Additional Analyses of the Findings from the 2019 CETF Digital Divide Survey in California Among Households Where Children Under Age 18 Reside

-- prepared for the --
California Emerging Technology Fund

by

Mark DiCamillo

March 19, 2019

FINDINGS IN BRIEF

- While one in three of the California adult population (35%) is Latino, its share of the population of householders where children under age 18 reside increases to 53%. On a regional basis, Los Angeles County has the largest proportion of Latinos among households with children, 65%. In addition, the adults living in households with children tend to have lower levels of formal education than the larger population.

- A major finding from the 2019 Digital Divide Survey is that more Californians (78%) now say they can connect to the Internet at home through a computing device than have reported this in the past. Our analysis shows that this increase is being driven primarily by increases in computer connectivity among households with children. According to the survey 86% of households where children under age 18 reside are now able to connect to the Internet through a computing device, up nineteen percentage points from 2017. By contrast, there has been relatively little change in connectivity to the Internet through computing devices among households where no children are present.

- School policies giving students the opportunity to take a school computing device home with them appear to be the driving force behind the recent growth in Internet connectivity through computing devices at home. About one in four of householders where students reside say their child is able to take a school computing device home with them. This increases to one in three in residences whose householder is Latino or has no more than a high school education. Since both of these segments have historically been far less likely to have computer connectivity to the Internet at home, school policies enabling students to take their computing devices home is a boon to these households, and appears responsible for much of the overall increase in connectivity to the Internet at home through computing devices over the past two years.

- Large majorities of the parents of K-12 students – greater than eight in ten – now report being able to access their child's school web site to retrieve their child's homework assignments and progress reports or to contact their child's teacher by email from home.

- However, Latinos and non-high school graduates among householders with children are more likely than others to report having experienced periods of interruptions in their households' access to the Internet.

- California households with children who are without Internet access through a computer device attach much greater importance to having Internet connectivity at home than other residents without such access. Eight in ten of these households (80%) say that being connected to the Internet would be important to them, compared to 48% among all households without Internet access through a computer.

1. Households with children are disproportionately Latinos and include more householders with no more than a high school education

While about one in three of the state's overall adults (35%) are Latino, this increases to 53% among households where children under age 18 reside. On a regional basis, the poll finds that Los Angeles County has the largest proportion of Latinos among households with children (65%).

Related to this is the finding that adults living in households with children tend to have lower levels of formal education than the general public. About half (47%) of the householders in this segment report having no more than a high school education compared 38% among the overall public. The nine-county San Francisco Bay is an exception and includes more householders who are college graduates in this segment.

Table 1
Demographic Characteristics of California Householders
Overall and Among Households where Children Under Age 18 Reside

	Total CA households %	Total HHs w/ children %	Los Angeles County %	San Francisco Bay Area %	All other California %
Race/ethnicity of householder					
White non-Hispanic	42	29	16	34	33
Latino	35	53	65	38	52
Asian/Pacific Islander	14	10	10	14	10
African American	6	5	6	8	3
Other	3	3	3	6	2
Education level of householder					
Not a high school graduate	16	20	24	14	20
High school graduate	22	27	25	26	28
Some college/ trade school	29	25	20	15	30
College graduate	31	26	28	42	21
Not reported	2	2	3	3	1
*(n)**	*(1,625)*	*(554)*	*(148)*	*(112)*	*(294)*

** In this and all subsequent tables (n) represents the unweighted sample base of the respondents in this segment*

2. Recent growth in Internet connectivity through computing devices driven primarily by increasing computer connectivity among households with children

A major finding from the 2019 Digital Divide Survey is that more Californians now say they can connect to the Internet at home through a computing device, such as a desktop, laptop or tablet computer, than have reported this in the past. Statewide greater than three in four Californians (78%) say they can access the Internet at home in this way, up nine percentage points from two years ago. This increase has also reduced the proportion of households whose only means of connecting to the Internet at home was through a smart phone.

