



CONTENTS

EXECUTIVE SUMMARY	3
INTRODUCTION	5
COPPA COMPLIANCE	7
METHODOLOGY	7
TIME SPENT ON TV AND COMPUTER	8
KIDS' TV VIEWING	9
KIDS' ONLINE ACTIVITY ON THE COMPUTER	12
CO-VIEWING	14
KIDS' SIMULTANEOUS USAGE OF TV AND COMPUTER	19
MEDIA CONTENT CONSUMPTION ON MOBILE DEVICES	21
CONCLUSION	27
APPENDIX	27
REFERENCES	28

EXECUTIVE SUMMARY

This white paper explores media consumption among children and across platforms (TV, computer and mobile). The analyses discussed expand our current understanding of kids' media consumption by (1) presenting data from a single-source TV and computer panel (Nielsen's Cross-Platform Homes Panel), thereby bridging these two types of data; (2) relying on data from a prompted measurement, which identifies actual viewers in real time; and (3) reporting more granular age groups instead of the broader 2-11 and 12-17 segments that are commonly reported. Using data from the same set of prompted panelists provides holistic insights on trends in kids' media consumption across time, age groups and platforms.

This white paper also explores the following dimensions of kids' cross-platform audience:

- 1. USE OF TVS AND COMPUTERS
- 2. THE VIDEO GENRES AND WEBSITE CATEGORIES VIEWED OR ACCESSED ON TVS AND COMPUTERS
- 3. CO-VIEWING (VIEWING TOGETHER WITH ANOTHER PERSON) ON TVS AND COMPUTERS
- 4. SIMULTANEOUS USE OF TVS AND COMPUTERS

In addition to the analysis of Nielsen panel data, findings from a recent survey that explored mobile device use and sharing will also be presented in order to provide an outlook on the trends discussed above in the context of accelerated mobile media consumption among kids.



KEY FINDINGS



- Across age groups, traditional TV remains the favored platform for media consumption
- The amount of time spent viewing TV has decreased slightly for teens since 2011
- The platforms and content accessed by kids vary by age
- Behaviors in media content consumption appear to change around age 8
- Parents and other adults in the home play a significant role in both how much and what type of media content kids consume on both TVs and computers
- Among kids, simultaneous use of the TV and computer has decreased since 2011
- 7 Kids use mobile devices at young ages and for various activities
- The content consumed on mobile devices differs from the content consumed on TVs and computers in terms of both audience and type

INTRODUCTION

For the past five years, Nielsen has measured cross-platform media consumption on TVs and computers. We have built a robust understanding of audience behaviors and can track demographic and historical variations in cross-platform activities. In particular, Nielsen data provide a unique perspective on children's audience—a notoriously difficult segment to measure, given privacy regulations (such as COPPA), parental concerns, children's rapidly changing media consumption, and their varying ability to consistently comply with measurement requirements.

So how and what are kids consuming on TVs, computers, and other devices? With increasingly diverse platforms available, kids consume multiple types of media and spend many of their waking hours in front of multiple types of screens, often simultaneously. As more technologies and devices become available to kids (and as kids become older and savvy enough to use these devices), how do behaviors change and shift from one platform to another? How does the presence of other household members affect the amount and type of content consumed? Developing a deeper understanding of how children of different ages use various media consumption platforms is crucial to measuring and reaching this audience.

As kids cognitively and developmentally change, their media consumption preferences and behaviors also change, perhaps more rapidly than they change for adults. For example, we cannot expect 2-4 year olds to like the same video genres—and access them in the same way—as 11-13 year-olds. How does the age of a child influence the platform accessed and the content consumed? Changes in media consumption habits appear to occur around age 8, when children expand their interests, are more likely to own the devices on which they consume media, and become independent enough to seek out the content without parental guidance (Gutnik & Robb, 2010). For instance, around age 8, more than half of all children have TVs in their bedrooms (Rideout, Foher & Roberts, 2010). This relative independence with regard to media consumption is likely a product of the various cognitive changes that occur around that age—when children develop better focus and logical reasoning, as well as mature reading skills, and thus are better able to select and follow the content they like to view.

