

**JAMES L. KNIGHT SCHOOL OF COMMUNICATION
MEASURING DIGITAL AND MEDIA LITERACY
DEVELOPING AN AREA-WIDE INDEX
MARCH 2014 REPORT**

I. Summary

In 2010, the John S. and James L. Knight Foundation announced a transformative \$5.75 million gift to Queens University of Charlotte to endow the James L. Knight School of Communication.

Our charge through the Knight Grant is to engage our university community and our city in an ongoing partnership to measurably improve digital and media literacy. To this end, we have positioned ourselves as a resource for both Queens and the greater Charlotte area, and are partnering with non-profits, small businesses, wide-ranging industry sectors, and community leaders who value us for our expertise in the field of digital and media literacy, and the innovative and entrepreneurial application of new technologies to civically-engaged ends.

To understand how we can have the greatest impact, we administered a community survey in October 2012 to establish baseline digital and media literacy levels across the city of Charlotte, and to get a bottom-up view of the city's media ecosystem. This baseline survey is needed as a gauge for future measurement of the School's impact, and will allow us to see whether or not we are "moving the needle," creating a community with greater digital and media literacy; it will also allow us to understand the environmental obstacles to digital and media literacy—we need to know how well technology is distributed across our neighborhoods, and identify any lingering boundaries to entry.

II. Theory of Change

Digital and media literacy is a constellation of skills that are necessary for full participation in our media-saturated, information-rich society. For people to take social action and engage in civic activities that improve their communities, they need to feel a sense of empowerment that comes from working collaboratively to solve problems; they need the ability to access, analyze and engage in critical thinking about the array of messages they receive and send; and they need to understand and know how to contribute to their local information ecosystem. Without unilateral access to digital technology, and a unilateral ability for all individuals to analyze and use digital technology, the digital divide will continue to widen. The absence of basic digital and media literacy skills prevents people from being able to evaluate the quality of media information they encounter, share information, create unique content across a variety of media forms, and take action as engaged digital citizens; the uneven distribution of basic digital and media literacy skills creates areas of disenfranchisement within the greater Charlotte area, and hinders true democratic participation in the civic process; the digital divide reinforces other socio-economic divides, and can only be overcome by connecting the city's various stakeholders, such as the libraries, the schools, city government, local industry, and local community service providers.

We have developed a Theory of Change to provide a framework for our performance measurement tools and process. The Theory of Change ensures alignment of:

- **Social Problem** addressed by the organization
- **Activities** the organization engages in to address the social problem
- **Immediate outcomes:** What the activities produce (sometimes called “outputs”)
- **Intermediate outcomes:** Results of the activities over a 1- to 2-year period
- **Intended Impact:** Results of the activities over a 3- to 5-year period
- **Hypotheses:** Assumptions about the connection between the activities and the predicted outcomes that need to be tested using performance measurement tools.

We begin with a social problem statement that suggests the digital divide reinforces the socio-economic divide and hinders a healthy democracy. More directly, with regard to our work and our study, the absence of digital and media literacy prevents people from evaluating media forms, realizing change in their daily lives, and taking action as engaged citizens.

To this end, we are engaged in two primary activities: the build of a web-based educational platform consisting of interactive digital and media literacy training tools, and the implementation of community workshops that provide parallel digital and media literacy training (in a more focused yet deeper capacity—workshops held at a particular time and location, led by digital citizen trainers who are available for lengthier exploratory sessions that can respond to particular questions and needs).

As an immediate outcome, we are assuming that both activities will lead to an improvement in baseline digital and media literacy skills, and as an intermediate outcome we expect that our patrons will put their digital and media literacy skills into practice, in more deliberate and self-motivated ways (the application of basic digital and media literacy skills, to practical ends). And it is our goal over the long term that basic skill acquisition will lead to ongoing forms of community engagement (putting digital and media literacy skills into practice in the greater community).

Our intended impact is to improve digital and media literacy in Mecklenburg County across a three-year period to help people navigate the local media ecosystem, improve their lives and engage their communities.

Through our study we are asking several questions: What are the best ways to establish reciprocal relationships while increasing baseline digital and media literacy in our community? What are the most effective tools? How do we measure any increase in digital and media literacy in our community? And how do we assess the efficacy of our tools in the broader educational landscape?

To this end, we are testing the assumption that our web-based educational platform and our community workshops are viable tools for improving digital and media literacy, and will be instrumental in improving digital and media literacy across Mecklenburg County. We are also assuming that the acquisition of basic digital and media literacy skills will, under the right direction, lead to measurable forms of community engagement, and that our actions will foster the development of a connected learning laboratory across the greater county area, as our

partnerships expand and other agencies become involved in our efforts. To this end, we will be examining the efficacy of our two primary activities, tracing their impact on skill acquisition and community engagement, and considering their overall utility for existing and potential partner agencies.