Our analysis of the state's households with children finds that the recent increase in household Internet connectivity through computing devices is being driven primarily by increases in computer connectivity among households with children. According to the survey 86% of households where children under age 18 reside are now able to connect to the Internet through a computing device, up nineteen percentage points from 2017. By contrast, there has been relatively little change in connectivity to the Internet through computing devices among households where no children are present.

Table 2
Changes in Type of Internet Connectivity at Home Since 2017
Among All California Households and by the Presence of Children Under Age 18

	Total households		HHs w/ children		HHs w/o children	
	2019 %	Change since 2017	2019 %	Change since 2017	2019 %	Change since 2017
Total connected at home	88	+1	95	+3	85	0
Through a computing device	78	+9	86	+19	75	+3
Through a smartphone	84	+5	93	+7	79	+3
Through a smartphone only	10	-8	10	-15	11	-3
(n)	*(1,625)*		*(554)*		*(1062)*	

3. While Latinos and non-high school graduates remain less likely than others to be connected at home through computing devices, both groups exhibit big increases in such connectivity over the past two years

Latinos and householders with fewer years of formal education have historically been far less likely than other Californians to be connected to the Internet at home through computing devices. The latest survey finds this continues to be the case. However, these segments display large increases in Internet connectivity through computing devices over the past two years.

For example, while a modest 68% of Latino households now report being able to connect to the Internet through a computing device, this is up 14 percentage points from 2017. Similarly, while only about half of Californians who have not graduated from high school (53%) can connect to the Internet at home through a computing device, this is also up 14 percentage points from two years ago.

Table 3
Demographic Characteristics of California Households that can Connect to the Internet Through a Computing Device (2019 vs. 2017)

	Connected at home thru a computing device		
	2019 %	2017 %	% change
Total households	78	69	+9
Race/ethnicity of householder			
White non-Hispanic	89	83	+6
Latino	68	54	+14
Asian/Pacific Islander	73	64	+9
Education level of householder			
Not a high school graduate	53	39	+14
High school graduate	74	65	+9
Some college/trade school	82	78	+4
College graduate	94	84	+10

4. Greater than one in four the householders where K-12 students reside say their child can take their school computing device home with them

A new set of questions included in the 2019 Digital Divide Survey asked California householders where K-12 students reside whether their child was assigned a computing device at school, and if so, whether the child could the device home with them. The results show about half of these households (52%) reports their child is assigned a computing device at school, with 28% saying they can bring their school computer home with them.

When the results are examined regionally, somewhat smaller proportions of the student households in the state's largest population centers of Los Angeles County and the San Francisco Bay Area than other areas of the state report that their child is able to take a school computer home with them.

Table 4
Student Access to Individually Assigned Computing Devices in the K-12 Schools and Whether Students Can Take Their Computing Device Home
(Among California Households Where K-12 Students Reside)

	Total households with K-12 students %	Los Angeles County %	San Francisco Bay Area %	All other California %
Does child's school individually assign computing devices to students?				
No, child not assigned a computing device	43	45	48	41
Yes, child assigned a computing device	52	51	36	56
Child can take computing device home	28	21	21	32
Child can't take computing device home	22	28	16	22
Not reported	2	1	*	2
Don't know if child assigned computing device	5	4	16	4
(n)	*(463)*	*(129)*	*(86)***	*(248)*

** less than ½ of 1%*
•• small sample base

5. School policies appear to be the driving factor behind the recent growth in Internet connectivity at home through computing devices

School policies appear to be the driving force behind the recent growth in Internet connectivity through computing devices at home. In addition, compared to segments of households where K-12 students reside, more Latinos and householders with no more than a high school education report that their child is able to take a school computer home with them. Since both of these segments have historically been far less likely to have had Internet connectivity through a computing device at home, school policies enabling these students to take their computing devices home is a significant boon to these households, and appears responsible for much of the overall year-to-year increases in connectivity to the Internet at home through computing devices.

