you can quickly jump to a school that has done that well, for example,” Maxwell said. “Or instead of reading about how station rotation models work, you can see examples of schools doing that.”

Diversity in computer science starts in classrooms – panel

With women representing only 18 percent of the computer science industry, researchers and advocates seek to solve the gender gap at an early age.

By Yizhu Wang
FEBRUARY 3, 2016 12:30 PM

<http://edscoop.com/diversity-in-the-computer-science-industry-starts-from-diversity-in-classroom>

With encouragement from her parents and access to computer science courses, Swetha Prabakaran started her own adventure as a programmer – and began inspiring other girls to code.

Tackling the great gender disparity in STEM courses, researchers and advocates called for more diversity in computer science education at an event held by the Center for American Progress at Google's headquarters in Washington, D.C., on Tuesday. The timing is apt – President Barack Obama announced Saturday that he will request \$4 billion for states and \$100 million for districts in the federal budget for computer science education.

In Swetha Prabakaran's first computer science course at Thomas Jefferson High School for Science and Technology, in Virginia, there were only five girls in a class of 27 students. She said she would become confused and stressed when she heard male classmates discussing their projects, using a programming language that she was not familiar with.

But her teachers pushed her. "That kind of encouragement makes a difference," Prabakaran said.

Swetha Prabakaran, a junior at Thomas Jefferson High School for Science and Technology, founded the nonprofit Everybody Code Now to teach young kids computer science. (Yizhu Wang/EdScoop)

Prabakaran is now the CEO of a nonprofit called Everybody Code Now. In one of its programs, called CS Chicas, the organization gathered female high school volunteers to mentor and teach middle school girls about Java.

"Seeing that kind of environment, and seeing how cool tech was, made me realize that we need these resources to exist for other girls, and they need to start at a younger age," she said.

Social encouragement and self-confidence are key factors that can lead women to careers in computer science, as well as access to academic resources and a positive perception of the industry, according to research from Google.

Google also found that female participation has been growing since the 1970s in mathematics, chemistry, biology and all other STEM fields – except computer science. Females in computer science peaked in the 1980s at 37 percent, and went down to 18 percent in 2010.

"There is a social tension between a 'technical identity' and a 'girl identity,'" Ruthe Farmer, director of the K-12 Alliance at the National Center for Women & Information Technology. "Girls have to walk into an all-male classroom, mostly male teachers, totally male environment, and they have to pull off their girlfriends being like, 'What are you doing over there?'"

While more school district funds are going towards computer science education, Farmer has noticed that some districts confuse educational technology with computer science

education – school officials spend large sums of money on technology for education, but fail to see that computer science education cannot be improved simply through facility upgrades. There is also the need for teacher training and thoughtful curricula and instruction plans.

“When [schools] are looking at the budget – ‘We spent \$10 million on technology, so we have the computer science, right?’” Farmer said. “There is a disconnect in that.”

Edtech tools can help developing countries with UNICEF money

UNICEF is investing in 50 to 60 startups that will develop open source educational technology tools for children in impoverished areas of the world.

By Yizhu Wang
FEBRUARY 2, 2016 9:00 AM

<http://edscoop.com/unicef-is-funding-open-source-ed-tech-products-all-over-the-world>

Global edtech startups can apply for \$9 million in funding from the United Nations to develop their products – as long as they improve education in developing countries around the world.

The United Nations Children’s Fund, known as UNICEF, is planning to fund 50 to 60 startups in 135 developing countries to receive around \$50,000 each. Products that will be considered include learning tools for youth, real-time communication software, or infrastructure to enhance connectivity to educational resources.

The products will be available anywhere in the world, including the United States, according to Christopher Fabian, UNICEF Innovation co-lead.

"What we’re looking for are [companies] that are working on similar problems, but in different parts of the world," Fabian said in an interview with EdScoop.

He used the refugee crisis in Europe as an example – the widespread displacement from places like Syria has left many children with gaps in their education, but they could possibly continue their studies and keep their minds active with innovative digital educational tools.

"It’s hard for them to get a continuity of education," Fabian said. "Our team has worked with a group in South Sudan, which is working on similar issues. And maybe somebody in Lebanon, somebody in Cambodia – there may be three different companies that are all working on that same space, but not connected. So what we could do with the fund is really to allow for those to be connected to each other, and for them to grow faster, and then apply whatever comes out to the refugee crisis."

UNICEF's Innovation Unit has raised \$9 million from governments, foundations, international finance institutions, academic entities and individuals to support the program. The group will invest only in projects that have an open source license so that other developers can customize and further improve the products for free.

Projects that are still in the early stages of development will be considered, but businesses should be able to demonstrate that what they have created could work. UNICEF will utilize its networks with governments and local businesses to promote the products.

"We'll be able to work with the ministries of education and form connections that allow us to take innovations, and really help them get into the education system," Fabian said. "Whether it's a different way of teaching, or a different way of making sure girls stay in school."

A UNICEF funding board will assess personnel and financing for the projects, and select finalists based on their inventiveness and relevance to students.

UNICEF has seen the social impact of the new technologies they are trying to fund. The NGO developed and launched a real-time communication tool in 2014 called U-Report. The application allows users to survey a customized group of teachers and students, and respondents can reply through text message.

For example, UNICEF officials had heard that teachers in Liberia were asking students for sex in exchange for good grades. So last September, the NGO asked 62,000 Liberian students through U-Report whether this was in fact happening. They received 11,000 responses, with 83 percent of people saying yes. UNICEF was able to immediately alert the ministry of education and local law enforcement to take action.

"That all happened within days," Fabian said of the reporting process. "That type of access to information and action is vital in many parts of the world."

Applications for funding will close Feb. 26. UNICEF will gather a series of finalists from different countries for a briefing in mid-March. After the second round of judging, the recipients will be notified in April.

Students bounce ideas off new classroom collaboration system

The Span classroom collaboration system, from a startup called Nureva, allows students to work together on class projects that are displayed on 6-meter-long projectors.

By Yizhu Wang
JANUARY 28, 2016 3:30 PM

<http://edscoop.com/students-throw-ideas-onto-classroom-wall-using-new-collaboration-system>

Students use Nureva's Span classroom collaboration system, with a large projector that shows all of their work in the background. (Nureva)

Thanks to a new classroom collaboration system, students are able to “throw” their ideas onto the wall.

Using the Span classroom collaboration system, 7th and 8th graders at Loyalsock Township School District in Pennsylvania made a timeline of what happened during the South African apartheid. They were able to do this using students' iPads and a panoramic projector system that casts the students' work on the walls, according to an assistant principal.

The Span classroom collaboration system, just a few months old, is from Nureva Inc., a startup founded in 2014 by David Martin and Nancy Knowlton. The cloud-based tool breaks boundaries between devices, and lets students work collaboratively from their own devices.

The product was showcased during a webinar held by the State Educational Technology Directors' Association on Wednesday. EdScoop caught up with Brooke Beiter, assistant principal at Loyalsock Township High School, to go into more detail about how the school district actually puts the system into play.

To start the timeline for this particular history assignment, teachers created a project in the content management system. Students logged into the same project can mark important dates with texts and pictures on their devices. Meanwhile, the projector in the classroom cast images onto a digital canvas, creating a 6-meter-long workplace on the wall.

While students edited their projects, their notes popped up on the canvas. Some students organized the elements by dragging and editing the images and texts on the canvas.

Teachers could observe the work and give advice. Finally, the polished timeline was saved as a PDF file and a spreadsheet, and each student received a copy via email.

“The best part is that teachers were able to actually take a step back, and allow the students to drive the lesson, and decide where they were going to go,” Beiter said. “[The teachers] were able to take the back seat.”

Using their work, students were able to generate about 400 questions for a guest speaker from South Africa about the systemic racial segregation that was finally repealed in the '90s.

In the past three years, Loyalsock has installed Apple TV in every classroom. The school also provides an iPad for each of the roughly 800 students, which they can take home for assignments. Lessons are disseminated on Moodle, an open source software.

Before applying the Span system in October, technologies like Apple TV and interactive whiteboards were mainly used to enhance presentation. For the school, Span is “a different platform with students’ interaction and engagement,” Beiter said.

“When you have this big 20-foot-long wall, this is for the student. This is not the teachers’ tool. It’s actually having students create and bring their ideas in,” said Kimberleigh Doyle, Nureva’s education market development manager, during the webinar.

For teachers at Loyalsock, they are able to use the students' work as a metric of their progress and understanding of the lesson material, and it provides thoughtful fodder for faculty meetings.

Loyalsock is a loyal customer of Nureva's – the school district also uses the company’s portfolio software, Troove, to manage students’ documents and records.

3 students among recipients of White House computer science award

Two high school students and a college undergrad were among the winners of awards as part of the White House' Champion of Change for Computer Science Education.

By Yizhu Wang

JANUARY 26, 2016 5:30 PM

<http://edscoop.com/3-students-among-recipients-of-white-house-computer-science-award>

Grace Clark, a high school student from New Orleans, La., interns with a nonprofit that offers free technology training and coding to young people. Through the organization, she taught officers with the local police department how to write code.

Clark, along with eight other students, educators, researchers and entrepreneurs, were named "Champions of Change for Computer Science Education" Tuesday at the White House for their teaching coding skills to diverse groups and advocating for computer science education. Christina Li, a senior at Adlai E. Stevenson High School in Macomb, Mich., and Angelica Willis, an undergraduate at North Carolina Agricultural and Technical State University in Greensboro, N.C., also received the honor.

Senior Obama administration adviser Valerie Jarrett, Acting Education Secretary John King, U.S. Chief Technology Officer Megan Smith, actress Gillian Jacobs, and co-founder and executive director of Amy Poehler's Smart Girls initiative Meredith Walker gave remarks at the event.

Another recipient of the award was Andreas Stefik, an assistant professor of computer science at the University of Nevada in Las Vegas. He invented a programming language

so that blind or visually impaired users can hear a recording from screen readers to write their own code using Quorum.

Quorum was first developed for just the blind and visually impaired, but now it has been expanded to the general public. The inventors used evidence-based approaches when building the code – when they established the programming, they studied human behaviors to see how people intuitively use language.

“I am deeply honored and humbled to be honored by the White House for Comp Sci Education!” Stefik wrote on Twitter.

For cities that seek to offer courses in computer science in K-12 schools, Jane Margolis' research will help. The researcher at the University of California, Los Angeles, investigated why women and minority youth are disproportionately represented in computer science education. Based on her study, Margolis and her colleagues created Exploring Computer Science, a high school curriculum for all students.

The White House has previously awarded Champions of Change honors to outstanding individuals and organizations who solve a wide variety of problems, including climate change, LGBT equity and immigration reform.

Nicaraguan immigrant wins digital equity award for exposing minority youth to tech, coding

Antonio Tijerino, who didn't speak any English when he arrived in the U.S. from Central America, has pushed for more minority kids to be exposed to tech and devices.

By Yizhu Wang
JANUARY 26, 2016 1:00 PM

<http://edscoop.com/nicaraguan-immigrant-wins-digital-equity-award-for-exposing-minority-youth-to-tech-coding>

Antonio Tijerino, president and founder of the Hispanic Heritage Foundation, was presented the "Champion of Digital Equality Award" by Brent Wilkes, national executive director of League of United Latin American Citizens, and Kim Keenan, President and CEO of Multicultural Media, Telecom and Internet Council. (Courtesy HHF)

Antonio Tijerino knows what it's like to have his intelligence questioned because he didn't know English – he immigrated to the United States from Nicaragua with his parents when he was just 6 years old.

Now, he wants to make sure minority youth don't feel as abandoned as he did in this new digital era.

As president and CEO of the Hispanic Heritage Foundation for the past 14 years, Tijerino has been dedicated to addressing the issue of the “homework gap.” He has launched projects like the ESA LOFT Video Game Innovation Fellowship and Code as a Second Language, to encourage teenagers and minorities to learn coding skills. For the fellowship, Tijerino flew about 20 high school and college students to the nation's capital in October to show off apps and video games they had created to solve a problem in their communities.

He has also served on panels at companies like Microsoft, where he said that Latinos “clean hotel rooms” and “serve your food,” but they need to learn coding and computer programming in order to truly move up in society.

His work and dedication to close the digital divide for Hispanic and other minority youth won the attention of the Multicultural Media, Telecom and Internet Council, which awarded him the “Champion of Digital Equality Award” on Jan. 20. The nonprofit promotes civil rights in mass media and broadband industries.

The digital divide is “a new form of inequality that I think is the same as in other days, when you weren’t allowed to get educated, or you weren’t allowed to vote and all these other things as a minority,” Tijerino said in an interview with EdScoop. “I felt a real sense of satisfaction that someone is noticing the work that we have been doing in this space – conducting research, writing op-eds, and also providing a vision and idea for young Latinos and other minorities.”

Early last year, the Hispanic Heritage Foundation conducted a study to identify where homework gaps exist, together with education company My College Options and nonprofit organization Family Online Safety Institute. About 40 percent of students in the national study reported that lack of Internet access results in failure to complete homework, and it impairs the academic performance of Hispanic and African American students more than white and Asian ones.

After the study was released, Tijerino received a call from Adan Gonzalez, then a college student at Georgetown University. Tijerino recalled that Gonzalez told him, ““I was just like what you are talking about.””

Gonzalez didn’t own a laptop at home when he was a senior in high school in Dallas, Texas. He completed his college application on a borrowed laptop, and had to sit on the curb late at night to “hijack” Wi-Fi from a McDonald’s near his home to finish his homework, he said in an interview.

“My family can’t afford the Internet,” Gonzalez said. “I didn't know anyone else who had Internet at home.” Gonzalez’s parents earned less than \$40,000 combined to support the family of eight, lower than the median household income in Dallas from 2009 to 2013, which is nearly \$50,000, according to U.S. Census Bureau.

Influenced by Tijerino, Gonzalez is now working with Hispanic and African American students to help them obtain higher education. Gonzalez said he is happy and proud that Tijerino was recognized with an award.

“If he can do it, we all can,” Gonzalez said. “That’s what he tries to teach us and that’s what he taught me as a mentor.”

Tijerino said he makes sure that his three children – ages 10, 8 and 5 – are well versed in technology. They use a host of devices, including computers, tablets and smartphones.

“They go crazy when the Internet is down,” Tijerino said, laughing. “Even at a very young age, they’re already extremely dependent on technology.”

Tijerino is now trying to pilot a program to install Wi-Fi routers on buses in Montgomery County in Maryland, so that students will be able to do their homework on buses, or connect their devices to the Internet in certain locations where wired buses are parked. He said communities should make better use of public facilities by providing Wi-Fi hotspots in community centers and libraries.

“I think community centers, before, were places where kids played basketball,” Tijerino said. “I think now it needs to be places where kids can get access to technology and be able to do their homework.”

Nanotechnology initiatives aim to get big reaction from kids

A video series about nanotech will air Monday, among several other activities that aim to educate and inspire students to explore the technology.

By Yizhu Wang
JANUARY 25, 2016 6:00 PM

<http://edscoop.com/nanotechnology-initiatives-aim-to-get-big-reaction-from-kids>

Nanotechnology may be the study of tiny molecules, but it's gaining a lot of ground with students.

The National Science Foundation and NBC Learn released a new educational video series and a nanotech-enabled superhero contest, according to a White House blog post Monday.

The activities aim to inspire students to develop high-tech skills and prepare for jobs through nanotechnology-related education, with the support of the National Nanotechnology Coordination Office, NSF and Stan Lee, a co-creator of comic characters including Spider-Man and Iron Man. Nanotechnology is the engineering of systems at the molecular level.

“So I’ve created a whole caboodle of superheroes, but the important thing is, now it’s your turn,” Stan Lee said in a promotional video of the “Generation Nano: Small Science, Superheroes” contest.

The challenge is open to high school students. Applicants need to design a superhero with nanotechnology-driven gears, based on findings in modern nanotechnology research. Finalists will showcase their ideas in April at the 2016 USA Science and Engineering Festival.

Besides the contest, more educational resources are available to both students and educators.

A six-episode video series, called “Nanotechnology: Super Small Science”, will air Monday on NBC Learn. The videos explain how nanotechnology can be applied to industries like advanced electronics, renewable energy and health. The content is expected to reach 9 million students across the country through more than 200 NBC affiliate stations.

For educators who have difficulty finding teaching resources about nanoscience and engineering, a searchable database is being developed by nanoHUB and NNCO.

NNCO is also expanding the U.S. Nano and Emerging Technologies Students Network, to gather tech enthusiasts and encourage students to build tech clubs in universities and colleges across the country. The network is preparing their first convening this summer at the TechConnect World Innovation Conference & Expo at National Harbor in Maryland.