By age 8, kids have also spent time in school with friends, prompting a change in interests and priorities. Group acceptance becomes important, as kids' desire to share experiences and be included increases. They become more involved with their peers and learn to manage complex relationships, including online. Many kids around this age sign up to play on game websites that introduce them to social networking by allowing them to chat and interact with their peers across the world. Indeed, a typical day includes using the Internet for almost half of kids aged 6 to 11, compared with one-fifth of those aged 2 to 5 (Nielsen, 2009). But how are these differences among age segments reflected in the amount of content consumed and the medium used?

Through a single-source prompted panel, Nielsen can accurately capture in real time what kids watch on TV and how they use computers to go online. In this white paper, we will use these data to discuss how a kid's age influences the content consumed, the platform or platforms where the content is accessed, and the influence of an adult as a guide or supervisor of his or her activities. Since adults in a household monitor and drive kids towards certain media content across platforms, we will explore trends in kids' co-viewing, defined as watching TV or using the computer to access the Internet with another person in the household (such as an adult). To show how content consumption intersects across platforms, we will also assess children's simultaneous usage of TV and computer and its trends over time. Finally, to open up this research to the mobile context, we will discuss a recent Nielsen survey of mobile devices, focusing on findings related to kids. Understanding how media consumption changes with age and across platforms will not only help identify kids' specific audience behaviors and therefore provide insights on content reach and viewership. It will also offer directional evidence on the shifting role of TVs, computers, and mobile devices as media channels to reach kids in the cross-platform world.



COPPA COMPLIANCE

COPPA (the Children's Online Privacy Protection Act) has posed significant challenges to researchers measuring kids' online activities, in many cases preventing rigorous and direct data collection. Thus, before discussing kids' media consumption across platforms, it is important to understand the processes Nielsen employs to ensure compliance with COPPA and protect the privacy of panel members of all ages.

COPPA protects children's privacy by prohibiting the online collection of personal information from children under age 13 without verifiable consent from a parent or guardian, among other provisions.

Nielsen's measurement approach is unique in that it captures digital information from children directly (through a prompt), while remaining COPPA-compliant by asking parents and legal guardians to provide consent for measuring children's activity before installing the metering software. In fact, Nielsen's panel-based data collection practices did not require adjustment with recent COPPA revisions enacted in July 2013—which expanded the definition of "personal information" to include several identifiers (such as cookie and user IDs) that can be used to recognize a user over time and across different websites or online services. COPPA compliance is one out of many practices that makes Nielsen's measurement of Cross-Platform Homes the only MRC-accredited, single-source panel in the U.S.

METHODOLOGY

All TV and computer data discussed in this paper were collected from active Nielsen National People Meter (NPM) panelists. The TV data come from all NPM panelists (since they all have metered TVs), while the computer data come from active Cross-Platform Homes panelists (i.e., a subset of NPM panelists whose Online activity is measured by Nielsen via a metered computer for each month of the analysis). The data include individuals that have watched TV and/ or accessed the Internet on a metered computer within the period reported in each analysis. The TV data include both live programming and time-shifted content.

The TV and computer data from these two samples of panelists are comparable because they are projected to their universes (TV and computer users with Internet access), and rely on a singlesource panel. The period reported is the month of March between 2011 and 2014, depending on the analysis. We selected the month of March because this was the most recent month of data available at the time of writing, so it provided the most up-to-date insights on crossplatform audience. We compare March 2014 to March 2011-2013 for consistency, as audience patterns can vary from month to month depending on the time of year, current events, seasonal schedule patterns, etc. For the purpose of our analyses, we define "children" or "kids" as media consumers aged 2 to 17. While this category includes teenagers, the wider age range helps show longer-range age differences among media consumers that live in households with adults. We refer to these consumers as "kids" in short, knowing that teens are also included in the analysis.

TIME SPENT ON TVS AND COMPUTERS

Before delving deeper into a comparison of media consumption on TVs and computers, we take a longitudinal look at the weekly amount of time that kids use TVs and computers. This will place the subsequent analyses in context, and help explain enduring differences between platforms.