Table 5
Demographic Characteristics of K-12 Student Households Where Student Is Able to Take Their School Computer Device Home with Them
(Among Householders Where K-12 Students Reside)

	Student able to take school computer home %	*(n)*
Total households with K-12 students	28	*(463)*
Race/ethnicity of householder		
White non-Hispanic	21	*(135)*
Latino	34	*(225)*
Education level of householder		
High school graduate or less	32	*(173)*
Some college/trade school	19	*(108)*
College graduate	29	*(176)*

Note: Other races not reported because of small sample bases.

6. Large majorities of the parents of K-12 students can access their child's school web site or contact their child's teacher by email from home

Californians living in households where a K-12 student resides were also asked whether a parent in the household could access their child's school website to retrieve the child's homework assignments and progress reports or contact their child's teacher by email from home. Large majorities – greater than eight in ten – of the householders surveyed report that the parents in these households are able to do these activities.

When examined regionally, slightly fewer householders in the San Francisco Bay Area than in other regions report that a parent is able to access their child's school website or contact their child's teacher by email.

Table 6
Parent Access to Child's K-12 School Website and Email Contact with their Child's Teacher (Among Households Where K-12 Students Reside)

	Households with K-12 students %	Los Angeles County %	San Francisco Bay Area %	All other California %
Parent access to school website from home				
Yes	82	83	70	85
No	13	13	18	12
Not reported	5	4	12	3
Parent email contact with child's teacher				
Yes	85	86	71	89
No	11	11	20	8
Not reported	4	3	9	3
(n)	*(463)*	*(129)*	*(86)**	*(248)*

* *While sample base is small, differences between this segment and all other households with K-12 students are statistically significant at the 95% confidence level*

7. Latinos and non-high school graduates in households with children are more likely than others to report periods of interruptions in their home Internet connectivity

Latinos and non-high school graduates living in households with children are more likely than others to report having had interruptions in their home access to Internet. Specifically, this includes connected households who say they have gone without Internet connectivity for one month or longer since they first had Internet connectivity at home.

Twice as many Latino households with children than white non-Hispanic households report this. Similarly, a larger proportion of connected householders who have not graduated from high school also report this compared to those with more years of formal education.

Table 7
Continuity of Internet Access Since the Time Their Household First had Internet Service (Among Connected Households with Children)

	Not continuous %	Contin-uous %	Not reported %	(n)
Total connected HHs with children	19	80	1	*(535)*
Race/ethnicity of householder				
White non-Hispanic	11	89	**	*(165)*
Latino	23	76	1	*(243)*
Education level of householder				
Not a high school graduate	33	64	3	*(57)**
High school graduate	17	82	1	*(124)*
Some college/trade school	19	81	**	*(126)*
College graduate	7	93	**	*(220)*

- *While sample base is small, differences between this segment and all other households with children are statistically significant at the 95% confidence level*

** *less than ½ of 1%*

8. Households with children without access to the Internet through a computing device attach greater importance to having such connectivity

California households with children who are currently without access to the Internet through a computer device attach much greater importance to having Internet connectivity at home than other residents without such access. Eight in ten of these households (80%) say that being connected to the Internet would be important to them, compared to 48% among all households without Internet access through a computer.

Table 8
Perceived Importance of Having Internet Connectivity at Home
Among California Households Not Able to Connect Thru a Computing Device

	Total households not able to connect thru a computing device %	Households with children not able to connect thru a computing device %
Important (net)	48	80
Extremely important	9	18
Very important	15	21
Somewhat important	24	41
Not important (net)	44	18
Not too important	12	7
Not at all important	32	11
No opinion	8	2
(n)	*(243)*	*(62)**

* *While sample base is small, differences between this segment and all households not able to connect through a computing device are statistically significant at the 95% confidence level*