Nanotechnology has been identified as one of the emerging “general-purpose technologies” in the Obama administration's latest Strategy for American Innovation report.

Calling all edtech ventures: applications open for AT&T Aspire Accelerator

The telecommunications company is looking to support startups developing cutting-edge strategies and solutions for students and teachers.

By Yizhu Wang
JANUARY 21, 2016 11:00 AM

<http://edscoop.com/calling-all-edtech-ventures-applications-open-for-at-t-aspire-accelerator>

AT&T wants to help edtech startups developing promising new products for schools.

The telecommunications giant's Aspire Accelerator is taking applications from technology firms seeking funding for promising products that support students and teachers. Those products can range from including mobile apps, learning and curriculum management tools, assessment tracking platforms or online courses. Special consideration will be given to solutions targeted at students who are on the brink of dropping out of school.

The deadline to apply is Feb. 5.

AT&T will offer \$100,000 as an investment to the companies, and an additional \$25,000 for each startup to cover expenses of the program. It will also provide mentorship from experts in the education and technology industry.

Last year, AT&T selected five winning ventures out of 350 applicants. Their products are used across mobile and computer platforms, including a new system for managing schools' devices and software, a writing assistance software, an interactive video platform and a producer of educational games. Collectively, their products reached more than 2 million students, 200,000 teachers, and 4,500 schools across the country, according to a press release from AT&T.

Among the awardees was GradGuru, which developed a mobile application for students to track deadlines and reach milestones with the promise of a reward.

“The big take-away for GradGuru was that we really do have a business that can scale and grow, and we’re making social impact,” founder Catalina Ruiz-Healy said in a video. “Our goal is to get to a hundred colleges in three years and a million users in five.”

The accelerator program is open to both for-profit and non-profit organizations. Ventures don’t need to relocate to complete the program. Five ventures last year came from Baltimore and Washington, California, North Carolina and New York.

This year, the accelerator invited eight leaders in educational technology companies to serve on an external board of advisers.

“We need to welcome ideas from every corner that use technology in innovative ways to help students succeed,” said Nancy Poon Lue, one of the advisers and executive director of the ASU GSV Summit, which brings together edtech companies each year. “The Aspire Accelerator’s unique focus on helping both for- and non-profit ed-tech ventures thrive is already having an impact. I’m excited to join the Board of Advisors and see what the 2016 class will achieve.”

The Aspire Accelerator was launched last year as part of the telecom company’s \$350 million commitment to education. The corporation's foundation will make final decisions and kick off the program in May. Candidates will have six months to complete their projects and show off their demos in October.

School, public libraries should be reimagined as digital hubs – officials

Federal officials and school district leaders convened Tuesday at the White House's ConnectED Library Challenge to learn about how traditional reading rooms can be transformed into digital studies.

By Yizhu Wang
JANUARY 19, 2016 4:00 PM

<http://edscoop.com/school-public-libraries-should-be-reimagined-as-digital-hubs-officials>

Libraries need to be dusted off and reimagined for the digital age, federal officials and school leaders said Tuesday at a White House ConnectED event.

As part of President Barack Obama's vision to get 99 percent of all students connected to high-speed broadband, schools around the country have adopted the ConnectED Library Challenge to build upon their resources by adding online materials, eBooks and Internet connectivity so they can become digital hubs for students.

Officials from Charlotte-Mecklenburg Schools in North Carolina, in one of 60 cities that have adopted the challenge, said at the ConnectED Library Challenge Convening that they gave out public library cards to more than 100,000 students since September. The students can check out up to 10 books at a time and access electronic resources and databases.

Public library officials said the program has boosted readership among students – about 50 percent of student library activity involves print books, a third of students use electronic resources and borrow eBooks, and the remaining 16 percent takes advantage of computers in the libraries.

“The circulation of juvenile and young adult eBooks has gone up about 100 percent,” said Lee Keesler, CEO of Charlotte-Mecklenburg Library.

"Our TumbleBook usage went from about 8,000 usages per month to 50,000, and we think that number is going to continue to grow," he added, referring to eBooks for children.

Federal officials said repurposing libraries can reduce the homework gap and provide more devices, resources, tutors and Internet access to students after school.

“The U.S. Department of Education understands that the full community is needed to increase and improve all opportunities for our nation’s youth,” said Ursula Wright, associate assistant deputy secretary for special projects of U.S. Department of Education. “And that anchor institutions like public libraries are absolutely essential in helping us get that done.”

School district superintendents can sign the Future Ready District Pledge to get help from the Office of Educational Technology to start their own programs similar to the one at Charlotte-Mecklenburg.

"When the superintendent works with the community to achieve a vision of digital learning, they're incredibly more effective than if they are trying to do that in a silo," said Joseph South, acting director of the Office of Educational Technology. "Just thinking beyond the library part. Thinking how can you support active use of technology inside and outside the library, how can we expand that to be across the entire community."

Educators, advocates hope Obama talks about STEM education at SOTU

During his final State of the Union speech, Obama may touch on his administration's work to promote science and math education.

By Yizhu Wang
JANUARY 12, 2016 6:30 PM

<http://edscoop.com/educators-advocates-hope-obama-emphasizes-stem-education-at-sotu>

President Obama during the 2015 State fo the Union (White House/Flickr)
STEM teachers and advocates are hopeful that President Barack Obama will mention his administration's work in science and math education during his final State of the Union speech Tuesday.

Among the guests of first lady Michelle Obama, a widely accepted indicator of the themes of the address, is Lydia Doza, a STEM advocate and college student in Alaska. STEM Education Coalition Executive Director James Brown said it's a good sign that STEM will feature in Obama's speech.

"We certainly expect that he will touch on that theme again," he said.

If he does, one of the programs the president may tout is the Every Student Succeeds Act, the update to No Child Left Behind that Obama signed in December. The new law gives districts more flexibility to tailor their courses to their students' needs, especially in STEM subjects. The law also talks about narrowing the gap between those who have access to educational resources and those whose resources are more limited.

Brown said addressing this disparity is critical — it continues to pose a barrier to encouraging diverse communities to take computer science classes.

"You do need to do more with the younger kids to give them opportunities to be exposed to the STEM context," he said. "One of the biggest deficiencies [of opportunities is found

among] kids from communities of color and underrepresented and disadvantaged groups.”

Under the law, states and districts also have more authority to fund STEM education and cooperate with tech companies to provide efficient hardware, software and technique training.

“It wouldn’t surprise me if what the president does [is] highlight some of the things that have happened in the public-private partnership area around promoting computer science,” Brown said.

STEM education has been featured in previous speeches.

In the State of the Union in 2011, President Obama proposed preparing 100,000 new STEM teachers over the next decade. Now, the administration said it is more than halfway there. Sekhar Chivukula — physics professor and associate dean in the College of Natural Science of Michigan State University, which educates many STEM teachers — hopes the president will discuss this program more in depth.

“I’m hoping that we’ll hear that there will be an increase of emphasis across the federal government on STEM education broadly,” Chivukula said. “And perhaps [we’ll hear about] some specific programs to make sure that we have more highly qualified teachers.”

Tech over teachers? Parents, educators express concerns with ESSA

At a public hearing Monday, advocates said they were worried about technology overreach in the new Every Student Succeeds Act.

By Yizhu Wang
JANUARY 11, 2016 6:30 PM

<http://edscoop.com/parents-advocates-concerned-by-use-of-student-data-in-essa>

Parents, advocates and educators expressed concerns Monday that their children would sit in front of computer screens all day thanks to the new, overhauled education law.

During a public hearing at the Department of Education, advocates like Marla Kilfoyle said she hopes that the revamped language of the Every Student Succeeds Act doesn't mean that technology will replace teachers.

"Will this be a vehicle for students to be placed in front of a computer screen for several hours a day?" asked Kilfoyle, an educator from New York and executive director of the Badass Teachers Association, which rejects "profit-driven education reform," according

to its mission statement. "This is very concerning to me as both a mother and an educator."

While ESSA encourages schools to use data and technology to improve instruction, Kilfoyle stressed that it shouldn't go too far.

"We see a need for technology and to make sure that our students are using it to enhance their learning," Kilfoyle said. "But it should not replace the human interactions that we need in the classrooms to become productive global citizens."

Others said they want to make sure schools are held accountable for the progress that students make based on information from their tests and other metrics.

"We want to ensure that this information is both easy to find and easy to understand, as it is another way that families and communities can hold decision-makers accountable for their actions," said Susie Saavedra, senior legislative director of the National Urban League.

The new law continues the department's "Investing in Innovation" grant program, and encourages districts to use data and technology to improve student achievement.

This was one of two public hearings the department is holding on ESSA, which is in the process of being implemented after President Barack Obama signed it into law last month. Speakers called for the federal government to give localities specific guidance on how to transition to the law. It is unlikely to go into effect before the next academic year.

The second meeting will be held on Jan. 19 at the University of California, Los Angeles. The Department of Education will continue collecting comments and recommendations from the public by Jan. 21.

Parents struggle to monitor kids' Internet use with tech - study

Parents prefer to personally monitor the browsing activity of their teens over using technology resources, a Pew Research Center study found.

By Yizhu Wang
JANUARY 8, 2016 4:00 PM

<http://edscoop.com/tech-tools-only-go-so-far-helping-parents-monitor-teens-online-activity-new-study>

Computers and smartphones may be a ubiquitous part of teenagers' lives, but parents don't typically turn to those same technology tools to track their kids' Internet activity, according to a new national study.

Parents recognize that paying attention to their children's behavior in cyberspace is an important part of parenting. A new study by Pew Research Center found, however, that most parents prefer to personally observe and discuss their children's behavior, rather than rely on software tools like Net Nanny.

While the study did not examine the challenges schools face in monitoring teenagers' online and social media behavior, it provides a fresh view of how parents are addressing the added presence of digital technology at home.

The study found, for instance, that 61 percent of parents check which websites their kids browse, and 60 percent checked their children's social profiles, but only 39 percent report using parental controls for "blocking, filtering or monitoring" their children's online activities.

The data show that communication with teens is better than using more technical means like parental controls, said Monica Anderson, a research analyst of Pew Research Center and the author of the report, so "conversations tend to act as 'first line of defense.'"

That approach also occurs with teenagers' mobile devices. Almost half of parents check their teen's call records or messages, but only 16 percent use parental controls and location tracking tools.

Most parents are teaching their kids to behave themselves online. Nearly all parents surveyed said they discuss with their children what's appropriate to view or share.

"Parents are concerned about what their teens do online, and they're taking steps to discuss, monitor and regulate their teen's digital use," Anderson said in an interview with EdScoop.

Parents are continuing to adapt to the reality that 92 percent of teens report going online everyday, and 73 percent teens report having smart phones, up from 37 percent in 2011, according to Pew Research.

At the same time, parenting styles can differ. "Some parents are more proactive and overseeing what their teens do online, and others utilize the lighter touch," Anderson said.

Parents have also recognized that their children's digital devices can be a source of leverage. "Digital grounding" is used as a form of discipline by 65 percent of parents, who cut off their children's access to the Internet or cellphones as a punishment.

The report found that some demographic factors influence how much parents are concerned about their kids' online behaviors. Parents of younger teens reviewed the web browsing history of their children more closely than parents of older teens. They are also more likely to apply digital tools to monitor online activities, which is 12 percent higher than parents of older teens.

Parents of the families with higher income talk less frequently with their children about both online and offline life than parents in lower income groups. Also, mothers tend to discuss online behaviors with their children more frequently than fathers, the study found.

The report, based on surveys conducted in the fall of 2014 and the spring of 2015, is the fourth in a series studies by Pew Research Center concerning teenagers' lives in the digital era since, Anderson said. The previous three research reports dealt with teens, social media and technology, how digital tools change teens' friendships and their romantic relationships.

California elementary school sees reading gains with blended learning program

California Elementary School in Costa Mesa, Calif., which has mostly English language learners, saw improvement in reading scores using a product from Lexia Learning.

By Yizhu Wang and Corinne Lestch
MARCH 25, 2016 2:30 PM

<http://edscoop.com/blended-learning-tool-improve-students-reading-skills-in-california-elementary-school>

Michelle Lopez, a first-grade student at California Elementary School in Orange County, uses Lexia Learning Reading Core5. The blended learning program helps students improve their reading skills. (Courtesy California Elementary School)
Officials at a California primary school credit higher reading scores to a blended learning program.

Teachers at California Elementary School, in Orange County, saw that second-grade students' average reading speed increased by 15 percent in a semester after using Lexia Reading Core5, a blended learning program from Lexia Learning, a reading technology company founded more than 30 years ago.

Now, officials say, they are going to roll out the program to the whole school, which serves more than 600 students in Transitional Kindergarten – the year between pre-Kindergarten and Kindergarten – to fifth grade. Nearly 90 percent of students are English language learners, which prompted school leaders to look for nontraditional methods of teaching.

John Albert is the principal of California Elementary School.

“For us, the No. 1 gap was reading,” said John Albert, the school’s principal, in an interview with EdScoop. “Our students were having an extremely hard time being able to become grade-level readers.”

Using Core5, students learn by completing assignments on tablets or computers in vocabulary, comprehension and phonics.

“Students like the interface,” said Albert. “For them, it looks like they’re playing games, but they’re learning.”

The school piloted the interactive, personalized learning program last February. In a phonics unit, students can listen to the pronunciation of a word, and choose the word spelling from several options. They get immediate feedback about whether they chose the right answer.

If a student has difficulty mastering a specific unit, the program will alert the teacher to see what the student is struggling to understand. Teachers can then adjust their lessons the next day according to the data collected by Core5.

Students also like the built-in reward feature. Each time students master a skill, they get an online certificate for the accomplishment, which is automatically sent to their teacher.

“Our teachers make a really big deal out of it when our students advance in a unit,” Albert said. “[Students] really love being recognized.”

During the 16-week pilot study last year, 49 second-graders used Core5 while 25 used teacher-made materials.

At the end of the pilot, 69 percent of students who used Core5 were reading according to their grade level, up from 16 percent a few months earlier. In addition, students who used the program were on average reading 88.6 words per minute, an increase of 12 words. By contrast, the control group had an increase of three words per minute.

After the pilot seemed to produce higher results, school staff voted to launch Core5 in all grades during the 2015-16 school year.

Although students complete the online activities independently and on their own pace, teachers are still integral to the program. Teachers can check an instruction plan on their end, which is generated based on students’ performance data.

“I think it’s enhancing teachers’ effectiveness in the classroom,” Albert said. “It doesn’t just show that students have difficulty with vowels. It tells you very specifically which vowel sounds.”

Core5 is the first blended learning tool that California Elementary School has rolled out. The program costs about \$10,000 a year for an unlimited school site license. Teachers and students have access to the content management system and the app in class and at home.

The school is currently looking for a blended learning solution for math with a similar program from Lexia Learning, which was acquired by Rosetta Stone in 2013.

"I've always been a huge believer in blended learning," Albert said.

"It offers customized learning pathways for students," he added, without leaving teachers in the dark about their students' progress.

Education groups pressure elected officials to fund tech in ESSA

Edtech stakeholders said the figure for block grants, a \$1.65 billion authorization, will help schools implement blended learning programs and purchase software.

By Yizhu Wang and Corinne Lestch
MARCH 3, 2016 6:00 PM

<http://edscoop.com/edtech-groups-put-pressure-on-elected-officials-to-fund-tech-in-essa>

Education advocacy groups are pressuring public officials to give school districts \$1.65 billion, which could be used for blended learning programs, technology and digital tools, among other things, when the Every Student Succeeds Act goes into effect.

The new law, which goes into effect during the 2017-18 academic year, authorizes \$1.65 billion in flexible spending for states and districts, but President Obama changed the request in his proposed federal budget to \$500 million. The final figure will be hammered out during the appropriations process.

Jon Bernstein, a consultant for ISTE, which hosts the nation's largest annual edtech conference, said the president's proposal "is not getting the job done."

"Our members are specifically looking for a full-funding appropriation," Bernstein said in an interview with EdScoop. "We're going to keep banging on the door, asking for the appropriate funding, because this is a critical year. This is the precedent. If we don't get a decent funding level for the first time this program is in existence, it's not going to be any better next year."

But there are competing priorities as the final details get worked out, and as members of Congress fight to allocate funds for whatever they are championing, whether it be blended learning programs or anti-bullying services.