According to Nielsen's 2011-2013 Cross Platform reports, TV remains the favorite platform for consuming content for kids of all ages, judging by the amount of time spent. At the end of 2013, kids aged 2 to 11 were spending over 24 hours a week watching TV (an increase of 7 minutes since the end of 2011), but they were only spending 20 minutes online on a computer (a decrease of 12 minutes since the end of 2011). By contrast, for teens, the amount of time spent watching TV has decreased slightly since 2011 (by about 2 hours), though they still spend more time on TV than on computers. Teens spend a little more time watching videos online than kids under 12, though both age groups spend little time on this activity compared to TV. It should also be noted that time spent watching online videos on computers has declined for all kids' age groups since 2012. By contrast, kids of all ages spend increasingly more time since 2011 watching timeshifted TV—perhaps a consequence of the increased availability and popularity of the on-demand service.

The fact that teens are watching less TV and all kids are using the computer less does not necessarily mean they are consuming less content. In fact, because a wide variety of platforms and services are now available for kids to consume media, it may be that more content is accessed, but on different platforms. Are kids moving away from TV and computers and towards mobile devices? And if so, how does this affect the type and amount of content being accessed?



TIME SPENT WATCHING TV AND USING THE INTERNET ON A COMPUTER

TIME SPENT /WEEK (HOUR: MINUTE)

AGE 2 TO 11			
Q4 2011	Q4 2012	Q4 2013	
24:09	24:32	24:16	
1:57	2:03	2:21	
:08	:14	:11	
:32	:29	:20	
	:	•	

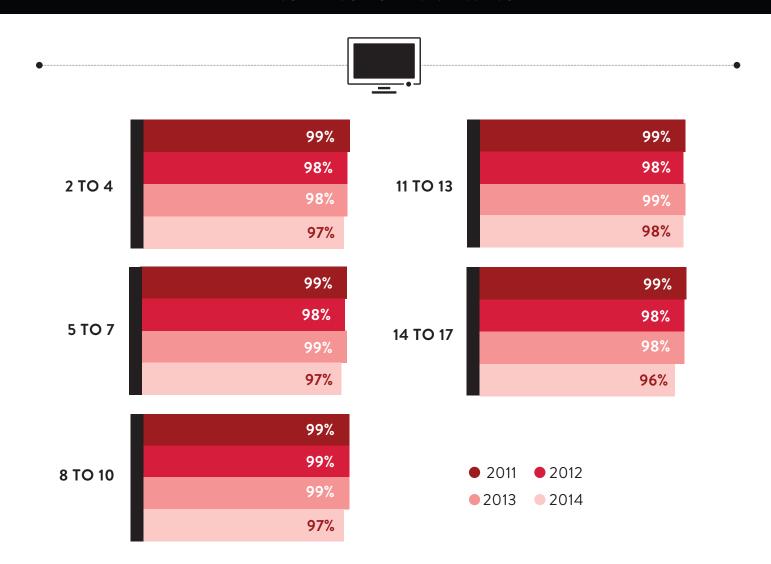
AGE 12 10 1/				
Q4 2011	Q4 2012	Q4 2013		
22:14	21:28	20:41		
1:31	1:37	1:51		
:23	:29	:19		
1:25	1:08	:43		
	:	:		

- WATCHING TRADITIONAL TV
- WATCHING TIME-SHIFTED TV
- WATCHING VIDEO ON INTERNET
- USING THE INTERNET ON A COMPUTER

KIDS' TV VIEWING

The incidence of TV viewing is substantial across all age groups. The vast majority of kids (over 95%) watched live (broadcast or network TV) or on-demand programming in 2011-2014 within the month of March. However, since 2011, the incidence of TV viewing has decreased slightly among all kids' age groups. Teens 14-17 show the biggest decrease from 99% in 2011 to 96% in 2014. While this is a seemingly small decrease, it reflects the changing landscape of platforms available for media consumption; 4% of teens are viewing content elsewhere.

