JAMES L. KNIGHT SCHOOL OF COMMUNICATION
MEASURING DIGITAL AND MEDIA LITERACY
CONTINUING AN AREA-WIDE INDEX
MAY 2018 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. The findings of this survey were reported in March 2014. In March 2018, we launched a second study of digital and media literacy in the city of Charlotte. In this study, we utilized the best measures from the 2014 study by curating a scale to serve as a digital and media literacy index. Over time, the combination of these and future studies in sequence will demonstrate the longitudinal impact of our work and allow us to see whether or not we are "moving the needle," creating a community with greater digital and media literacy.

II. Assessing Digital and Media Literacy: Building the Survey

Methodology: The Knight School of Communication initiated a community survey in October 2012. This community survey offered us a baseline for longitudinal analysis of digital and media literacy across a number of key indicators throughout Mecklenburg County. The results of this baseline measure and the data points examined allowed us to hone the survey for future use to develop measures of digital and media literacy for the county. The resulting survey was administered in April 2018 through a partnership with Public Policy Polling in Raleigh, NC. Five hundred and forty-five telephone interviews were conducted with adults in Mecklenburg County, North Carolina. Interviews were conducted from April 26-29, 2018. The sample included random digital dial (RDD) landline numbers and RDD cell phone numbers. All interviews were conducted by Public Policy Polling and data was reported to the Knight School in aggregate form. The data was then analyzed and compared to results from the 2012 survey where appropriate.

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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. Based on the key findings of the 2012 survey, a list of ten paired questions was administered to create a scale to assess digital and media literacy. Each of the five components of digital and media literacy (access and share; analyze; create; reflect; and act) was assessed using a pair of questions which emerged as most salient in the 2012 study.

III. Measuring Digital and Media Literacy: Developing an Index

The 2012 report indicated the presence of two key measures for each aspect of digital and media literacy. Those two questions for each of the five aspects were combined into a ten-questions Likert-type scale to assess overall digital and media literacy in this survey. Participants were asked to indicate whether they strongly agree, agree, neither agree nor disagree, disagree, or strongly disagree with each of the following statements, sorted here by competency:

ACCESS & SHARE

- Over the last three months, I frequently shared information, ideas or opinions on the Internet.
- When I find interesting information online, I like to share links with other people.

ANALYZE

- When I see information online, I can quickly determine if it is correct and reliable.
- When I search for something online and get many results, I have trouble deciding which ones will be the most useful for me.

CREATE

- Over the last three months, I frequently uploaded self-created content such as images, videos, or text to a website for sharing.
- I create high quality content like images, videos, and text information and post it online.

REFLECT

- When I post comments on websites, I frequently provide people with additional facts and information.
- When I'm interested in a topic, I gather information from several different sources like newspapers, TV, radio, and the Internet to try to get the full picture.

TAKE ACTION

- I use the Internet to stay actively involved in local or national issues.
- I frequently volunteer in my community.

Again, this list of ten questions emerged from the 2012 study as the most valuable predictors of digital and media literacy as defined in this report.

These competencies were assessed individually and in total by county area (using zip code), ethnicity, age, income, education, gender, and other demographic variables. The full results for each question are available in the appendix.

IV. Comparison of Digital and Media Literacy Measures 2012-2018

In 2012, competency in digital and media literacy was indicated with responses of "agree" or "strongly agree" for each measure. Thus, the report was built by averaging the percentage of the survey population demonstrating competency in each of the five key measures. These measures were assessed across a variety of demographic measurements. This section of the report compares scores in demographic groups selected in the 2012 study for analysis with the comparable group assessed in 2018:
competency by county area, ethnicity, age (specifically data on oldest subset), income (data for annual household incomes less than $40,000), and education (data for those with less than a high school degree). Thus, this comparison includes data only on those demographic populations that demonstrate the most significant variance below the county-wide average (although 2018 data on other demographic populations can be found in the full survey results attached in the appendix).