According to sources who were in the negotiating room when the bill was being crafted, \$500 million would not be enough spread out across 50 states and some 14,000 school districts, and conversations are ongoing to figure out the final figure.

Department of Education officials have been encouraging states and districts to start using technology and software effectively in classrooms by training teachers on the new tools so they know how to use them. The funds in ESSA would be able to be used towards professional development for teachers.

"It's critical for tech investments," Ann Flynn, director of educational technology for the National School Boards Association, said of professional development.

"We've seen a lot of dollars spent on devices, and some did not live up to their promised expectation because it was really automating the same practices that were there before," Flynn told EdScoop. "The devices and technology give you an opportunity to do things differently, but that probably means a change in pedagogy, a change in teaching styles."

There is also a cap on spending for hardware for schools – no more than 15 percent of ESSA funds can be spent on infrastructure.

Computer-based tests can help at-risk students – report

A Center for American Progress report found that PARCC and Smarter Balanced tests are tailored to students' needs, especially those with disabilities and English language learners.

By Yizhu Wang and Corinne Lestch
MARCH 1, 2016 11:00 AM

<http://edscoop.com/next-gen-assessments-are-designed-for-all-report>

Students at Summit Middle School experiment with using computer-based tests about seven years ago. Now, it's the norm. (Jose Kevo/Flickr)

Computer-based assessments can help the most vulnerable students, according to a new report.

New tests created by Smarter Balanced and Partnership for Assessment of Readiness for College and Careers (PARCC) accommodate the needs of students with disabilities and English language learners – reducing the need for special help or an aide, according to a report from the Center for American Progress released last week.

All students have access to digital glossaries, notepads, calculators and zoom in and out functions, and they can change the background and foreground colors on the screen to contrast certain information. Students with disabilities and English language learners can take advantage of closed captioning services, computer-based Braille, and translation to other languages and dialects. There are written test directions in 10 languages, and text and audio glossaries in more than 11 languages.

"The ability to have the access to some of the assessments, at least in the student's native language, is very helpful," said Scott Sargrad, co-author of the report and managing director of K-12 education policy at CAP.

Sargrad added that he and other researchers specifically wanted to study how the tests affected more underserved populations of students. They sought information from PARCC and Smarter Balanced, and consulted with advocacy groups like the National Center for Learning Disabilities, the National Disability Rights Network, the National Council of La Raza, the Migration Policy Institute, and experts from the University of Miami and University of New Mexico.

"The tests are trying to avoid some of the barriers to accessibility on the front end," Sargrad said in an interview with EdScoop. "Things like being able to change the font size of the test, being able to block out answers and review them one at a time, can help students with learning disabilities. Having things like Braille and American Sign Language available [and] embedded in the test, it's a really big step forward for students with disabilities."

The new features, which were not so widely available and accessible in paper-based tests, allow at-risk students to take the yearly assessments with the rest of their peers rather than face the stigma of being singled out or separated from their class.

"Test takers can choose which supports they need in collaboration with their teacher or [Individualized Education Program] team in an inclusive testing environment," the report reads.

For example, an English language learner can wear headphones to listen to a translated glossary while another student with a reading disability can use the headphones to cancel out noise.

Samantha Batel, co-author of the report and policy analyst, said the tests offer an inclusiveness and accessibility to students that are not usually found in traditional exams.

"A closer look at the new assessments developed by PARCC and Smarter Balanced show the breadth of thoughtful universal design features that have been incorporated to make test taking more dynamic and user-friendly for all students," Batel said in a press release.

Researchers also noted some challenges. At times, there are inconsistencies between the standards created by test developers and assistive technology vendors, both of which must ensure that students can access the special features.

"States must create clarity for districts around state-approved accommodations," the report states. "Schools and parents need more local information to better understand available supports."

In addition, lack of computer literacy affects students across the country. Maryland launched computer-based assessments for the first time last year, and a state analysis showed that students who took the tests on paper received higher scores than those who took PARCC tests, according to the Baltimore Sun. Officials said that students' unfamiliarity with the new test interface could have contributed to lower results.

Tech groups eager for ESSA guidance as King prepares to go before Congress

Technology associations are waiting for the Education Department to offer assistance on how to implement the Every Student Succeeds Act.

By Yizhu Wang and Corinne Lestch
FEBRUARY 23, 2016 1:30 PM

<http://edscoop.com/tech-groups-eager-for-guidance-on-essa-as-john-king-prepares-to-testify-before-congress>

Education and technology groups are looking for more guidance on the Every Student Succeeds Act as acting Education Secretary John King plans to outline his vision of the new law before Congress this week.

The overhaul of No Child Left Behind gives states more flexibility and authority over how to spend federal dollars, and allots \$1.65 billion in block grants for counseling, dropout prevention programs and technology – but it's still unclear whether all that money will see the light of day.

President Obama, in his 2017 federal budget proposal released earlier this month, requested just \$500 million for states to dole out the competitive grants to districts, as the likelihood Congress would approve full funding grew dimmer.

But education advocates hope more money goes into school coffers.

"We hope that funders provide much more, because the interest in using this flexible funding stream is very high," said Phillip Lovell, vice president of policy and advocacy at the Alliance for Excellent Education, a nonprofit group in Washington, D.C. "It could be used for so many things."

Along with a new law, there is also a new acting education secretary – King's nomination is still pending since he took over for Arne Duncan, and King will go before lawmakers in a separate hearing to testify about his appointment.

With the transition, it is unclear how much guidance will be issued to states and school districts in the near future. The law will officially go into effect during the 2017-18 academic year.

"The department is still working through a lot of details about how to implement the law," said Lovell. "Slowly but surely, states will get information. But a lot of policies have yet to be determined because the department has to issue regulations."

Obama's budget request started the negotiating process over the funding of the bill. Congress will ultimately decide how much money to assign in the annual appropriations bill, which is usually enacted in the new fiscal year.

Other groups are concerned that if Congress doesn't appropriate the full \$1.65 billion, even less money will go toward technology infrastructure. As it stands, no more than 15 percent of the block grants can go toward hardware.

Lan Neugent, interim executive director of the State Educational Technology Directors Association, said this fixed amount "is not sufficient to do what is necessary," and called for Congress to deliver on "what was originally projected."

Kristen Amundson, executive director of the National Association of State Boards of Education, advised that state leaders confer about what districts need before making any funding decisions.

"You should start to think about what changes you want to make and you should start to gather information, but you don't have to act in a hasty way," she said.

Amundson added that it might be typical to see more states using the money for personalized learning programs.

"I think that is very positive, [and] something we will certainly encourage states to take a look at," she said.

King will testify before the House Committee on Education and the Workforce about the law on Thursday at 10 a.m., and then on his nomination later that afternoon. He will also go before the committee on Wednesday to talk about the department's budget request.

For John King, personal struggles fuel passion for equity in education

King said that career and technical education programs, high schools that offer associate's degrees in technology and other programs can help close the achievement gap.

By Yizhu Wang and Corinne Lestch
JANUARY 20, 2016 6:00 PM

<http://edscoop.com/for-john-king-personal-struggles-fuel-equity-in-education-causes>

Acting Education Secretary John King said Wednesday that states need to be "aggressive" when implementing the new Every Student Succeeds Act, which gives localities more oversight and responsibility over student performance and achievement.

King, who stepped into former Secretary Arne Duncan's shoes this month, made his remarks at the U.S. Conference of Mayors at the Capital Hilton Hotel in Washington, D.C. He frequently invoked his personal struggles during childhood to show that states need to be mindful of equitable access to resources in all schools.

"I suspect I'm the first secretary of Education to be expelled from school," he said. "But I believe in second chances."

King grew up in Brooklyn, N.Y., and went to Public School 276 in Canarsie. His mother died when he was 8 years old, and he went to live with his father, who was ill and died when King was 12 years old.

Despite the many obstacles, he managed to land at Harvard, and then he received a law degree from Yale and a doctorate in education from Columbia.

"My life could have gone in a lot of directions. My teachers could have looked at me and said, 'Here's an African-American Latino male student going to New York City public school with a family in crisis – what chance does he have?'" he said to an audience of about two dozen mayors and other audience members. "But they didn't. They invested in me, they had hope for me, and they saw promise in me."

King said states' most vulnerable children – children with disabilities, English language learners, dropouts, chronically absent kids and other students at risk – need to have a vision for their future.

The law requires that when students are struggling and schools are struggling, states have a responsibility to act and to intervene," he said. "We need to make sure that states are aggressive and leaning forward and trying to support schools that are struggling the most. We cannot allow an intervention response to become just a bureaucratic compliance exercise. It has to be meaningful."

King mentioned the Investing in Innovation program, P-Tech high schools (which offer associate's degrees in tech fields), and career and technical education programs as examples of alternative programs that can help disadvantaged children envision careers and futures.

"Many young men who got off track did not see a future for themselves, or weren't clear on what their future looked like," he said. "With career and technical education ... I think for some students, particularly who dropped out, that can be a very powerful lever, because you can see that immediate connection between what I'm doing in the classroom and what I might do afterwards."

During a question-and-answer session, Tony Yarber, mayor of Jackson, Miss., wanted to know how to give every child the chance to innovate in school.

"My struggle is, how do we create an environment where the arts, innovation, technology and entrepreneurship are part of the norm, and not part of select or specialty schools in certain areas of our cities," Yarber said.

King answered that under ESSA, struggling schools can qualify for more funding. But, he noted, "We need more investment."

Chapter 5: Analysis Component

Spending the semester in Washington D.C., I was surrounded by political news, especially about the presidential election. Candidates are being exposed in media through debates, campaigns and interviews. Journalists play a significant role in vetting the qualifications of the candidates and assist voters in making decisions. Through this research, I want to look at what are the difference and similarities between digital media and the traditional newspaper.

My research subject is the third Republican presidential debate on CNBC. It attracted a lot of coverage because the candidates accused the CNBC moderators of asking disparaging questions and interrupting too often. Afterwards, the Republican National Committee suspended its cooperation with NBC Universal, the parent company of CNBC, for a future debate due to the “disservice” of the network.

Also, the rankings of candidates were complex at that time. Donald Trump stayed as a front runner with lots of questions; Jeb Bush’s support kept declining once he joined the race; Marco Rubio was catching up as a new political star; and Ben Carson was the number one candidate who received top ranking in a national poll. Media coverage focused on the candidates’ policy positions as well.

I conducted the exploratory study news coverage of the debate, to measure how it was presented in digital and traditional media. I used gatekeeping theory as the background information of my analysis. Gatekeeping is a mechanism in mass media communication where journalists significantly influence the flow of information. I tried to figure out: Between coverage of traditional media (USA Today and New York Times)

and online media (Slate and Politico), what are the differences and similarities in genres, discourses and styles?

I chose two traditional newspapers, USA Today and the New York Times, and two news websites that were born on the Internet, Slate and Politico. The four media outlets are dedicated to reporting the 2016 election including the CNBC debate, and represent a mixed political alignment. I collected 156 stories that are particularly about this debate from the four publications. Most of the stories were published between Oct. 26 and Nov. 3, a period that included Oct. 28, the date of the debate. I divided the stories into three categories based on the main framings: introductions about the debate regarding rules and how to watch it, candidates' performance during the debate and the dispute afterward between the Republican party and the television network.

There are three main issues in the media coverage of the presidential elections. First, gatekeeping bias exists in every step of news collection and is reflected in the stories reported (D'Alessio & Allen, 2000). Second, stories are more about the form of elections over the core values, known as "horserace journalism" (Broh, 1980). Third, digital technology provides more resources of information for journalists to process, including social media and visualization techniques. Digital technology is an important instrument, but also a challenge to journalists' power of gatekeeping and can impair the quality of coverage (Lawrence et al., 2013).

5.1 Literature Review

Background: The role of journalism in presidential elections

Media play an important role in the presidential elections. The gatekeeping process involves the information flow and influences the audience's opinions on

candidates. Before I compare the media of different kinds, I reviewed previous research to understand gatekeeping in political reporting. Politicians make effort to influence the media, and information delivered by the media influences audience's recognition of the candidates. This final point needs to be made clearer; it is vague now.

Candidates are the first gatekeepers to build up their images, by using certain rhetorical discourses to emphasize their positions and to distinguish the image as the future president (Spielvogel, 2005). These discourses exert strong influence on voters' decisions. In the 2004 presidential election, George W. Bush narrowly won reelection over John F. Kerry by highlighting the morality value of the war against Iraq.

Bush argued that waging war was about "good and evil," and defined the war as a part of the anti-terrorism action in the post-9/11 era. It fit with the conservative morality of the Republican, Bush. Kerry, on the other hand, applied a "progressive" worldview saying that the war would hurt innocent people in the Middle East and caring should be the priority.

As Bush's moral frame prevailed, Kerry's anti-war stance was judged as an evil tolerance of the terrorism (Spielvogel 2005).

Media also helped politicians' efforts on the issue of agenda setting. Bedingfield and Anshari (2014) explained that in the 2012 election, Barack Obama set the frame on Romney that he is a "vulture capitalist." Media exposure of this framing of Romney significantly enhanced the influence of this framing.

News coverage influence the audience's voting decisions by provoking emotional reactions from readers toward political figures (Namkoong, Fung & Scheufele, 2012). Through analysis of the audience's response to the media coverage, researchers

found that negative emotions toward Kerry increased over time, and it was accompanied by an increase in positive emotions toward Bush (Namkoong, Fung & Scheufele, 2012). As long as the news content makes voters feel angry or afraid of one candidate, voters tend to favor the opponent.

However, this can be misleading. Media frame the candidates based on the existing stereotype of an issue. But this distorts the reality because candidates tend to be unique and may not be able to represent the situation generalized from stereotype (Sisco & Lucas, 2015).

An example is the feminism framing in the 2008 presidential election. Feminism was in the spotlight because two female candidates, Hillary Clinton and Sarah Palin, were featured in the Democratic and Republican contests, respectively. When talking about Barack Obama's attitude toward feminism, media built up a positive image based on the fact that Obama has a competent wife and was raised by a single mother. But in fact, his background does not necessarily make Obama in favor of feminism. The authors draw a conclusion that news coverage oversimplified feminism, made the concept of feminism fractured because these "nontraditional" candidates are not representative enough to reflect the current situation in feminism (Sisco & Lucas, 2015).

Graber (1987) analyzed broadcasting news of the 1984 presidential election, and found that good and bad news changed the public's political thinking. Previous research considered that the reelection of President Reagan was partly because the good news on television illustrating his success, and the meaning delivered by the good news and bad news is actually identical. Every time Reagan showed up on television, no matter whether the news about him was good or bad, he received a favorable public impression.

Gatekeeping theory

First put forward in sociology, gatekeeping in journalism referred to the role of journalists performed as information processors in the chain of communications. Wire editors selected or rejected stories as part of daily routines (White, 1957).

As gatekeeping evolved, researchers extended the focus of the theory to the entire information transmission process. For example, as media construct the social reality, not only when editors pick up wire stories, but also all points where journalists make decisions on story development to writing (Shoemaker et al., 2001).

The gatekeeper delivers information in three ways: perceiving a role as an observer, a participant or a catalyst (Cohen, 1963). As observers, journalists take a neutral stand in producing foreign policy news. If official policy makers utilize the press to deliver messages, the press is regarded as a participant. If it is the public who uses the press to satisfy its interests in politics, the press is the catalyst in the process of political policy development.

Five factors in the gatekeeping process influence the information transmission hierarchy. They are a) individuals, b) routines of communication work, c) organizational characteristics, d) social institutions, e) and the social system (Shoemaker & Reese, 1996). Shoemaker and Reese (1996) found that the newsworthiness depends more on editors' routine assessments over individual staff writers, but Relly, Zanger and Fahmy (2015) argued that individual journalist's attitudes and values have the most influence, and that organizational characteristics of the media hardly influence individuals' attitudes in reporting.

The five factors sometimes help gatekeepers to comply with journalistic principles, while sometimes intervene not the best verb here the news judgment. In the media coverage of 2008 presidential elections, journalists used their gatekeeping influence to balance the reporting intentionally. Media exposure is not positively related to the endorsement of a newspaper of a certain candidate. On the contrary, editors tend to select op-ed pieces that are different from the newspaper's political stance (Butler & Schofield, 2010).

During the 2008 presidential elections, Butler and Schofield (2010) sent letters to editors presenting support of either Obama or John McCain, and then observed whether editors would publish the letter in the op-ed page of the newspaper. They found that among their samples of 100 newspapers, although 70 percent of the newspapers expressed endorsement on Obama, pro-McCain letters were more likely to get published than pro-Obama letters. Editors in this experiment did not take advantage of their gatekeeping power to strengthen the opinions of the newspaper, but used the practice to promote diverse points of view.