We will focus our digital citizen training and workshop efforts with the libraries through Fall 2013, and consider additional partners for subsequent academic years. As our long term approach is to engage in partnerships that establish Charlotte as a connected learning laboratory, with the goal of furthering our reach and improving city-wide digital and media literacy, in Spring 2014 we will re-assess our “labor force” to determine whether we are equipped to expand into other municipal areas. If our training force is large enough, we will expand into partnership with Charlotte Mecklenburg Schools. And in Spring 2015, we will once again re-assess our training force, and look to expand our scope of service for the following term, Fall 2015. Our next area of emphasis will be chosen in consultation with the Knight Foundation, but might include linking digital and media literacy efforts to the local healthcare network (for example, launching student to patient workshops in hospitals). This effort will also involve assessing these institutions, to determine whether they have the infrastructure and need to support our initiatives and make them meaningful, high-value partners that can generate actionable feedback.

Our goal is to act as a national model for how universities can shape their local media ecosystems.

III. Assessing Digital and Media Literacy: Building the Survey

Methodology: The Knight School of Communication initiated a community survey in October 2012. This longitudinal analysis examines baseline digital and media literacy across a number of key indicators throughout Mecklenburg County. The Knight School of Communication 2012 Digital and Media Literacy Survey of Adults in Mecklenburg County, NC was conducted with the assistance of MarketWise, a private market research firm based in Charlotte, NC. Four hundred telephone interviews were conducted with adults in Mecklenburg County, North Carolina. Interviews were conducted from October 29 through November 17, 2012. The sample included random digital dial (RDD) landline numbers and RDD cell phone numbers. All interviewing was conducted from the MarketWise Call Center by trained interviewers and supervised by professional staff. All interviewers were trained to MRA (Marketing Research Association) standards. The questionnaire was administered in Spanish when necessary.

Background: The survey was structured to assess baseline digital and media literacy across Mecklenburg County. Several key questions are embedded in the survey to align the instrument with a 2010 report by Renee Hobbs sponsored by the Aspen Institute Communications and Society Program and John S. and James L. Knight Foundation. The report defines digital and media literacy as “a constellation of life skills that are necessary for full participation in our media-saturated, information-rich society.” The report outlines five key competencies, including the ability to: “make responsible choices and access information by locating and sharing materials and comprehending ideas and information; analyze messages in a variety of forms by identifying the author, purpose and point of view, and evaluating the quality and credibility of the content; create content in a variety of forms, making use of language, images, sound, and

new digital tools and technologies; reflect on one's own conduct and communication behavior by applying social responsibility and ethical principles; take social action by working individually and collaboratively to share knowledge and solve problems in the family, workplace and community, and by participating as a member of community.”

Assessment: The community survey links together the five essential competencies of digital and media literacy to key measures, connecting each competency to one or more survey questions. Competency is demonstrated by the bolded response.

1. Access and Share: Finding and using media and technology tools skillfully, and sharing appropriate and relevant information.
 - *The ability to make responsible choices and access information by locating and sharing materials and comprehending information and ideas.*
 - *Key measures: Q9j & Q14l*
 - *Q9j: “Over the past few months, please tell me whether you engaged in the following activities over the Internet on any type of device... Thinking about the past three months, how about the frequency of these activities... How frequently did you share information, ideas, or opinions?” (**daily, weekly, less, never, don't know**)*
 - *Q14l: “Please tell me whether you agree or disagree with the following statements... I often share website links with other people.” (**agree, disagree, don't know**)*

2. Analyze & Evaluate: Comprehending messages and using critical thinking to analyze message quality, veracity, credibility, and point of view, while considering potential effects or consequences of messages.
 - *The ability to analyze messages in a variety of forms by identifying the author, purpose and point of view, and evaluating the quality and credibility of the content.*
 - *Key measures: Q14j & Q14k*
 - *Q14j: “Please tell me whether you agree or disagree with the following statements... I can usually determine whether or not the information I find online is correct and reliable.” (**agree, disagree, don't know**)*
 - *Q14k: “Please tell me whether you agree or disagree with the following statements... When I search for something online and get many results, I can usually decide which ones will be the most useful for me.” (**agree, disagree, don't know**)*

3. Create: Composing or generating content, using creativity and confidence in self-expression, with awareness of purpose, audience, and composition techniques.
 - *The ability to create content in a variety of forms, making use of language, images, sounds, and new digital tools and technologies.*
 - *Key measure: Q10a*
 - *Q10a: Over the past few months, please tell me whether you engaged in the following activities over the Internet on any type of device... Thinking about the past three months, how about the frequency of these activities... How frequently*

did you upload self-created content such as images, videos, or text to a website for sharing?” (daily, weekly, less, never, don’t know)

4. Reflect: Applying social responsibility and ethical principles to one’s own identity and lived experience, communication behavior, and conduct.
 - *The ability to reflect on one’s own conduct and communication behavior by applying social responsibility and ethical principles.*
 - *Key measures: Q11b & Q14h*
 - *Q11b: “When you post comments on websites, please tell me if you do the following all or most of the time, some of the time, hardly ever, or never. How frequently do you provide additional facts and information?” (all/most, some, hardly ever, never, don’t know)*
 - *Q14h: “Please tell me whether you agree or disagree with the following statement... When I’m interested in a topic, I gather information from several different sources like TV, radio, and the Internet to try to get the full picture.” (agree, disagree, don’t know)*