ACCESS & SHARE

	2012	2018	% change
I frequently share…	56 %	38 %	↓ 18 %
I like to share links…	52 %	47 %	↓ 5 %
White	56 %	40 %	↓ 16 %
Black	53 %	45 %	↓ 8 %
Hispanic	42 %	52 %	↑ 10 %
Age 55+	44 %	36 %	↓ 8 %
< $40K Income	45 %	43 %	↓ 2 %
< High School	35 %	57 %	↑ 22 %

ANALYZE & EVALUATE

	2012	2018	% change
I can quickly determine…	85 %	62 %	↓ 23 %
I can decide what is useful…	93 %	48 %	↓ 45 %
White	91 %	45 %	↓ 46 %
Black	87 %	44 %	↓ 43 %
Hispanic	87 %	35 %	↓ 52 %
Age 55+	84 %	38 %	↓ 46 %
< $40K Income	84 %	44 %	↓ 40 %
< High School	97 %	60 %	↓ 37 %

CREATE

	2012	2018	% change
I upload content…	53 %	25 %	↓ 28 %

I create high quality content	No data	16 %	--
White	55 %	15 %	↓ 40 %
Black	55 %	27 %	↓ 28 %
Hispanic	39 %	32 %	↓ 7 %
Age 55+	29 %	10 %	↓ 19 %
< $40K Income	41 %	26 %	↓ 15 %
< High School	20 %	31 %	↑ 31 %

REFLECT

	2012	2018	% change
I add additional information…	42 %	26 %	↓ 16 %
I gather various sources…	83 %	79 %	↓ 4 %
White	65 %	52 %	↓ 13 %
Black	63 %	54 %	↓ 9 %
Hispanic	54 %	55 %	↓ 1 %
Age 55+	53 %	46 %	↓ 7 %
< $40K Income	57 %	46 %	↓ 11 %
< High School	50 %	63 %	↑ 13%

ACT

	2012	2018	% change
I … stay involved…	56 %	67 %	↑ 11 %
I volunteer …	36 %	51 %	↑ 15 %
White	57 %	58 %	↑ 1 %
Black	57 %	59 %	↑ 2 %
Hispanic	28 %	74 %	↑ 46 %
Age 55+	55 %	44 %	↓ 11 %
< $40K Income	45 %	55 %	↑ 10 %
< High School	37 %	66 %	↑ 29 %

The comparisons above offer many opportunities for discussion and interpretation in our community and county. Two comparisons are particularly noteworthy. First, a sharp uptick in the use of the internet for civic engagement county-wide is one highlight. The political and civic discourse in Charlotte-Mecklenburg has changed dramatically over the past five years related to local, state-wide, and national issues. Another key comparison is the reported steep decline in the "analyze" competency related to uncovering the reliability of media stories online. Over the past few years, "fake news" has become a buzzword. In short, none of us know what to believe. This steep decline points to the increased need to add discernment to our list of crucial skills for digital and media literacy in civic discourse.

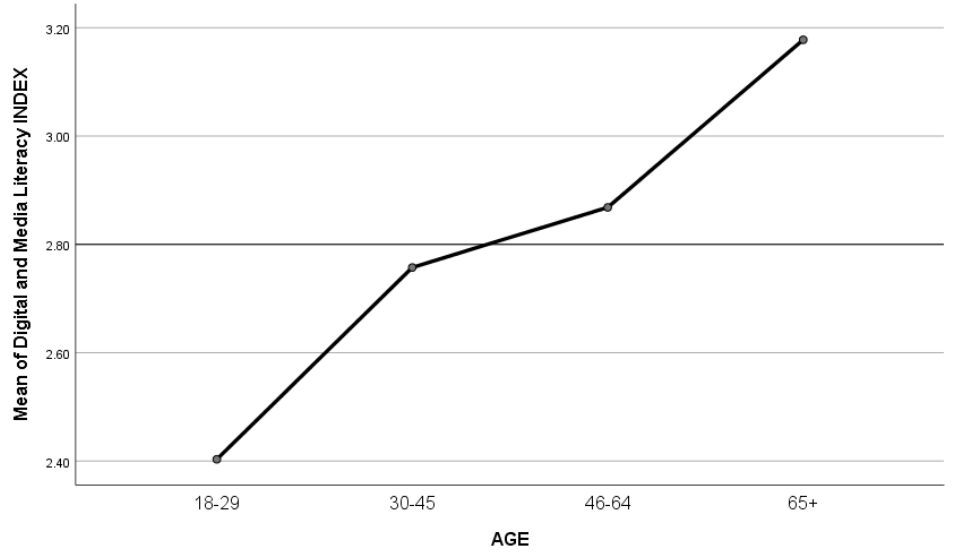
V. Measuring Digital and Media Literacy: Key Findings

The topline data (see appendix 1) reveals several notable trends in digital and media literacy in the Charlotte community.