Ownership of the media constrained the *Washington Times* to keep neutral in the 1988 presidential campaign. *Washington Times* was biased in favor of the Republicans according to a content analysis of its headlines and stories (Kenney & Simpson, 1993). *Washington Times* was launched in 1982 to provide "conservative alternative voice," as a rivalry to the liberal-left *Washington Post*. The management philosophy influenced the reporting and writing patterns. However, researchers found that the *Washington Post* managed to keep neutral and well-rounded in the same case.

Critiques of traditional media: Gatekeeping bias in media coverage of elections

Gatekeeping bias is among the three types of media bias in coverage of the presidential elections since 1948, which means that journalists tend to select stories from one party or another (D'Alessio & Allen, 2000). An example of this type of “selectivity” is the television news about the 1972 presidential election, when television networks emphasized major candidates and exclude the others in the election. Among the two finalists, television news set the tone for Richard Nixon, the GOP candidate, as the president but treated George McGovern in his role as the Democratic candidate (Hofstetter & Zukin, 1979). The other two are coverage bias, which is the amount of the media exposure, and statement bias, where writers interject their own opinions.

For print media, gatekeeping bias occurred both in news gathering and news writing, which are addressed as “selection bias” and “presentation bias,” respectively (Groeling, 2013). In gathering, the media have a tendency to go after the dramatic moments and cast the world with “villains, heroes, and plots” (Larson, 1974). Reporters are also criticized in heavily relying on those who are media-related professionals and public figures, namely the elite sources. Sources determine the framing of stories. In the 2008 vice presidential campaign, Democrats were surprised that Republicans nominated Palin for vice president and withdrew their attacks on her in fear of losing female voters. *ABC World News* only had two democratic sources who criticized Palin during that week. This is a strategic framing using elite sources (Entman, 2010).

In the news writing process, editorial policies in a news organization can effectively prevent bias. The *Washington Post* had a policy on attributing to male and

female sources equally in courtesy titles, and this language planning solution reduced the gender differences in the articles and made the language of *the Washington Post* less sexist (Fasold, 1990).

Social identity of journalists is a significant factor in structural bias. Whether journalists perceive the story is an “in-group” or an “out-group” one influences their attitudes. Individual journalist’s social identity and judgment on whether “in-group” or not subconsciously affects the news decision (Cuillier, 2012). In hometown games, sports reporters of local newspapers showed more favorable attitudes in their writing than reporters of The Associated Press, who targeted national audience (Reinardy, 2005).

In political reporting, structural bias is reflected as “political favoritism”. In the Republican presidential nomination campaigns in 2000, traditional media showed favoritism to John McCain, which influenced many Republican voters to support McCain (Barker & Lawrence, 2006).

Demographic factors of the reporters will also influence the reportage. Gender influences the reportage. In four presidential elections from 1994 to 2004, there were more male reporters involved than female reporters, but female reporters had a tougher tone when criticizing. Male reporters also preferred a masculine approach where they emphasized the competition against candidates (Grabe, Samson, Zelenkauskaitė & Yegiyani, 2011).

Gatekeeping in the digital era

In the 2008 presidential election, a Pew research showed that 40 percent of all Americans have gotten news about the campaign from the Internet, 7 percent higher than in the 2004 election. Online political videos and engagement via social networking were

two emerging trends (Rainie & Smith, 2008), which reflects the diversification of information genres in coverage of presidential elections (Hussain, 2012). While the young voters, who are better at using technologies, tended to support Obama more than Clinton and the Republican McCain, online campaigns of Obama got the best effect.

While citizen bloggers occupied part of the gateway of gatekeeping, journalists can hardly control the traffic as the only gatekeeper (Hussain, 2012). Traditional journalists also ignored diversifying the presentation of information. However, campaign videos were welcomed by all types of blogs in Hussain's research (2012), including journalism, political, entertainment and lifestyle, which means readers showed more interest in directly hearing from the candidates. Functions on social media, for example, "Like" or "Friend" on Facebook, also make the audience feel closer to the candidates (Enda, 2011).

In the digital era, technologies changed the gatekeeping method as a process of information, communication and gradual elimination (Bro & Wallberg 2014). Digital devices and software help in selecting, rejecting or generating stories. The audience is able to join the communication more effectively, and new subjects like participatory journalism emerged. The management of news organizations also evolves, with social media, search engine companies and digital media joining the battle in the media market. Scholars discussed whether machines will replace journalists' intelligence in the post-industrial journalism era (Anderson, Bell, & Shirky, 2012).

In terms of coverage of presidential elections, digital media doesn't improve the gatekeeping process from the root (Landreville et al., 2015). Regarding to the platform of the stories, there is also research on the role of social media in framing the presidential

election. Sivek (2012) found that in the 2012 presidential election, magazines promoted printing stories by publishing briefs of their articles on Twitter, which reinforced political mobilization and affected the longevity of their publications.

Reporters who used Twitter to report information in the 2012 Republican and Democratic conventions were less likely than traditional reporters to comply with the rules to strengthen the objectivity (Lawrence et al., 2013). Reporters who published information on Twitter also did not effectively use interactions on Twitter between reporters and readers, and maintained the one-way gatekeeping flows (Lawrence et al., 2013).

5.2 Analysis

I focused on a particular event in the campaign, the third Republican debate on CNBC. I used gatekeeping theory as background information to compare the difference and similarities between traditional media and digital media regarding coverage of this debate. Analysis was informed by research into gatekeeping bias.

In each category, I compared how the genre, discourse and style analyze are respectively reflected in the stories.

Category I: to inform readers of the hard information about the debate

This category covers informational content in which reporters introduced the focus and rules of the debate, so that readers would know what to expect, and also gave some basic information about how the debate would work.

There were four main topics that were covered by all four publications: lineups and principles of the debate, candidates' poll rankings, negotiations between the Republican party and the network, and the ratings for this debate.

USA Today

Although basic information about the debate, including rules and lineups, was covered by all four sample publications, USA Today's coverage was newsier, which means that reporters kept publishing stories as long as CNBC or the candidates announced something new.

USA Today elucidated CNBC's early decision on the format and principles very well. Reporter Donovan Slack published the first story about this debate as early as on Sept. 30. It was the earliest one among the four publications. The story explained the first round of decisions made by the network, including the threshold for candidates' participation of 2.5 percent in the polls, and the format of two debates for all eligible candidates, which was applauded by Republican National Committee Chairman Reince Priebus. In a story 21 days later, another reporter introduced the topic of the debate ("Your Money, Your Vote") and the participants who would attend the debate and who would not.

As in the other three publications, Trump made the headline by bargaining over the length of the debate and threatening to quit if CNBC insisted on three hours. The short story didn't include original reporting, but quoted tweets from Trump and RNC chairman Priebus about the RNC's negotiation with the network. It is an example of the use of social media to strengthen the story.

There was also a series of stories analyzing candidates' standings in the polls. Reporters aggregated candidates' recent coverage in media, and covered all front runners in a balanced manner. No single candidate dominated the coverage.

New York Times

The Times had a surprising feature to show what core people in Jeb Bush's campaigns were doing. Last fall was a critical time period for Bush. Expected to be the front-runner, once he entered the race his poll numbers fell.

As in USA Today, the Times also introduced the rules of the debate and candidates' standings in polls. Stories were not updated frequently, but information was well organized in a few long pieces. The first article published on the Times website in this category was one week before the actual debate. Reporter Alan Rappoport introduced lineups, time and place of the debate, and addressed candidates' complaints about the length of the debate, with a brief update on their rankings in polls.

The Times was the only publication among the four to provide full transcripts along with complete video of the debate. It served as an archive, a benefit of the digital platform, on which such long-form articles did not take up too much precious space as they would in the newspaper. Readers can also easily manage to search certain keywords, as well as highlight, copy and paste.

Slate

Slate's writers set the agenda beforehand and made Ben Carson and Trump the two main rivals. Carson hit the top in a national poll over Trump at that time. Readers had an incentive to get to know him better and the debate would provide an opportunity to do so. How Carson would perform thus became a focus that Slate writers recommended readers pay attention to. There was another story with lively video interpreting Trump's hand gestures. It was an interesting angle to explore his personality.

In general, the Carson vs. Trump storyline was so dominant that other candidates were not covered sufficiently.

Politico

The format of stories under this category on the Politico website was more flexible. For example, there was a Q&A story about basic information like moderators, front-runners' status, time and location of the debate. It was shared 4,600 times on social media platforms. In another informational story, reporter Mike Allen showed up in front of the camera to talk about “*6 things to watch for in tonight’s debate.*”

Politico reporters went deep into new rules about the debate. Reporter Kelsey Sutton reported that CNBC would hold live polls on Twitter during the debate, reflecting the audience’s real-time opinions on TV.

Category II: to interpret candidates’ speeches in the debate.

In this category, reporters recorded candidates’ performance in the debate, checked the facts and explained the stance of candidates on policy issues. There is an overlap between Category II and Category III, which especially discussed the conflict between Republicans and CNBC, but these articles in Category II are all about what happened on the stage.

USA Today

There are six stories from USA Today falling into this category. Two of them are memorable quotes of candidates. Two stories described the conflicts between candidates and moderators on the stage. The other two focused on the policies discussed in the debate.

Four candidates were featured in the headlines: Jeb Bush, Ted Cruz, Marco Rubio and John Kasich. USA Today did not give any special attention to Donald Trump in terms of candidates' performance on the stage, although there were many dramatic moments involving him. Trump just appeared in some collections of highlights together with all other candidates. If readers only saw stories from USA Today, they would not realize that Trump was standing at the center of the stage at that night.

One main issue of this particular debate is that the moderators and host network became a target of the candidates. When describing the battle on the stage, more stories took a stance which favored the Republicans and there was no opportunity for CNBC to respond or explain. Candidates' and moderators' relationship was naturally unbalanced during the debate, because a debate is supposed to be a platform for candidates to have conversations. But it does not mean that moderators could not defend themselves when being criticized. The loopholes of the rules created a dilemma to moderators: when they tried to stick to the rules, stopped someone and allocated the time to others, which was designed to be fair, they were recognized as interrupting.

The reporter wrote, *“Twice, CNBC moderator Carl Quintanilla held up his note card reminding Cruz he was using all his time, and that he had asked a legitimate economic question.”*

Also, candidates are naturally the focus in the debate over moderators. When reporters wrote about candidates, they were writing about their criticisms of CNBC.

For example, in one article, USA Today explained how Ted Cruz, Marco Rubio and Chris Christie expressed their frustration that moderators' questions were not substantive and unfair to Republicans. It was a recap of the debate so there were no

external sources. The only voice came from someone who did not attend the debate was from a letter from Republican National Committee. The letter praised candidates' reaction in the debate and attacked CNBC on the confrontations as unprofessional. Emotional words in the letter include "*extremely disappointing*", "*did a disservice to their network*", "*deeply unfortunate*", and "*CNBC should be ashamed.*"

USA Today also had critiques of candidates' policy positions. The policy-related highlights that USA Today picked up include government regulation, tax plans, and whether candidates were part of "the establishment" of the party.

In general, USA Today's coverage of candidates' performance on the stage shed more light on candidates' complaints against CNBC moderators, but failed to balance that with the CNBC moderators' explanation or responses. Though several candidates were enraged about them, it did not necessarily mean that they asked wrong questions. Because of the unbalanced chances to voice between CNBC and Republicans, bias was delivered that CNBC did not perform well in organizing questions, debate rules and thus enraged candidates.

Regarding the style, USA Today inserted photos, videos and GIFs in the articles. These visual elements featured special moments during the debate. There are compelling captions on GIFs, which are quotes from candidates in the debate. The quotes picked up and made into GIFs are mostly about candidates' complaints of about CNBC, like Ted Cruz's "The questions that have been asked thus far in this debate illustrate why the American people don't trust the media", which appeared twice in two articles. There are also interesting quotes like Bush's "You find me a Democrat willing to cut spending \$10 ... I'll give them a warm kiss", and Trump's "I trust people too much."

There are video montages with a few articles that summarized the debate. Videos featured the dynamic on the stage including conflicts between moderators and candidates and jests aimed at the Democrats and each other.

New York Times

There are 11 news stories from Oct. 27 to Nov. 3 describing the debate specifically. Republican or G.O.P. are most frequently used in headlines referring to candidates, and only two stories among the 13 put candidates' names in the headline, mentioning Cruz, Trump and Carson.

Compared to coverage from USA Today, there are more critiques of policies and topics are more varied, including tax reform, climate change and candidates' profiles.

Because this debate emphasized economics and finance issues, tax reform is a focus not only on the stage but also in the Times' coverage. Two stories discussed tax cuts, and both of them are collected in the Upshot section, which features analysis in texts and graphics based on data and historical background. One story fact-checked whether candidates' exchanges with moderators during the debate are misleading or incorrect. The other story explained how these tax plans are "Republican": big tax cuts for middle class, plus risking the loss of revenue. The author compared the Republican style of tax plans with Mitt Romney's tax proposal when he ran for president in 2012 - more risk of losing revenue, with fewer promises to offset the lost. The analysis is based on historical facts, specific quotes and numbers that are mentioned in the debate or other occasions.

In terms of dynamic on the stage, the conflicts between moderators and candidates are only a sidelight, which is mentioned somewhere in the overview of the debate, and the main focus is the battle between candidates. The overview story not only

summarizes the signature moments of every candidate, but also explains their conversations flowed, including how they compared themselves to each other and how they argued. No stories focus on the conflicts between CNBC moderators and candidates, and there is only one paragraph with a general assessment of the hosts - they lost control over the debate.

Additionally, the Times collects voices from nonparticipants in the debates. Reporters interviewed voters' and other Republicans, which provided an envision on which candidates would lead or fail the Iowa caucus based on their performance so far. This story analyzed the situation of the main candidates, and featured the top two at that point – Trump and Carson. Sources include a lawyer, a businessman, an executive in university, and other politicians. By interviewing both the supporters and opponents of different candidates, the Times gave a conclusion that the top two “underwhelmed Iowa Republicans in debate”. It is informative but not misleading because the projection was based on interviews and substantive analysis.

In general, coverage of the Times of candidates' performance on the stage emphasized policies and provided detailed analysis of their plans, which is more systematical and profound. Furthermore, the profound analysis did not leave space for bias. There is an insight in the stories pointing to predict the person selected as the final nominee, by weighing who has gained or lost points in elucidating policy proposals and leaving favorable impressions.

Regarding the style, interactive graphics, photos and videos are inserted in the stories.

Surprisingly, Ted Cruz is the only candidate who gets a feature story about his debate strategies. There is a [one-minute video](#) named “How to debate like Senator Ted Cruz”. It is originally produced by the Times for this specific debate. It lists three characteristics of his performance in the debate, illustrated by fragments from the debate video. The text story explains the origin of this style, including his previous experiences of debates, his overall campaign strategies and how he spent money on making headlines.

Illustrations are also informative and support the argument in the story. In [a story](#), when the author said that Bush’s campaign manager was angry with CNBC for the unfair allocation of speaking time, there is a clear-cut illustration showing how long each of the candidates spoke in the debate. Bush spoke the second longest in the first two debates and was allocated the least time this time.

Also, [an interactive graphic](#) is linked to multiple stories. It is a real-time data dashboard integrating rankings of the polls, endorsements and money raised.

Slate

There are 15 articles in Slate in this category from Oct. 28 to Nov. 3. Slate did not emphasize the conflict between moderators and debaters on the stage as USA Today did, but focused on the battle between Republicans. There is a clear framing that Marco Rubio won this debate while Jeb Bush lost this one.

It was a difficult time period for Bush around the third debate. He was expected to be one of the most electable candidates in early 2015 after candidates announced their campaigns one after another. In mid-October, a few weeks before this debate, campaign finance data showed that Bush had burned through 86 percent of the money he has raised so far, which was \$11.5 million, [according to Washington Post](#). But his support kept

declining. In the CNBC debate, Bush was assigned the least amount of time to speak, which infuriated his campaign manager. In spite of various issues, his performance in the CNBC debate definitely failed to win him support among voters. In a survey released on Nov. 4 by Quinnipiac University, Bush's support plummeted to low single digits, according to Politico. Among his competitors, Trump continued to make headlines by his troubles with CNBC moderators, and Carson was rising as the most "honest and trustworthy" one, according to the Quinnipiac survey.

With this background, it makes sense why Slate focused on Jeb Bush's performance in this debate. But as one of Slate's headline suggested, "the 'Jeb Bush Is Doomed' narrative Is dooming Jeb Bush." Slate is among those who consolidated this narrative.