5. Act: Working individually and collaboratively to share knowledge and solve problems in the family, the workplace and the community, and participating as a member of a community at local, regional, national and international levels.
 - *The ability to take social action by working individually and collaboratively to share knowledge and solve problems in the family, workplace and community, and by participating as a member of a community.*
 - *Key measures: Q24b, Q24c and Q24d*
 - *Q24b: “Please tell me if you agree or disagree with the following statements... I am actively involved in local issues of have been in the past.” (agree, disagree, don’t know)*
 - *Q24c: “Please tell me if you agree or disagree with the following statements... I am actively involved in national issues of have been in the past.” (agree, disagree, don’t know)*
 - *Q24d: “Please tell me if you agree or disagree with the following statements... I have volunteered in my community.” (agree, disagree, don’t know)*

IV. Measuring Digital and Media Literacy: Developing an Index

The Digital Media Literacy Index is built by averaging the percentage of the survey population demonstrating competency in each of the five key measures. Competency is demonstrated by the bolded response to the linked survey question. The index provides a view of competency across Mecklenburg County, and also provides a more detailed view of competency by county area (an aggregate of zip codes subdivided as north, south, east and west), ethnicity, age (data on the 55 and older population), income (data for annual household incomes less than \$40,000), and education (data for those with less than a high school degree). The index includes data only on those demographic populations that demonstrate the most significant variance below the county-wide average (although data on other demographic populations can be found in the full survey results).

1. Access and Share (Mecklenburg County): 54%

- *Q9j*: 56%
- *Q14l*: 52%

North: 57%
South: 56%
East: 50%

West: 52%
White: 56%
Black: 53%
Hispanic: 42%
55+: 44%
<\$40K: 45%
<HS: 35%

2. Analyze & Evaluate (Mecklenburg County): 89%

- *Q14j*: 85%
- *Q14k*: 93%

North: 85%
South: 89%
East: 95%
West: 87%
White: 91%
Black: 87%
Hispanic: 87%
55+: 84%
<\$40K: 84%
<HS: 97%

3. Create (Mecklenburg County): 53%

- *Q10a*: 53%

North: 60%
South: 56%
East: 48%
West: 46%
White: 55%
Black: 55%
Hispanic: 39%
55+: 29%
<\$40K: 41%
<HS: 20%

4. Reflect (Mecklenburg County): 63%

- *Q11b*: 42%
- *Q14h*: 83%

North: 59%
 South: 68%
 East: 60%
 West: 61%
 White: 65%
 Black: 63%
 Hispanic: 54%
 55+: 53%
 <\$40K: 57%
 <HS: 50%

5. Act (Mecklenburg County): 54%

- *Q24b*: 56%
- *Q24c*: 36%
- *Q24d*: 70%

North: 55%
 South: 58%
 East: 48%
 West: 50%
 White: 57%
 Black: 57%
 Hispanic: 28%
 55+: 55%
 <\$40K: 45%
 <HS: 37%

V. Measuring Digital and Media Literacy: Key Findings

In a population sample where a score of 100% can be equated with the highest level of universally demonstrated proficiency in digital and media literacy, a comparative analysis reveals several underdeveloped population groups within Mecklenburg County. The general trend shows the majority of the population demonstrates the greatest proficiency in analysis and evaluation, and the weakest proficiency in the more communal activities of sharing, creating and acting (areas that are commonly associated with civic engagement).

The data reveals digital and media literacy scores are lowest in the following demographic populations: Hispanic, 55 and older, annual household income less than \$40,000, and those without a high school degree. Of these groups, those without a high school degree score lowest on the index. The most glaring disparity in digital media literacy is among individuals with less education.

With regard to geographic location, within the county the west region (an aggregate of zip codes 28208, 28214, 28218, 28273 and 28278) shows the lowest score. The west region of Mecklenburg County also demonstrates lower than average Internet use in specific communities. For example, 43% of respondents in zip code 28208 do not use the Internet anywhere. The county-wide average of individuals not using the Internet anywhere is 16%.

The population in zip code 28208, with the lowest Internet use, also contains the highest percentage of respondents without a high school degree (18%) and the highest percentage of households with an annual income less than \$40,000 (11%). It can be concluded that zip code 28208 is a community of greatest need, where the largest proportion of households not using the Internet is not surprisingly disproportionately made up of families with less income and education. In this population, cost is cited as the biggest obstacle to learning more about computers and related technology; cited as 33% in this income bracket, and 31% in this education bracket.

By region, the percentage of individuals using the Internet anywhere is highest in south zip codes (93%), followed by north (89%), east (82%) and west (82%).

Index Scores:

Mecklenburg County: 63%
North zip codes: 63%
South zip codes: 65%
East zip codes: 60%
West zip codes: 59%

White: 65%
Black: 63%
Hispanic: 50%
55 and older: 53%
Income < \$40,000: 54%
Education < High School: 48%