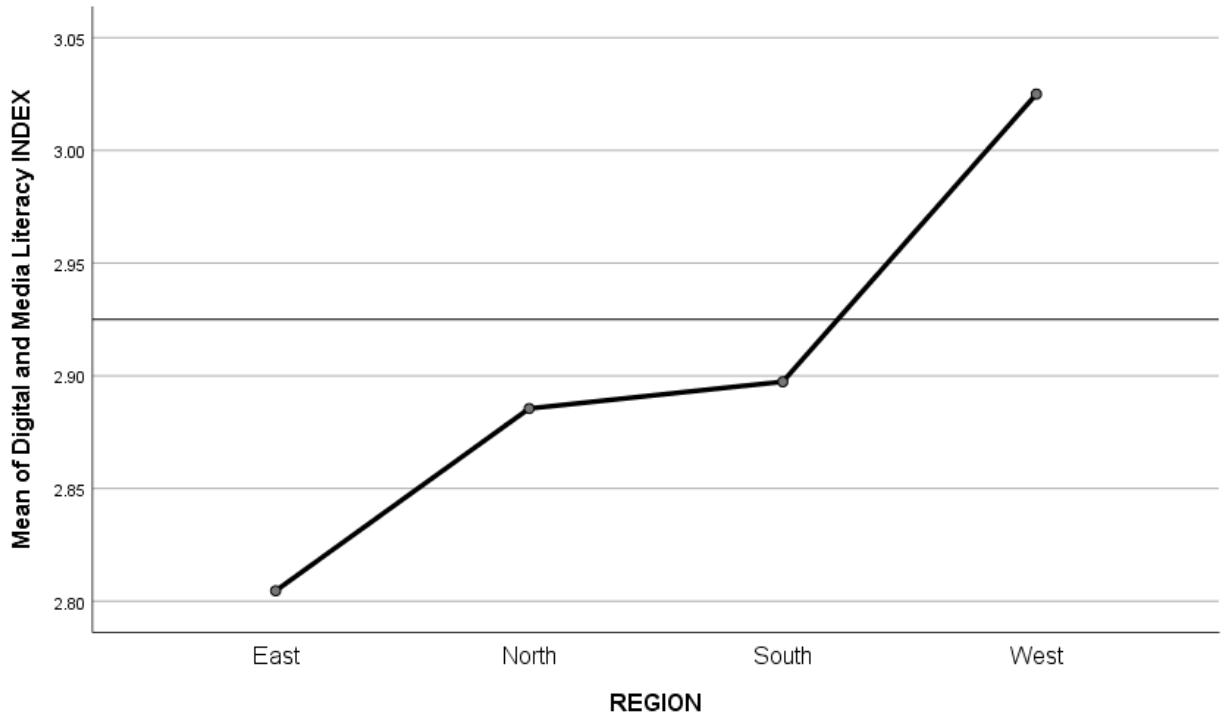
1. Broadband Internet Access: 82% of Charlotteans surveyed reported using broadband Internet access in their homes. An additional 10% used their mobile devices or nearby WiFi connections to connect to the Internet in their homes. The remaining 8% reported another form of access or no access.
2. Internet Access Outside the Home: 34% of Charlotteans cited work as their primary Internet access point outside the home.15% primarily used business/restaurant-provided wireless. 9% primarily used library access points, 9% primarily used free public WiFi, and an additional 32% indicated other sources of wireless access.
3. Types of Devices Used for Internet Access: 42% of Charlotteans selected a mobile device as their primary device for Internet access. Another 42 % indicated a desktop or laptop computer as their primary device for Internet access. 10% indicated tablet devices.
4. Daily Internet Use: The majority of Charlotteans (83%) connect to the internet daily. 74% of Charlotteans connect daily with their mobile devices. 65% connect daily with a desktop or laptop computer. However, 5% report never connecting to the Internet from home using any device.

In addition, two key findings surrounding age and geography were confirmed through the data collected in this survey.

One key demographic finding in this survey related to age. In general terms, the younger the participant, the stronger their relative reported level of digital and media literacy competency (Note: a lower number on the index equates with greater competency, so a 2.4 is indicative of stronger literacy than a 3.2).