Bush was featured in the headlines of four articles out of 17, and all four articles delivered negative messages about him. One article simply described a moment where Rubio censured Bush's criticism to him was just playing politics without reasonable arguments, which won audience's applause. This scene appeared many times in other articles, one of which has a more direct headline – "Jeb died on that stage".

Winning and losing is the fundamental framing in Slate's campaign coverage. The slogan of Slate's "Politics" section is "who's winning, who's losing, and why." The coverage of the CNBC debate reflected its spirit very well, but here are some problems. First, "who's winning and who's losing" is basically the principle to select who and what to write about in Slate's coverage. This principle is subjective and has a strong editorial judgment. It is where selection bias exists. Second, those dramatic moments like in a

horse race are not always worth further discussion. Bush and Rubio were just playing politics by disparaging each other and praising themselves.

Also, such a specific goal of explaining winners and losers created redundancy among articles. In seven articles out of 15 which recapped the debate or explained why Rubio won or why Bush lost, the authors mentioned or described the scenario where Bush was accused of playing politics.

In terms of the conflict between CNBC moderators and candidates, Slate made a fair description by recording the back and forth between them. In an article, the author first summarized what moderators target with each question, and then reported how candidates shifted the focus to attack moderators “in response”.

“Trump and Carson have proposed massive tax cuts that nonpartisan and even conservative analysts have said would raise the deficit by trillions of dollars; Cruz has famously pushed the U.S. to the brink of defaulting on its debt, which almost everyone—including the leaders of his own Republican Party—agrees would be a catastrophe. CNBC also asked Marco Rubio a pointed question about his frequent, well-documented absences from the Senate, asked Carly Fiorina about her widely criticized performance as CEO of Hewlett-Packard, and pressed Jeb Bush on his campaign's poor poll numbers.”

In the above paragraph, we can see some implications. First, moderators’ harsh questions were not groundless. The issues in their tax plans and economics policies that CNBC addressed have already created the broad concerns, even inside the Republican party. Therefore, moderators did not intend to embarrass candidates, and it could have

been a solid discussion on the federal budget and tax cuts. But Rubio and Cruz shifted the agenda to media bias, which the audience at the debate bought.

It is a typical “Slate Pitch”, where reporters encourage readers to think in an alternate way and be open to diverse opinions (Goldenberg, 2014). While the audience applauded Cruz for criticizing the media agenda, the author pointed out that candidates were actually avoiding answering harsh questions.

Overall, there is a predominate framing pattern of candidates’ performance on the stage—Rubio won and Bush lost.

Regarding the style, Slate inserted various multimedia elements in stories, including videos, photos, interactive charts and Tweets. The length of articles varies a lot. There is one article which is quite short and just described the argument between Rubio and Bush, illustrated by the video clip. Slate also produced a 90-second video recapping the debate, with a text explanation of 99 words. Video clips were usually directly cut from the debate, without additional reporting or editings.

According to the listed time of publication, seven articles out of 15 were published in the debate night. It is a productive team but there were tiny mistakes in three articles, which were marked by corrections, including misspelling Tennessee and a person’s first name, and misstating the date of the debate. These mistakes are tiny but could have been easily avoided. It is a problem with quick updates.

In four long stories, there are text boxes inserted to emphasize the core opinions of the story. The three featured quotes summarized the basic framing of Slate’s coverage on the debate: determining the winner and loser: “*Rubio showed he could go toe-to-toe,*” “*Any wind Bush had—any fire or spirit—was gone,*” defending the press: “*Presented with*

facts and figures that didn't fit their story, the leading Republican candidates accused the moderators of malice and deceit,” and a general analysis of the position of Republicans: *“The Republican Party has moved backward in its relationship with Latino Americans.”*

Politico

Politico had the largest number of articles among the four publications, 38 articles between Oct. 28 and Nov. 3. The stories were published mainly on the night of the debate. Politico watched closely candidates' conversations on stage, as well as on other occasions like on Twitter. Opposite to the New York Times' style with comprehensive background information, Politico's stories usually focus on a single real-time moment on the stage, which could be a conflict between candidates, or discussions under a single issue or a single question. There is a strong sense of live news in Politico's stories about candidates' performances in the debate.

Politico's coverage had main framings like what other gatekeepers established, including the pattern of Bush losing and Rubio winning that Slate featured, and the conflicts between moderators and candidates that USA Today featured. In addition, Politico also made Trump the star in the debate.

Trump took up a lot of space in Politico's coverage. None of the other three publications highlighted Trump. Why did he receive so much attention from Politico's reporters?

During the debate, one of Trump's signature moments was when he blasted CNBC, which of course got an entry on Politico: Donald Trump boasts about limiting the debate 'so we can get the hell out of here'. It is a very short article of 161 words. The author described the back and forth between moderators and candidates – while

candidates complained that they should have had more time to speak, they also thought that debate should be shorter. In this story, the author gave both sides a paragraph about their complaints, which keeps the balance.

However, although Fiorina, Trump and Carson were all mentioned in this article, Trump got the headline with his blunt quote in it. Carson and Trump issued a joint letter about the debate format, but Trump became the only focus because of his quotable speeches. This is where gatekeeping bias appeared. For reporters, quotes made a candidate stand out.

Also, Politico framed a tension between Trump and Carson. The retired neurosurgeon was once considered a layman in the economy and foreign affairs. But his poll numbers peaked during last October and November. He once exceeded Trump become number one in a poll after the CNBC debate. In news about Republican polls, as Trump was always the front-tier candidate, he made headlines even if he was not the focus of the story. Trump was in the headline of a story where the reporter explained why Rubio won – Trump? Carson? Rubio Steals the Debate Show.

Even after the debate, Politico did not miss Trump's comments and interactions with reporters on Twitter. They even did a specific story on what Trump tweeted after the debate. In an online poll of MSNBC after the debate, Trump was voted as the person who could handle the economy best based on his performance in the CNBC debate. Without any surprise, he retweeted it and commented "very true, thanks!" In another tweet, Trump wrote "*Marco Rubio will not win.*" It is very clear to me that Politico's dominant news judgment on Trump is to report the eye-catching stuff that Trump said or did, no matter whether these opinions were reasonable and newsworthy. I cannot say the consequences

of these stories, because I did not research on audience's reactions to these stories. But researchers have found in previous presidential elections that the more news coverage a candidate got, no matter positive or negative, the more favorable public impression he/she received (Graber, 1987).

Another article featured an interview of Trump with ABC after the debate, where Trump made some comments on his Republican colleagues and shot back against President Obama's comments – "And then it turns out they can't handle a bunch of CNBC moderators."

"I think that Ben just doesn't have the experience," Trump said.

"Jeb is not the man that's gonna make it. He's wasting his time, he's wasting a lot of money. I say Rubio is highly overrated. I think there are some people that actually do have talent in the group," Trump said.

"As far as President Obama saying what he said, he can't handle the country. I mean, he's doing a terrible job running the country," Trump shot back.

Judgment on candidates is everywhere. Everyone wants to know their positions in this battle. That is why there are polls and debates all the way through the election. But these comments of Trump are personal, subjective, strategic and not fair. Trump made some eye-catching comments. He looked down on every other candidate. These sarcastic comments made him look different from his colleagues who behaved political correctly. But this personality is just what he is selling to the voters. It is not a meaningful piece of news for voters, because not being political correct does not mean that Trump is honest on other issues and qualified to be the president, though it can be a merit to someone.

This story was shared on social media more than 1,000 times, but I do not think that the popularity of this story made it successful because of its gatekeeping bias in two aspects. First, it is not newsworthy that Trump just said something negative about other candidates that others would not say, which was picked up by Politico out of all other candidates' interviews. Second, it is unfair that only Trump was selected for his disparagement. If Politico does not mind helping a candidate disseminate his message, why did only Trump get exposed?

In general, Politico chased after controversial moments. They put Trump on their radar first, and gave Trump a priority in their news agenda.

There was a type of stories simply describing scenes in a way the same as what people could see on TV. Many of these entries were published during the debate, short and simple, aiming at telling readers what was happening on the stage. For example, one article simply summarized candidates' answers to a question without additional reporting and commentary: what is your biggest weakness. This was indeed a highlighted moment on the stage, because it was the only question that everyone gave an answer to, and it reflected characteristics of candidates with a little humor or seriousness.

But this text piece did not deliver more information than the video clipping, which was inserted at the top of the story. It might be easier to read for users of mobile devices. But technically, it does not add value to the video clips, which seems redundant to me.

Category III: to assess the confrontation between candidates and CNBC

During and after the debate, candidates were clearly dissatisfied with CNBC moderators. Their complaints were mainly about the questions and rules of the debate. Moderators stuck to the rule that each candidate should have a firm 90-second time

period to state their arguments, but there was no timer on the stage and candidates didn't know how much time they had used, so that moderators had to interrupt when time was up, even though they had not finished their arguments. In terms of the questions, criticism was more direct. Ted Cruz asked that "How about talking about the substantive issues? Nobody believes the moderator will vote in the Republican primary. It shouldn't be about tearing into each other."

Afterwards, the dispute drew attention from various parties. Republican National Committee chairman Reince Priebus issued a statement saying that "the performance by the CNBC moderators was extremely disappointing and did a disservice to their network, our candidates, and voters." The party then suspended its cooperation with NBC for another debate scheduled on Feb. 26. NBC spokesman Brian Steel responded, "People who want to be president of the United States should be able to answer tough questions." President Obama said that the problem was about Republicans' capacity to communicate and negotiate. "Then it turns out they can't handle a bunch of CNBC moderators at the debate. Let me tell you, if you can't handle those guys, then I don't think the Chinese and the Russians are going to be too worried about you," Obama said.

The chaos on the stage and afterwards drew a lot of media coverage. I collected stories about the back and forth between CNBC and Republicans on the USA Today, the New York Times, Slate and Politico websites. I try to look at the differences and similarities in the focus and approach of the four publications, and whether the nature of the media as a traditional one or a digital one made a difference.

USA Today

There were six news stories from USA Today especially about the relationship between candidates and the network, which amounted to almost one third of the newspaper's coverage of this debate.

One story addressed how specifically Republican students were not happy with the CNBC moderators' questions. The reporter interviewed young campus Republicans who attended the debate Colorado University in Boulder, where the debate was hosted. All sources, in their 20s, was disappointed by CNBC moderators. They did not think the discussion was fair and healthy, and they thought that moderators called too much attention to themselves, which went against the mission of a presidential debate – to let candidates showcase their opinions so that the audience could know them better. The reporter also inserted a quote from Ted Cruz on the stage, in which he harshly criticized moderators' questions that they made the debate a “cage match” and instigated candidates to attack each other.

There was a visual element inserted in the article, which was a tweet from College Republicans. It was a live vote asking if you think CNBC moderators were fair in the debate, and 85 percent of 994 votes went to “No.” There was no balance at all in this story. CNBC became the only target to be held accountable for the unsmooth debate. Gatekeeping bias existed in this story due to the way the reporter selected sources.

But in general, this group of stories avoided gatekeeping bias.

USA Today provided context showing that the communication between the party and CNBC was not smooth from the very beginning. The first story of the relationship between CNBC and Republicans came out on Oct. 15. Donald Trump was featured

because he allegedly was planning to boycott the debate together with Ben Carson if CNBC insisted to make it two hours long. In this story, reporters were fair by covering both sides. Republicans were not satisfied with the original plan and CNBC reacted to the complaints by adjusting the rules.

Although there was a story solely blaming CNBC, USA Today published a comedic op-ed in showing what candidates asked for too much as infants. It was a third-party audio program that was not a property of USA Today. In the brief introduction of the program, the reporter wrote in a humorous and editorial way to mock Republicans saying that “in the late-night comics' eyes, this makes the party look like a bunch of babies. Although, according to Larry Wilmore and his National Council for Babies, that comparison is an insult to infants.”

In terms of the visual elements, live quotes from Twitter drew a lot of attention. Some quotes were informational, linked to related documents, such as Reince Priebus' letter to NBC to suspend the partnership with debates in the future.

In the story about the communication between the party and CNBC, USA Today quoted three tweets from Trump simultaneously, which was very eye-catching, because Trump said that the debate terms were “ridiculous”, Democrats' debate was “boring”, and CNBC asked for longer time to “sell more commercials.” Quotes selected here were personal opinions from Trump. The reporter chose to put Trump in the center of the communication between the party and the network.

New York Times

Regarding the communication between CNBC and Republicans, there were 11 articles from the New York Times between Oct. 16 and Nov. 2 covering this issue. The

main controversies that the Times addressed included early negotiation over the length of the debate, RNC chairman's letter to CNBC and Obama's response.

A letter to NBC News issued by the chairman of RNC, Reince Priebus, was a key and direct contention between RNC and CNBC after the debate. The coverage was fair because reporters considered the situation from both sides.

Reporters analyzed what went wrong on both sides. In a story, John Koblin and Ashley Parker reported why CNBC "lost." They gave candidates, experts and CNBC the chance to speak. But on the other side, reporter Ashley Parker pointed out in a story that *"the action by the party leadership seemed designed in part to redirect Republican anger away from the national committee, which many believe has bungled the debate process."* CNBC was not the only one to blame, according to the Times, and they held Priebus accountable. It is because he did not give each campaign enough room to leverage with the network by themselves. The story made clear that it was Priebus, not CNBC, who donors were not happy with: *"After the CNBC debate, Mr. Priebus raced to the spin room to criticize the network, but donors were already grumbling that one of the evening's biggest losers was their party chairman."* And also, Republicans customarily attack liberal media to raise money, according to the story.

The Times eliminated gatekeeping bias by fair and logical analysis. Reporters created space for conversations and let both sides had a voice. When they examined the problem, they checked both sides with solid evidence. The writing style was not sensational, and every judgment made by reporters addressed the sources.

The New York Times is also adjusting its reporting and writing style to meet the needs of digital readers. Its digital end was operated as a breaking news platform. In an

article right after the debate, the reporter interviewed Priebus. The 130-word story only had a lead, two quotes and an ending paragraph. Among the four media, the Times was the first one that reported Priebus's disappointment on moderators and support on his candidates before he released the official letter to CNBC, which made them efficient gatekeepers.

The Times is flexible in styles and types of stories, and taking advantage of the convenience of the digital platform. In a recap story of the debate, reporter Alan Rappeport collected quotes on Twitter and blogs of various people on the Internet, and pulled these quotes together into a story explaining why Marco Rubio won and CNBC lost.

What made The Times stood out were stories that really added value by original interviews and angles. Reporters told stories from the perspective of insiders. When everybody learnt in the national news that RNC suspended a future debate with NBC due to their dissatisfaction with CNBC, reporter Ashley Parker contacted campaign managers and told people how they negotiated with networks. It was not only interesting but also informational. For example, Trump's campaign manager Corey Lewandowski said that they usually negotiated with the network directly, not through the party. It verified that Trump and his team did not tend to rely on the party. They made decisions by themselves and it reflected the character of the team led by Trump. It also reminded people of the situation before the CNBC debate, where Trump and Carson complained that a three-hour debate in their original plan would be too long. Background information made people understand how it worked, not merely what happened.

Another example is the story by Peter Baker on President Obama's comments on CNBC debate. He said at a Democratic National Committee event that if a candidate could not handle a CNBC moderator, they would not be able to deal with other tough foreign leaders like Russia president Vladimir Putin. It was a public occasion and the other three publications also did not miss president's remarks. But the Times was the only one that provided additional information that Obama was involved in the campaigns by visiting important fund raisers of Democrats.

Slate

There are no immediate stories from Slate about the CNBC moderators' performance. Slate writers didn't publish immediate stories, and had six concise and comprehensive stories.

In general, stories on Slate were well-organized, and did not just catch up every new piece of information to publish. Information in each article did not overlap. The six articles discussed why it was not a successful debate, what RNC's issues were, how RNC suspended partnership with NBC due to this debate, and what campaigns were doing to prevent their candidates from being uncomfortable again in another debate. Writers reduced gatekeeping bias by analyzing problems of the both sides in a calm, balanced and humorous tone.

In one story, Slate writer Helaine Olen analyzed how moderators failed, from their tones to questions. But Slate looked into the Republican side as well. In another story, Slate writer Jamelle Bouie interpreted moments where candidates managed to avoid answering the tough questions frankly, but took advantage of the anger on the stage. For example, moderators asked Carson about his endorsement of a private

company making nutritional supplements. Though it was a real issue for Carson to maintain his image of honesty, he still did not give a candid explanation to the public but made a detour by calling this question propaganda.

Impressively, reporter Ben Mathis-Lilley wrote a piece about tweets with hashtag “CNBCGOPDebate” scrolled at the bottom of the screen during the debate. With his keen observations, Mathis-Lilley found that though the network put on this novel feature, many tweets that showed up were about how people disliked CNBC moderators. A person pointed out in a tweet that the moderator said that Trump’s tax plan is unrealistic, but a CNBC commentator contradictorily said in a program that it’s great. The reporter, as acutely as the audience, captured the moment when this tweet was shown on the screen.

These tweets are hard evidence showing how CNBC moderators failed to lead the discussion and engage people from the perspective of audience. There were tons of complaints on Twitter, but Mathis-Lilley did not simply collect random tweets to show the audience’s responses, but found a string, which was ironic and interesting, to connect the tweets. I personally did not notice this scene by myself when I watched it. Some of the tweets did not gain lots of attention with very few retweets. The reporter add value by writing about what people may have ignored by his gatekeeping.

In the visual part, the writer inserted live tweets that he mentioned in the article. The story flows well with illustrations like tweets and external links. Through live tweets, readers could click any links or hashtags in it. They could also see how many times the tweet was liked or Retweeted.

Politico

There are 20 stories of Politico featuring the contention between CNBC and Republicans, faithfully recording each step in the development of the situation between the two sides.

Compared to the other three publications, Politico's dedication to reporting on politics in detail resulted in exhaustive coverage. Only Politico reported on how Trump performed in other programs of CNBC as a TV star. Hadas Gold, the reporter, drew the conclusion that "*CNBC is friendly turf for Trump.*" Trump displayed his "softer side" as "a doting father and devoted family man." CNBC was also the network which picked the rerun of Trump's TV show "The Apprentice" and boosted his career in broadcasting. One of the moderators Becky Quick, was the co-host in "Trump Tuesdays" on its signature show "Squawk Box." Gold's intention was expressed clearly in the subhead:

"Moderators vow to be impartial, despite the network's past ties to 'The Apprentice' star."

It suggested that readers should keep an eye on whether the close connection between Trump and CNBC would lead to favoritism in the debate. That is a scrupulous gatekeeping monitor for public purpose.

Also, Gold did not just talk about the history. She also reported Trump's attitude towards CNBC about this specific debate and it was pretty straightforward: "*Donald Trump: CNBC debate will be 'unfair'.*" The two stories from both sides eliminated the gatekeeping bias and showed the complete picture, and it had a news hook.

Some stories overlapped in content, which highlighted certain information. The same content was published in different stories. Under some circumstances, the overlap is

a result of chasing after dramatic moments. For example, the moment when Ted Cruz said “this is not a cage game” was covered in three stories.

However, it is easy to tell if there is solid reporting. For example, reporters Hadas Gold and Kyle Cheney did a good job of avoiding bias by conducting well-rounded interviews. The full story not only included the two statements from RNC and NBC, but also explained the consequence of the suspension – the only Hispanic TV network involved in holding the debates would have to quit along with NBC as its partnership with RNC suspended. In addition, the reporter touched on how RNC made the decision to suspend the debate by interviewing other leaders about their comments on the CNBC debate.

The design of the website encouraged readers to share stories on Facebook, Twitter and Google Plus. Stories were promoted in different platforms, which reflected the digital nature of Politico. Reporters sometimes curated their own stories for promotion, which created repetition.

For example, a story about the fact that the RNC had suspended its partnership with NBC was published at 1:04 p.m. on Oct. 30 by reporters Hadas Gold and Kyle Cheney. It included RNC’s statement letter, NBC’s response, interviews with a leader in RNC and spokesman of CNBC. It was a balanced and informative story. In addition, there was another story published by Hadas Gold as a brief of this story, where Gold introduced the statement letters of the two parties. The story started with “Breaking news this afternoon,” and was published in another category at 2:52 p.m. It looked like a briefing of the main story to spread the word. Such strategies could bring in gatekeeping bias, because repetition makes certain information exposed more than others.

Another article proved the digital nature of the media with only three line:

“What the campaigns are saying:

A tippy-top official, from inside the hall, agrees with Twitter pans of CNBC: ‘Too many interviewer interruptions.’”

It was published by Politico’s chief White House correspondent Mike Allen during the debate at 8:46 p.m. It was immediate, real-time and informative. Although it was not a detailed news story, the reporter delivered this before RNC and media framed the debate as a failure of CNBC afterwards. Most importantly, digital platform reduced the cost of time and efforts to publish such a piece news to a large extent.

5.3 Findings

I collected 156 stories on the four publications specifically about the CNBC debate, and then categorized them into three genres based on the purpose of the story. Stories in the first category were hard information about the debate. Stories in the second category assessed candidates’ performance on the stage of the debate. Also, there were some stories reported the dispute between CNBC and Republican National Committee, which led to the suspension of a future debate.

In each category, stories on every publication had differences and commonalities, and the digitalization of contents helps and hurts. Here are my findings.

Genres

1. Digital platforms, especially referred to websites in this research, better served the public by enhancing the diversity of stories’ genres, which confirmed Hussain’s observation (2012) on the diversification of information.

The publications provided various ways for the audience to review the debate afterwards. All four publications produced video recaps aggregating the special moments during the debate, such as when Ted Cruz accused the moderators of disparaging candidates with their questions. They also inserted video clippings of the debate into certain stories. Video clips were used to illustrate the points made in the story, or replay the moment mentioned by the reporter. It shows their efforts in delivering information of different kinds to readers, and also combines the realism of video with the ability to provide context in print.

In addition, the New York Times also provided the full transcription of the debate in text on its website. Digital platforms like websites were significant for such types of sharing. Texts were searchable and easy to copy and paste. Readers were given more options to review the quotes within the context.

No matter whether the publication has the nature of digital media or not, multimedia skills have been commonly applied in producing contents. From the perspective of public service, these contents were more engaging and the combination of videos and texts was convenient for readers to gain information.

2. However, there were repetitions when reporters present stories in multimedia ways, which presented the same information too many times in different genres of stories.

It especially happened in the second category, and it was an issue for both digital and traditional media. There were certain scenes that were extremely highlighted in multimedia contents, mainly video clips and GIFs. There were some signature moments of candidates, for example, when Marco Rubio criticized that mainstream media favored

Hillary Clinton in reporting, leading public opinions as her personal super PAC. Ted Cruz also expressed his complaints about moderators' questions. These two moments were not only described in many stories, but also featured in many multimedia contents.

Repetitive multimedia contents created both selection bias and presentation bias, and especially appeared in web stories on USA Today and Politico. On Politico, those moments were picked out, written into a story, and illustrated with the video clip when the candidate was actually saying that. On USA Today, these moments of disputations were also made into gifs with striking captions showing the quotes. For example, a moment when Rubio and Bush attacked each other was mentioned in seven of the 15 stories on Slate in the category about candidates' performance in the debate. Rubio's quote was also made into a GIF on USA Today.

The problem was that these multimedia elements were usually lack of further discussions. The one-sided quotes were personal opinions and could be interpreted in different ways without the context.

3. Differences in genre observed in this study are not necessarily determined by the nature of the media, like digital or traditional media, but is depended on the digital strategies and reporting tenets of the publication.

Genres reflect "the way of acting." (Fairclough, 2003) In this research, the specific angle of genre is the digital strategy of the publications, including how they implemented multimedia skills in presenting information. As all four publications have sophisticated websites, and thus all of them face this risk.

Among the four publications sampled, both USA Today and Politico used many video clips to show candidates' performance on stage. The video clips captured the

tensions between moderators and Cruz, Rubio and Bush, but all had issues of redundancy as these multimedia materials of tensions were used in many different stories, and explained again by texts.

Discourse

4. Compared to traditional media, presentation in digital media is more dramatic.

Basically, stories on the Times and USA Today are more comprehensive and well-rounded. The Times' stories emphasized candidates' policy positions, and USA Today did not shed more light on few certain character but covered everyone fairly.

Because Slate set out as an explicit purpose of its election coverage that reporters would declare winners and losers, the selection bias was very obvious. The core framing for this debate was that Rubio won and Bush lost, and the discourse was explicit and assured, like "*Jeb died on that stage,*" or "*Jeb Bush Is Doomed.*" Reporters set up a conclusion first, and then looked for evidence to prove it.

These strong words were usually followed by dramatic moments, such as when Rubio won applause for saying that Bush was just playing politics with his attacks on Rubio. But first, Rubio was being honest about a political trick, but he was also one of those who played politics. We have seen how he played politics to attack Trump in the Fox debate this February. Second, such a frame resulted in redundancy in the overall coverage. This moment between Rubio and Bush was mentioned in seven of the 15 stories on Slate about candidates' performance in the debate. Writers held a bias to strengthen the narrative that "Jeb Bush is doomed."

For Politico, reporters focused on Trump too much, and took his dramatic speeches very seriously without providing context or outside voices. For example, Politico reported an interview of Trump with ABC after the debate, and quoted him:

“As far as President Obama saying what he said, he can’t handle the country. I mean, he’s doing a terrible job running the country,” Trump shot back.

He definitely could question Obama’s political competence as a president, but in this story there were no further discussions at all. Readers got this knowledge but did not know why - just because Trump said so.

5. Aggregating has become a norm, but journalists should find a balance between original reporting and aggregating.

All of the four publications produced excellent and solid feature stories with original reporting, but meanwhile, aggregating information online from Twitter or from interviews with other news outlets was very common.

Selectivity, which was particularly obvious in the third category about the dispute between the RNC and CNBC after the debate. USA Today lacked original reporting on the issue, and the main sources were public letters. RNC chairman Priebus used extreme words in this letter, including *“extremely disappointing”*, *“did a disservice to their network”*, *“deeply unfortunate”*, and *“CNBC should be ashamed.”* While NBC only had a short response, the coverage made CNBC look like the troublemaker.

By comparison, the Times dug deeper in the dispute, and managed to get information from other occasions, like a donors’ meeting with the party officials, where object of donors’ unhappiness was actually Priebus, not the network. The reporter also pointed out that Republicans were accustomed to attacking liberal media to raise money.

Aggregating is helpful in the era of Internet. However, reporters should be cautious of the information sent to them. In many cases, aggregating is not “gatekeeping,” but being guided by the information providers.

6. Among the four publications, chasing after dramatic moments was particularly a problem for Politico, while the New York Times was the best in explaining what happened backstage.

The New York Times did the most original reporting among the four publications. USA Today did many aggregating stories, but the sources were conventional - candidates, leaders in the party and the network. Also, USA Today reported most on the debate itself but did not reveal much information from behind the scenes.

For Politico, nine articles among 39 put Trump in the headlines. Politico’s reporters gave Trump most attention, and faithfully recorded his speeches in different occasions. For example, Politico used this quote:

“Jeb is not the man that’s gonna make it. He’s wasting his time, he’s wasting a lot of money. I say Rubio is highly overrated. I think there are some people that actually do have talent in the group,” Trump said.

This was from an interview with ABC News after the debate. Trump did not give any reasons for his judgment, and Politico also did not follow up with him for further discussions. Thus the story just helped Trump spread his message, but did not help readers tell if Trump’s judgment was fair. It reinforced the selection bias.

For Slate, the spirit of the publication is to encourage readers to think in an alternate way and be open to diverse opinions, known as “Slate pitch” (Goldenberg, 2014). For example, “CNBC also asked Marco Rubio a pointed question about his

frequent, well-documented absences from the Senate, asked Carly Fiorina about her widely criticized performance as CEO of Hewlett-Packard, and pressed Jeb Bush on his campaign's poor poll numbers.”

The reporter provided the statement with hard evidence to remind people that the CNBC moderators’ challenging questions were not groundless, but candidates avoided giving direct answers. In the situation where CNBC was regarded to fail in organizing the debate, Slate tried to guide the audience back onto the track to discuss real issues.

7. Reporters in digital media tend to find more unconventional and interesting angles, while reporters in traditional media preferred more comprehensive stories.

For the New York Times and USA Today, stories tended to be more conventional and followed the traditional flows. But digital media took many new pathways in reporting the debate. The diversification of information helped reduce the gatekeeping bias.

For example, Slate had a story about how viewers were disappointed by CNBC. The reporter noticed that while CNBC tried to be innovative and showed live tweets with a certain hashtag at the bottom of the screen during the live broadcasting, many tweets were people’s complaints. While most of the stories focused on official voices from RNC and NBC, this story provided another angle by reporting on the audience’s response.

Style

8. News publications have different preferences on the frequency of publishing stories, but pursuit of timeliness cannot sacrifice accuracy.

Politico published the most stories of the four publications. Their stories tended to be more quick and immediate but less collaborative. Conversely, stories from the New York Times and USA Today tend to be more exhaustive.

Slate tried to keep pace with the live debate, and published 15 stories about what happened on the stage, but corrections were seen in three articles. These were all minor mistakes, like misspelling the word “Tennessee,” but reporters should definitely pay attention to basic accuracy.

9. Digital publications tend to quote content from social media, and inserted live tweets in the article.

Live tweets usually served as direct quotes. Readers could view how popular the tweet was and even retweet it themselves. In the third category about the dispute between the party and the network, live tweets were used a lot.

The New York Times hardly quoted tweets and inserted live tweets. But USA Today, Politico and Slate borrowed many tweets and displayed them directly in articles. Trump’s Twitter was on Politico’s radar and even a single tweet could make a story on Politico.

To quote tweets directly required the reporter to provide context, or it could lead to both selection and presentation bias. For example, Politico had a story about an online poll of MSNBC after the debate, where Trump was voted as the person who could handle economy best based on his performance in the CNBC debate. Politico quoted his retweet saying “*very true, thanks!*” In another tweet, Trump wrote “*Marco Rubio will not win.*” But the Politico reporter did not explain why he said so and whether it was a fair judgment.

Limited by the number of words, tweets could only show the most apparent results briefly. It depended on the reporters to explain what the number or a quote meant. If reporters selected tweets only based on who published it, like Trump, it created selection bias. Also, just because the information was contained in a tweet, the message could be inserted as a live tweet, with interactive buttons and larger space in the layout. it led to presentation bias.

10. Characteristics of digital tools made both traditional media and digital media more flexible in style.

The format of “lede” emerged in the era of telegram, when delivering a message was expensive with limited channels. Although reporters nowadays can publish stories simply by clicking a button, the pursuit of delivering immediate and accurate information is still kept in journalism.

Compared to publishing stories on newspapers, publishing web stories is easier. Gatekeepers have more tools to deliver information efficiently and reach out to readers quickly. Short informational stories with few sentences were seen on both Politico and the New York Times.

In the second category about candidates’ performance, there was a story with only 161 words, published by a Politico reporter during the debate. The reporter described the back and forth between moderators and candidates right in the debate – while candidates complained that they should have had more time to speak, they also thought that debate should be shorter. Although it was a common frame of the debate afterwards, such a message delivered during the debate was still newsy.

The New York Times also utilized the digital platform to meet readers' demands for immediate news. In an article right after the debate, the reporter interviewed Priebus. The 130-word story only had a lead, two quotes and an ending paragraph. It was published before Priebus issued the official statement to the network. While readers could feel the obvious tension between moderators and candidates, such a story show them the official attitudes from the party.

5.4 Conclusion

As the literature review shows, the mutual influence between media and politics has been a hot issue in the research regarding presidential elections for a long time. The series of presidential debates which started from August 2015 not only provided a stage showing the dynamic between candidates and journalists, but also drew considerable discussions and media coverage afterwards. I chose the third Republican debate on CNBC to study, because of the confrontations which reflected the relationship between media and politicians. I hope that a deep look into the discourse of the stories can provide journalists with a review of the merits and lessons learned in the coverage of this particular event. There are also some implications on how political reporting can enhance the public integrity and serve the public better.

Also, more and more news outlets employ digital storytelling. Many researchers are exploring how news in digital formats change the storytelling and readers' cognition. In this study, I compare the coverage between traditional and digital media in detail. The evidence-based study could contribute to further qualitative research regarding selectivity and bias in political news stories, or how digital strategies of news outlets make a difference in the coverage.

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Appendix I: Project Proposal

Introduction

As the 2016 presidential election approaches, candidates will be exposed to media through debates, campaigns and interviews. Journalists have examined their political opinions, fact-checking backgrounds and watching campaigns closely. Media plays a significant role in vetting the qualifications of the candidates as they and assist voters in making decisions.