A second key demographic finding related to region in the Charlotte community. Congruent with the 2012 study, this survey confirmed that West Charlotte (an aggregate of zip codes 28208, 28214, 28218, 28273 and 28278) remains the area of greatest need in digital and media literacy competencies.


Mean of Digital and Media Literacy INDEX
3.05
3.00
2.95
2.90
2.85
2.80
East
North
South
West
REGION

APPENDIX 1 : Correlation tables for DML Index Scale

Correlations

		DMLINDEX	ACCESS1SHARE	ACCESS2LINKS	ANALYZE1RELIABLE	ANALYZE2SELECTING	CREATE1UPLOAD	CREATE2QUALITY	REFLECT1PROVIDE	REFLECT2CURATE	ACT1CURRENT	ACT2VOLUNTEER
DMLINDEX	Pearson Correlation	1	.649**	.672**	.473**	.031	.649**	.651**	.712**	.379**	.554**	.421**
	Sig. (2-tailed)		.000	.000	.000	.481	.000	.000	.000	.000	.000	.000
	N	545	524	531	525	526	526	528	522	539	537	532
ACCESS1SHARE	Pearson Correlation	.649**	1	.547**	.161**	-.134**	.413**	.383**	.473**	.091*	.230**	.129**
	Sig. (2-tailed)	.000		.000	.000	.002	.000	.000	.000	.038	.000	.003
	N	524	524	519	514	513	515	513	508	521	519	516
ACCESS2LINKS	Pearson Correlation	.672**	.547**	1	.192**	-.127**	.447**	.369**	.425**	.104*	.298**	.165**
	Sig. (2-tailed)	.000	.000		.000	.004	.000	.000	.000	.016	.000	.000
	N	531	519	531	519	520	519	520	516	527	525	521
ANALYZE1RELIABLE	Pearson Correlation	.473**	.161**	.192**	1	.023	.154**	.166**	.231**	.162**	.229**	.189**
	Sig. (2-tailed)	.000	.000	.000		.603	.000	.000	.000	.000	.000	.000
	N	525	514	519	525	517	519	518	510	523	521	518
ANALYZE2SELECTING	Pearson Correlation	.031	-.134**	-.127**	.023	1	-.170**	-.144**	-.087*	-.040	.017	-.092*
	Sig. (2-tailed)	.481	.002	.004	.603		.000	.001	.050	.365	.697	.036
	N	526	513	520	517	526	517	516	511	522	520	516
CREATE1UPLOAD	Pearson Correlation	.649**	.413**	.447**	.154**	-.170**	1	.717**	.467**	.018	.196**	.082
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000	.000	.684	.000	.062
	N	526	515	519	519	517	526	519	511	523	522	518
CREATE2QUALITY	Pearson Correlation	.651**	.383**	.369**	.166**	-.144**	.717**	1	.543**	.057	.177**	.130**
	Sig. (2-tailed)	.000	.000	.000	.000	.001	.000		.000	.194	.000	.003
	N	528	513	520	518	516	519	528	517	525	523	517
REFLECT1PROVIDE	Pearson Correlation	.712**	.473**	.425**	.231**	-.087*	.467**	.543**	1	.198**	.253**	.171**

	Sig. (2-tailed)	.000	.000	.000	.000	.050	.000	.000		.000	.000	.000
	N	522	508	516	510	511	511	517	522	519	519	514
REFLECT2CURATE	Pearson Correlation	.379**	.091*	.104*	.162**	-.040	.018	.057	.198**	1	.285**	.128**
	Sig. (2-tailed)	.000	.038	.016	.000	.365	.684	.194	.000		.000	.003
	N	539	521	527	523	522	523	525	519	539	534	529
ACT1CURRENT	Pearson Correlation	.554**	.230**	.298**	.229**	.017	.196**	.177**	.253**	.285**	1	.198**
	Sig. (2-tailed)	.000	.000	.000	.000	.697	.000	.000	.000	.000		.000
	N	537	519	525	521	520	522	523	519	534	537	527
ACT2VOLUNTEER	Pearson Correlation	.421**	.129**	.165**	.189**	-.092*	.082	.130**	.171**	.128**	.198**	1
	Sig. (2-tailed)	.000	.003	.000	.000	.036	.062	.003	.000	.003	.000	
	N	532	516	521	518	516	518	517	514	529	527	532

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).