The course that inspired me most in this topic was Philosophy of Journalism, where Dr. Ryan Thomas guided us to consider how journalism should enhance democracy. Philosophers started the discussion about the relationship between speeches and democracy thousands of years ago. In modern society, the media landscape has evolved radically and journalism confronts market pressure amid rising competition from digital technologies.

Web content is more "non-linear," "iterative," "interactive," and more closely related to "network" (Boyer, 2010). However, the cornerstone of journalism remains firm, as scholars asserted: "the purpose of the press is to promote and indeed improve, and not merely report on and complain about, the quality of public or civic life" (Glasser & Lee, 2002).

In this project, I want to explore how content on digital media is influenced by the gatekeeping process during a presidential election and how the gatekeeping process is different between traditional newspaper and digital media. Gatekeeping, which significantly influences the flow of information, influences the information shared in a

presidential election debate. I plan to apply gatekeeping theory to explore how articles about primary elections deliver coverage via digital media.

There are three main issues in the media coverage of the presidential elections. First, gatekeeping bias exists in every step of news collection and reflects in the stories reported (D'Alessio & Allen, 2000). Second, stories are more about the form of elections over the core values, known as “horserace journalism” (Broh, 1980). Third, digital technology provides more resources of information for journalists to process, including social media and visualization techniques. Digital technology is an important instrument, but also a challenge to journalists’ power of gatekeeping and can impair the quality of coverage (Lawrence et al., 2013). I will focus on gatekeeping bias and the influence of digital technology.

These problems do not only result from journalists’ one-way gatekeeping process, but also from audience preferences. Voters are easily attracted by entertaining and the so-called horseracing news. In an experiment, voters viewed more articles about the horserace type of news more than foreign policy and social issues, even though researchers put horserace (try to use a term other than horseracing here articles at the end and it took more time to find them (Iyengar et al., 2004). For journalists, it is worth investing more time to figure out how to make hard news reader-friendly and shareable.

These challenges occur across beats. I would like to be a multimedia, business reporter after completing my master’s degree next May. It is a different field compared to political reporting, but the practices and principles that I learn from this project will help me clarify my role as a civic journalist in the digital era.

Professional component

My coursework and practices have prepared me to do research in this area. I learned how the government works through reporting classes such as News Reporting, Art and Mechanics of Business Reporting and Investigative Reporting. I have worked at Missouri Business Alert since September 2014, where I practiced checking documents from regulators, negotiated with government officials about access to information, sorting out interest groups in public discussions. In the spring, I will attend the Washington, D.C., program for the School of Journalism. I will also follow up the latest news of the 2016 election to strengthen my understanding of and familiarity with reporting patterns.

I will work in CCTV America from January to May. The Chinese largest broadcasting company that headquarters in D.C. targets the international audience. The D.C. station is the main source of CCTV for political reporting. I will have opportunities to participate reporting the presidential election and experiences with CCTV will help me understand how election reporting works in real-world practices.

The analysis component

I want to determine how the gatekeeping process is different between digital media and the traditional newspaper, and how gatekeeping works in digital journalism.

There are four sections in the literature review. The first explains the relationship between the media, the audience and the politicians in the coverage of presidential elections. It is a background of the academic research of what role media plays in the presidential elections. The second part explains gatekeeping, my theoretical framework. The third part discusses a main issue of election coverage: gatekeeping bias, which

includes selection bias and presentation bias. Reporters tend to write about dramatic moments, emphasizing tension and portraying actors as “villains, heroes, and plots” (Larson, 1974). The final part assesses the influence of digital tools and platforms in the coverage of elections.

I will focus on the Republican presidential debate held by CNBC on Oct. 28. What makes this debate distinguishable is that organizer CNBC became part of the story. Several confrontations erupted between candidates and CNBC hosts. Candidates questioned that the rules were not applied fairly because they were disrupted all the time and the time limitation intervened them to interpret opinions comprehensively.

Two days after the debate, the Republican National Committee suspended the partnership with NBC News, the parent company of CNBC, for the Republican primary debate on Feb. 26, 2016. The committee said speaking time was not allocated fairly and some questions were “inaccurate or downright offensive.” CNBC defended its actions, insisting “people who want to be president of the United States should be able to answer tough questions.”

I chose two traditional newspapers and two news websites that were born on the Internet, USA Today and The New York Times, versus Slate and Politico. I chose all of the online articles on websites of the four news organizations related to the third Republican debate on CNBC as my sample pool. The articles are listed and categorized in the research method section.

I selected these four news outlets for two reasons. First, the four media outlets are dedicated to reporting the 2016 election, thus all of them are focusing on the debates. The four outlets produced a total of 183 articles on this particular debate.

Second, the four news outlets are comparable but have different characteristics. Both The New York Times and USA Today are national newspapers. A Pew report in 2014 showed that average readers of The New York Times lean to left-center, while readers of USA Today have a more mixed political alignment than the Times (Mitchell et al., 2014).

Both Slate and Politico were started on the digital platform. Slate promotes a journalistic style to explain why “counterintuitive” ideas could be logical, known as the “Slate Pitch.” This type of article does not convince or persuade people, but encourages readers to think in an alternate way and be open to diverse opinions (Goldenberg, 2014). Slate has far higher ratio of left-of-center readers than the national average, according to the Pew report, while Politico has more readers than Slate who identify themselves as “consistently conservative” (Mitchell et al., 2014).

My research project will seek answers for the following research question: Between coverage of traditional media (USA Today and New York Times) and online media (Slate and Politico), what are the differences and similarities in genres, discourses and styles?

Literature Review

Background: The role of journalism in presidential elections

Media play an important role in the presidential elections. The gatekeeping process involves the information flow and influences the audience’s opinions on candidates. Before I compare the media of different kinds, I reviewed previous research to understand gatekeeping in political reporting. Politicians make effort to influence the

media, and information delivered by the media influences audience's recognition of the candidates. This final point needs to be made clearer; it is vague now.

Candidates are the first gatekeepers to build up their images, by using certain rhetorical discourses to emphasize their positions and to distinguish the image as the future president (Spielvogel, 2005). These discourses exert strong influence on voters' decisions. In the 2004 presidential election, George W. Bush narrowly won reelection over John F. Kerry by highlighting the morality value of the war against Iraq.

Bush argued that waging war was about "good and evil," and defined the war as a part of the anti-terrorism action in the post-9/11 era. It fit with the conservative morality of the Republican, Bush. Kerry, on the other hand, applied a "progressive" worldview saying that the war would hurt innocent people in the Middle East and caring should be the priority.

As Bush's moral frame prevailed, Kerry's anti-war stance was judged as an evil tolerance of the terrorism (Spielvogel 2005).

Media also helped politicians' efforts on the issue of agenda setting. Bedingfield and Anshari (2014) explained that in the 2012 election, Barack Obama set the frame on Romney that he is a "vulture capitalist." Media exposure of this framing of Romney significantly enhanced the influence of this framing.

News coverage influence the audience's voting decisions by provoking emotional reactions from readers toward political figures (Namkoong, Fung & Scheufele, 2012). Through analysis of the audience's response to the media coverage, researchers found that negative emotions toward Kerry increased over time, and it was accompanied by an increase in positive emotions toward Bush (Namkoong, Fung & Scheufele, 2012).

As long as the news content makes voters feel angry or afraid of one candidate, voters tend to favor the opponent.

However, this can be misleading. Media frame the candidates based on the existing stereotype of an issue. But this distorts the reality because candidates tend to be unique and may not be able to represent the situation generalized from stereotype (Sisco & Lucas, 2015).

An example is the feminism framing in the 2008 presidential election. Feminism was in the spotlight because two female candidates, Hillary Clinton and Sarah Palin, were featured in the Democratic and Republican contests, respectively. When talking about Barack Obama's attitude toward feminism, media built up a positive image based on the fact that Obama has a competent wife and was raised by a single mother. But in fact, his background does not necessarily make Obama in favor of feminism. The authors draw a conclusion that news coverage oversimplified feminism, made the concept of feminism fractured because these "nontraditional" candidates are not representative enough to reflect the current situation in feminism (Sisco & Lucas, 2015).

Graber (1987) analyzed broadcasting news of the 1984 presidential election, and found that good and bad news changed the public's political thinking. Previous research considered that the reelection of President Reagan was partly because the good news on television illustrating his success, and the meaning delivered by the good news and bad news is actually identical. Every time Reagan showed up on television, no matter whether the news about him was good or bad, he received a favorable public impression.

Gatekeeping theory

First put forward in sociology, gatekeeping in journalism referred to the role of journalists performed as information processors in the chain of communications. Wire editors selected or rejected stories as part of daily routines (White, 1957).

As gatekeeping evolved, researchers extended the focus of the theory to the entire information transmission process. For example, as media construct the social reality, not only when editors pick up wire stories, but also all points where journalists make decisions on story development to writing (Shoemaker et al., 2001).

The gatekeeper delivers information in three ways: perceiving a role as an observer, a participant or a catalyst (Cohen, 1963). As observers, journalists take a neutral stand in producing foreign policy news. If official policy makers utilize the press to deliver messages, the press is regarded as a participant. If it is the public who uses the press to satisfy its interests in politics, the press is the catalyst in the process of political policy development.

Five factors in the gatekeeping process influence the information transmission hierarchy. They are a) individuals, b) routines of communication work, c) organizational characteristics, d) social institutions, e) and the social system (Shoemaker & Reese, 1996). Shoemaker and Reese (1996) found that the newsworthiness depends more on editors' routine assessments over individual staff writers, but Relly, Zanger and Fahmy (2015) argued that individual journalist's attitudes and values have the most influence, and that organizational characteristics of the media hardly influence individuals' attitudes in reporting.

The five factors sometimes help gatekeepers to comply with journalistic principles, while sometimes intervene not the best verb here the news judgment. In the

media coverage of 2008 presidential elections, journalists used their gatekeeping influence to balance the reporting intentionally. Media exposure is not positively related to the endorsement of a newspaper of a certain candidate. On the contrary, editors tend to select op-ed pieces that are different from the newspaper's political stance (Butler & Schofield, 2010).

During the 2008 presidential elections, Butler and Schofield (2010) sent letters to editors presenting support of either Obama or John McCain, and then observed whether editors would publish the letter in the op-ed page of the newspaper. They found that among their samples of 100 newspapers, although 70 percent of the newspapers expressed endorsement on Obama, pro-McCain letters were more likely to get published than pro-Obama letters. Editors in this experiment did not take advantage of their gatekeeping power to strengthen the opinions of the newspaper, but used the practice to promote diverse points of view.

Ownership of the media constrained the *Washington Times* to keep neutral in the 1988 presidential campaign. *Washington Times* was biased in favor of the Republicans according to a content analysis of its headlines and stories (Kenney & Simpson, 1993). *Washington Times* was launched in 1982 to provide "conservative alternative voice," as a rivalry to the liberal-left *Washington Post*. The management philosophy influenced the reporting and writing patterns. However, researchers found that the *Washington Post* managed to keep neutral and well-rounded in the same case.

Critiques of traditional media: Gatekeeping bias in media coverage of elections

Gatekeeping bias is among the three types of media bias in coverage of the presidential elections since 1948, which means that journalists tend to select stories from one party or another (D'Alessio & Allen, 2000). An example of this type of “selectivity” is the television news about the 1972 presidential election, when television networks emphasized major candidates and exclude the others in the election. Among the two finalists, television news set the tone for Richard Nixon, the GOP candidate, as the president but treated George McGovern in his role as the Democratic candidate (Hofstetter & Zukin, 1979). The other two are coverage bias, which is the amount of the media exposure, and statement bias, where writers interject their own opinions.

For print media, gatekeeping bias occurred both in news gathering and news writing, which are addressed as “selection bias” and “presentation bias,” respectively (Groeling, 2013). In gathering, the media have a tendency to go after the dramatic moments and cast the world with “villains, heroes, and plots” (Larson, 1974). Reporters are also criticized in heavily relying on those who are media-related professionals and public figures, namely the elite sources. Sources determine the framing of stories. In the 2008 vice presidential campaign, Democrats were surprised that Republicans nominated Palin for vice president and withdrew their attacks on her in fear of losing female voters. *ABC World News* only had two democratic sources who criticized Palin during that week. This is a strategic framing using elite sources (Entman, 2010).

In the news writing process, editorial policies in a news organization can effectively prevent bias. The *Washington Post* had a policy on attributing to male and female sources equally in courtesy titles, and this language planning solution reduced the

gender differences in the articles and made the language of *the Washington Post* less sexist (Fasold, 1990).

Social identity of journalists is a significant factor in structural bias. Whether journalists perceive the story is an “in-group” or an “out-group” one influences their attitudes. Individual journalist’s social identity and judgment on whether “in-group” or not subconsciously affects the news decision (Cuillier, 2012). In hometown games, sports reporters of local newspapers showed more favorable attitudes in their writing than reporters of The Associated Press, who targeted national audience (Reinardy, 2005).

In political reporting, structural bias is reflected as “political favoritism”. In the Republican presidential nomination campaigns in 2000, traditional media showed favoritism to John McCain, which influenced many Republican voters to support McCain (Barker & Lawrence, 2006).

Demographic factors of the reporters will also influence the reportage. Gender influences the reportage. In four presidential elections from 1994 to 2004, there were more male reporters involved than female reporters, but female reporters had a tougher tone when criticizing. Male reporters also preferred a masculine approach where they emphasized the competition against candidates (Grabe, Samson, Zelenkauskaite & Yegiyani, 2011).

Gatekeeping in the digital era

In the 2008 presidential election, a Pew research showed that 40 percent of all Americans have gotten news about the campaign from the Internet, 7 percent higher than in the 2004 election. Online political videos and engagement via social networking were

two emerging trends (Rainie & Smith, 2008), which reflects the diversification of information genres in coverage of presidential elections (Hussain, 2012). While the young voters, who are better at using technologies, tended to support Obama more than Clinton and the Republican McCain, online campaigns of Obama got the best effect.

While citizen bloggers occupied part of the gateway of gatekeeping, journalists can hardly control the traffic as the only gatekeeper (Hussain, 2012). Traditional journalists also ignored diversifying the presentation of information. However, campaign videos were welcomed by all types of blogs in Hussain's research (2012), including journalism, political, entertainment and lifestyle, which means readers showed more interest in directly hearing from the candidates. Functions on social media, for example, "Like" or "Friend" on Facebook, also make the audience feel closer to the candidates (Enda, 2011).

In the digital era, technologies changed the gatekeeping method as a process of information, communication and gradual elimination (Bro & Wallberg 2014). Digital devices and software help in selecting, rejecting or generating stories. The audience is able to join the communication more effectively, and new subjects like participatory journalism emerged. The management of news organizations also evolves, with social media, search engine companies and digital media joining the battle in the media market. Scholars discussed whether machines will replace journalists' intelligence in the post-industrial journalism era (Anderson, Bell, & Shirky, 2012).

In terms of coverage of presidential elections, digital media doesn't improve the gatekeeping process from the root (Landreville et al., 2015). Regarding to the platform of the stories, there is also research on the role of social media in framing the presidential

election. Sivek (2012) found that in the 2012 presidential election, magazines promoted printing stories by publishing briefs of their articles on Twitter, which reinforced political mobilization and affected the longevity of their publications.

Reporters who used Twitter to report information in the 2012 Republican and Democratic conventions were less likely than traditional reporters to comply with the rules to strengthen the objectivity (Lawrence et al., 2013). Reporters who published information on Twitter also did not effectively use interactions on Twitter between reporters and readers, and maintained the one-way gatekeeping flows (Lawrence et al., 2013).

Research method

I plan to use content analysis of the third Republican primary debate held by CNBC on Oct. 28. Both USA Today and Slate focused on main issues in three different phases of the debate: a) Before the debate, they discussed the rules of the debate and highlighted what to expect. b) During the debate, they talked about candidates' speeches and interactions with each other and with hosts. c) After the debate, they assessed the performance of both candidates and the organizer.

USA Today has 106 articles when searching "CNBC debate." I reviewed 26 of them. I filtered out articles marked as sponsor stories, pure videos, as well as articles that didn't feature the third Republican debate but just mentioned it. USA Today categorizes every article into a specific section of the website. Most of the articles are put in the section of Elections and Opinion.

Slate sets a keyword “GOP Primary 2016” to categorize coverage about Republican primary debates. From Oct. 27 to Nov. 3, Slate has 31 articles about the Oct. 28 CNBC debate. All articles discussed the CNBC debate.

Discourse analysis

Discourse delivers meaning through three main elements: genres, discourses and styles (Fairclough, 2003). Genres reflect “the way of acting.” Authors deliver information with different purposes. I categorize these articles into the four genres: to inform, to interpret candidates’ speeches, to assess the confrontation between candidates and CNBC, and to interact with the audience. I will only compare articles with the same genre.

First, reporters “inform” the audience of rules and highlights of this particular debate. Only candidates with minimum 2.5 percent support in an average of national polls can attend the primetime debate. Both media explained this rule and compared the national polls. They also provided background information as guidance of what to expect. Here are the articles that aim at informing:

USA Today

1. Elections: CNBC sets 2.5% threshold for next prime-time GOP debate. (Sept. 30)
2. Elections: CNBC announces lineup for Oct. 28 debate. (Oct. 21)
3. Elections: Trump: CNBC debate will be two hours. (Oct. 16)
4. Elections: Economy is the focus in latest Republican debate. (Oct. 27)
5. Opinion: Punchlines: Before the next debate, political quirks. (Oct. 27)
6. Rieder: Rieder: Plenty of plotlines for GOP debate. (Oct. 26)
7. Elections: Republican presidential candidates gather for third debate. (Oct. 28)
8. National Now: How to watch the Colorado Republican debate. (Oct. 28)

New York Times

1. Republican Debate Draws 14 Million as Viewership Declines (Oct. 29)
2. Transcript: Republican Presidential Debate (Oct. 29)

3. [Transcript: The ‘Undercard’ Republican Presidential Debate \(Oct. 29\)](#)
4. [GOP Debate No. 3: A Guide to Candidates on the Big Stage. \(Oct. 27\)](#)
5. [A Debate CNBC Plans to Win. \(Oct. 28\)](#)
6. [CNBC Sets Lineups for Republican Debates Next Week. \(Oct. 21\)](#)

Slate

1. [Carson Tops Trump in National Poll; Donald Decides Polls Don’t Matter All That Much. \(Oct. 27\)](#)
2. [What to Watch For in CNBC’s GOP Debate: Is Ben Carson Immune to Donald Trump’s Attacks? \(Oct. 28\)](#)
3. [The GOP Greatest Hits Soundboard. \(Oct. 28\)](#)
4. [The Instant Spin Room. \(Oct. 28\)](#)
5. [Stop Losing to Ben Carson! \(Oct. 28\)](#)
6. [A Guide to Donald Trump’s Hand Gestures. \(Oct. 28\)](#)
7. [Candidates Bungle Science, but Neil deGrasse Tyson Says the Problem Starts With Voters. \(Oct. 28\)](#)

Politico

1. [GOP debate takeaways. \(Oct. 29\)](#)
2. [Third GOP debate: Top 5 takeaways. \(Oct. 29\)](#)
3. [5 takeaways from the third GOP debate. \(Oct. 28\)](#)
4. [CNBC to broadcast viewer reactions during debate. \(Oct. 28\)](#)
5. [6 things to watch for in tonight's debate. \(Oct. 27\)](#)
6. [Everything you need to know about tonight’s GOP debate. \(Oct. 27\)](#)

The second genre is to “interpret” candidates’ speeches on the scene. They reported what was happening in the debate, checked the facts and explained the stance of candidates on policy issues and its influence.

USA Today

1. Elections: [The most quotable moments from the third Republican debate. \(Oct. 28\)](#)
2. Opinion: [Punchlines: GOP debate's odd moments. \(Oct. 30\)](#)
3. Opinion: [Jeb Bush is right, he has 'no clue': Column. \(Oct. 30\)](#)
4. News: [Colorado debate: Highlights from Republicans' third faceoff. \(Oct. 29\)](#)
5. Elections: [Republican candidates go after one another — and the media. \(Oct. 29\)](#)
6. Elections: [Analysis: A new and rougher phase in the GOP debate. \(Oct. 29\)](#)
7. Elections: [Kasich tries to emerge as establishment choice with combative approach. \(Oct. 29\)](#)
8. Opinion: [Column: When CNBC debate fumbled, Rubio picked up the ball. \(Oct. 28\)](#)
9. Elections: [Cruz and others blast CNBC, media over debate. \(Oct. 28\)](#)

The New York Times

1. [Republicans' Talk of Taxes Leaves Much Unsaid. \(Nov. 3\)](#)
 2. [The Latest: Rubio Casts Rival Bush as Part of the Past. \(Oct. 31\)](#)
 3. [The Most Ridiculous Comments of the Republican Debate: Readers Weigh In \(Oct. 30\)](#)
 4. [Donald Trump and Ben Carson Underwhelm Iowa Republicans in Debate \(Oct. 30\)](#)
 5. [Jeb Bush's Mayday \(Oct. 30\)](#)
 6. [Ted Cruz Sticks to Script, Ignoring Rivals and Aiming to Engage Viewers \(Oct. 30\)](#)
 7. [Assessing the Third G.O.P. Debate \(Oct. 30\)](#)
 8. [Fact-Checking Republicans on Tax Plans \(Oct. 30\)](#)
 9. [At Republican Debate, Fantasy Sports Got More Attention Than Wall Street \(Oct. 30\)](#)
 10. [Republican Tensions at CNBC Boil Over During and After Debate \(Oct. 29\)](#)
 11. [The G.O.P.'s Economic Policy Problem \(Oct. 29\)](#)
 12. [At the Republican Debate, Noise Drowned Out Substance \(Oct. 29\)](#)
 13. [How They Did: A Breakdown of the Republican Debate on CNBC \(Oct. 29\)](#)
 14. [G.O.P. Candidates Take Sharp Tone in Third Debate \(Oct. 29\)](#)
 15. [Ben Carson and Donald Trump Lack Electricity in a Charged Debate \(Oct. 29\)](#)
 16. [Republicans at Early Debate Fight for a Breakthrough Moment \(Oct. 29\)](#)
 17. [G.O.P. Candidates Seek Pot of Gold at End of Tax Cut Rainbow \(Oct. 28\)](#)
 18. [Climate Change Ad to Air During Republican Debate. \(Oct. 27\)](#)
 19. [A G.O.P. Stalwart's Task: Retooling Candidate Debates. \(Oct. 27\)](#)
- Slate

1. [The GOP Undercard Debate Had No Winner, Just Losers. \(Oct. 28\)](#)
2. [Watch Republican Presidential Candidates Try to Talk Sense to Their Party About Climate Change. \(Oct. 28\)](#)
3. [Marco Rubio Crushed Jeb Bush in Their First Debate Fight. \(Oct. 28\)](#)
4. [GOP Candidates Decry Common-Sense Questions About Their Crazy Plans as Biased Low Blows. \(Oct. 28\)](#)
5. [Carly Fiorina Attacks Hillary Clinton as Bad for Women. \(Oct. 28\)](#)
6. [Marco Rubio Finally Lives Up to Hype, Wins Third GOP Debate. \(Oct. 28\)](#)
7. [Which Republican Has the Most Delusional Tax Plan? Here's a Handy Graphic. \(Oct. 28\)](#)
8. [The CNBC Republican Debate in 90 Seconds. \(Oct. 29\)](#)
9. [Jeb Died on That Stage. \(Oct. 29\)](#)
10. [Ben Carson's Winning GOP Debate Strategy: Flat Out Lying About Mannatech. \(Oct. 28\)](#)
11. [Why Ted Cruz Was Sucking Up to Rand Paul. \(Oct. 28\)](#)
12. [The "Jeb Bush Is Doomed" Narrative Is Dooming Jeb Bush. \(Oct. 29\)](#)
13. [Reality Sucks. \(Oct. 29\)](#)
14. [Why Rubio Won. \(Oct. 29\)](#)

15. Pundits Have Long Been Saying Rubio Is on the Rise. Now There's Finally Some Evidence to Back That Up. (Nov. 3)

16. Republicans Are Destroying Their Chances With Latino Voters. (Nov. 3)

17. Jeb Bush's Campaign Is Pre-Emptively Warning of Dark Polling Days Ahead. (Nov. 3)
Politico

1. Trump: Carson lacks 'temperament' to be president (Nov.3)

2. Trump kicks off week with attacks on Rubio (Nov.2)

3. GOP debate talks in disarray as consensus collapses. (Nov.2)

4. GOP campaigns push to take more control of debates. (Nov.1)

5. Trump and Carson top latest poll post-debate. (Oct. 30)

6. Exclusive: GOP campaigns plot revolt against RNC. (Oct. 30)

7. After CNBC's debate, viewers went elsewhere for analysis (and baseball). (Oct. 29)

8. Cruz raised \$772,000 through midnight from debate performance. (Oct. 29)

9. Trump's debate hangover therapy —Twitter. (Oct. 29)

10. Moderate GOP senators form green working group. (Oct. 29)

11. Cybersecurity setback in presidential debates. (Oct. 29)

12. Rubio tries to cool expectations of a surge. (Oct. 29)

13. Insiders: Bush bombed, Rubio won. (Oct. 29)

14. What you didn't see on TV: A peek behind the scenes of the third GOP debate. (Oct. 29)

15. Bush walks into Rubio's trap. (Oct. 29)

16. The incredible shrinking Trump. (Oct. 29)

17. For a good time, you can't beat politics. (Oct. 29)

18. Which Candidates Are Doomed?. (Oct. 29)

19. Marco's bull run. (Oct. 28)

20. Rubio steals the show. (Oct. 28)

21. Bush after debate: I'm 'not frustrated'. (Oct. 28)

22. Bush gets least amount of time in GOP debate. (Oct. 28)

23. Cruz slams mainstream media as 'Democrats' cheerleaders'. (Oct. 28)

24. Reince Priebus blasts CNBC: They 'should be ashamed'. (Oct. 28)

25. Rubio squabbles with CNBC's Harwood over tax plan. (Oct. 28)

26. Donald Trump boasts about limiting the debate 'so we can get the hell out of here'. (Oct. 28)

27. Christie blasts moderators: Who cares about fantasy football? (Oct. 28)

28. Huckabee: 'I'm wearing a Trump tie tonight'. (Oct. 28)

29. Crowd boos moderator after jab at Carson. (Oct. 28)

30. Rubio: Media a Democratic 'super PAC' (Oct. 28)

31. The 15 most explosive moments of the GOP debate. (Oct. 28)

32. Donald Trump clashes with John Harwood. (Oct. 28)

33. Candidates, asked their biggest weakness, duck and dodge. (Oct. 28)

34. How the candidates warmed up for the debate. (Oct. 28)

35. Trump? Carson? Rubio steals the debate show. (Oct. 28)

36. Can Rubio and Cruz Capture the GOP Establishment? (Oct. 28)

37. [GOP debate moderator predicts 'big fireworks'. \(Oct. 28\)](#)
38. [Official post-debate Facebook data. \(Oct. 28\)](#)
39. [Does Donald Trump Know the Minimum Wage? \(Oct. 27\)](#)

The third genre is to “assess” the confrontation between candidates and CNBC, before, during and after the debate.

USA Today

1. Opinion: [Punchlines: Babies or GOP candidates? \(Nov. 4\)](#)
2. Elections: [GOP chairman suspends partnership with NBC for Feb. debate. \(Oct. 30\)](#)
3. Elections/Recommended: [CNBC debate brings record rating for network. \(Oct. 29\)](#)
4. Elections: [Campus Republicans pan CNBC debate moderators. \(Oct. 29\)](#)
5. Rieder: [CNBC's very bad debate. \(Oct. 29\)](#)
6. Elections: [Donald Trump not happy with upcoming CNBC debate. \(Oct. 15\)](#)
7. News: [Debate sites invest time and money for political spotlight. \(Oct. 10\)](#)

The New York Times

1. [Obama Chides Republican Field, Saying CNBC Is No Putin. \(Nov. 2\)](#)
2. [As Republicans Outline Debate Demands, Donald Trump Plans to Go It Alone. \(Nov. 2\)](#)
3. [Telemundo, With Its Republican Debate Put Off, Seeks a Democratic One. \(Nov. 2\)](#)
4. [Top Republican Lawyer to Attend Meeting on Debates. \(Oct. 31\)](#)
5. [Republican party suspends debate partnership with NBC \(Oct. 30\)](#)
6. [G.O.P. Drops Debate on NBC Citing 'Gotcha' \(Oct. 30\)](#)
7. [Ratings Winner for CNBC Is Ammunition for G.O.P. \(Oct. 30\)](#)
8. [Debate Devolved Into G.O.P. vs. CNBC, and the Network Lost \(Oct. 30\)](#)
9. [Critics' Early Take on G.O.P. Debate: Marco Rubio Won, and CNBC Lost \(Oct. 30\)](#)
10. [Reince Priebus Follows Candidates in Criticizing Debate Moderators](#)
11. [CNBC Gives In to Donald Trump on Details of the Debate. \(Oct. 16\)](#)

Slate

1. [The GOP's Presidential Contenders Are Hijacking Their Own Debates. \(Nov. 2\)](#)
2. [GOP Candidates Are Banding Together to Demand Networks Do the Impossible. \(Nov. 2\)](#)
3. [The Republican Revolt Against the Media Is Empty, Grandstanding Nonsense. \(Oct. 30\)](#)
4. [Why the GOP Won't Like Any Honest Debate Moderators. \(Oct. 30\)](#)
5. [CNBC Was the Biggest Loser of Its Own Debate. \(Oct. 29\)](#)

6. CNBC Debate Scroll Features Numerous Tweets About CNBC Being Bad. (Oct. 28)

Politico

1. About that debate demands letter... (Nov.4)
2. Stop Whining, GOP Debaters. (Nov.3)
3. GOP campaigns fail to unite around debate demands. (Nov.3)
4. Obama on Broadway: Mocking Republicans (Nov.2)
5. Trump camp: We have always negotiated directly with networks. (Nov.2)
6. RNC seeks to blunt revolt on debates. (Nov.1)
7. Reince Priebus and the debate season from hell. (Oct. 30)
8. RNC suspends NBC debate. (Oct. 30)
9. RNC suspends partnership with NBC. (Oct. 30)
10. Rubio irritated with CNBC debate questions. (Oct. 29)
11. GOP rivals weigh teaming up to force debate changes. (Oct. 29)
12. CNBC's GOP debate draws in 14 million viewers. (Oct. 29)
13. Media criticism tops Twitter moments from the CNBC debate. (Oct. 29)
14. Moderators lose control at third GOP debate. (Oct. 28)
15. Bush campaign manager confronts CNBC producer. (Oct. 28)
16. Cruz unloads on CNBC debate moderators. (Oct. 28)
17. Top GOP honcho: 'Too many interviewer interruptions'. (Oct. 28)
18. Donald Trump: CNBC debate will be 'unfair' (Oct. 28)
19. CNBC is friendly turf for Trump. (Oct. 28)
20. Donald Trump and CNBC have a cozy history. (Oct. 27)

The fourth genre is to be “interactive” with the audience by online tools.

USA Today

1. Opinion: Poor moderators, not candidates, focus of GOP debate: #tellusatoday. (Oct. 30)

Slate

1. Who Won the GOP Debate? (Oct. 28)

The second element is the discourse itself, which reflects “the way of representing.” This will constitute the main analysis part of my research. I would like to figure out in each genre, how USA Today and Slate are different in attitude, and how the wording and quoting reflect the differences. As a result, I will be able to answer whether Slate reduced or reinforced gatekeeping bias compared with USA Today.

I would like to apply Fairclough's framework (2003) of discourse analysis and structure my analysis by internal relations of texts, which means semantic, grammatical and lexical characteristics, and external relations to social structures, practices and events.

Scholars found that digital media does not help much in relieving the structural problems in the gatekeeping process. The final 2012 presidential debate added a Twitter feed and poll results in the online live streaming, but there is still gatekeeping bias, where reporters relied or had to rely on elite sources, and focused more on strategies over solid political opinions (Landreville et al., 2015).

Style means "the way of being" (Fairclough, 2003). Design and layouts also reflect authors' intentions. For example, bold fonts or words with quotation marks draw special attention and mean to emphasize. Some paragraphs or quotes are highlighted with larger and different fonts, as in the following picture. What do authors intend to emphasize and how do special designs influence the delivery of information.

Appendix II: changes in the original proposal

I stick to the original proposal to a large extent, but make one change in the original proposal.

I set up a Category IV in my proposal, where I tried to see how the four publications interacted with the audience by online tools. But there were not enough samples in this category – only two stories from two publications. Also, although the New York Times made interactive charts to display the result of polls after debates, reporters kept updating it as the poll results changed. The chart about the poll numbers that I saw when I conducted the research has been overwritten by the latest results. Therefore, I just cut this part off. As the number of samples in this category was very small, it did not influence my analysis.