INCIDENCE OF TV VIEWING



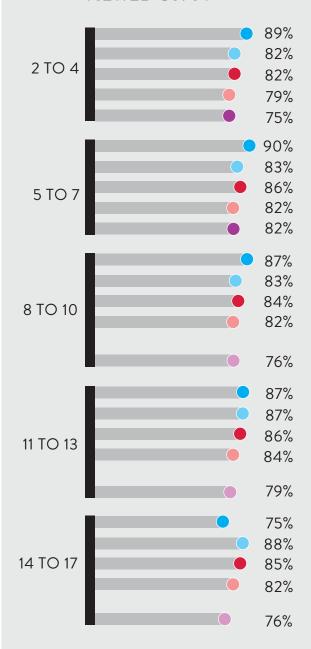
Read As: 96% of teens 14-17 with access to a TV watched TV during March 2014.

TV GENRES WATCHED BY KIDS

While we do not observe great differences in the incidence of TV viewing among kids' age groups, age has a much stronger influence on the types of content viewed.

Most of the variation emerges around age 8, consistent with previous research on the developmental changes that occur around this age. Children's weekly programming is a popular TV genre for all kids 2 to 17, but becomes less popular as kids age. Sitcoms, feature films and drama programming are popular for kids of all ages. Somewhat surprisingly, informational programming such as news or general documentary seems to be viewed by all kids: younger kids are more likely to consume news programming, while older kids 8 to 14 are more likely to watch documentaries. This could be attributable to the time of the day when these types of programs are aired. Perhaps younger kids are more likely to watch evening news programming because that is what the TV is set on (by adults) right before they go to bed. This finding could also be attributed to the fact that the data include co-viewing, which captures adults and children watching TV together, even if children are not as engaged as the adults. In fact, Nielsen panelists are instructed to log into the meter if they are watching or listening to TV, so a child present in a room where a parent selects the TV content will be counted among the viewers. As regards older kids, they could be more likely to watch documentaries because they are educational and potentially related to school activities or learning interests.

TOP FIVE GENRES VIEWED ON TV



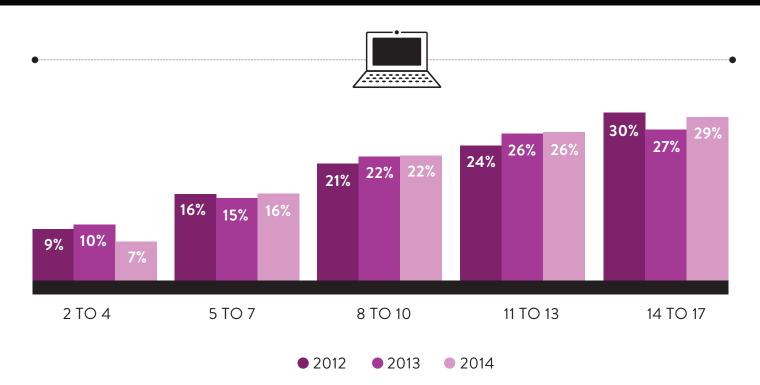
- CHILDREN'S WEEKLY PROGRAMMING
- DRAMA
- FEATURE FILM
- SITUATIONAL COMEDY
- NEWS
- DOCUMENTARY

Read As: 89% of kids 2 to 4 with access to a TV watched Children's Weekly Programming during March 2014.

KIDS' ONLINE ACTIVITY ON THE COMPUTER

While the incidence of TV viewing has decreased slightly for kids since 2011, the percentage of kids who go online on a computer remained relatively stable within each age group. This suggests that kids' overall online activity remains uninfluenced by the emergence of new Internet-capable devices (even though, as shown above, some kids may spend less time on the computer). However, internet activity increases linearly with age from 2 to 17. Very few kids 2 to 4 access the Internet on a computer, while teens 14 to 17 do so the most; these trends are likely due to the digital dexterity kids accumulate, as well as to an increasing need and desire to use computers as kids reach school age. This is in line with previous research showing that kids around age 8 start to become more independent consumers of media content.

INCIDENCE OF ONLINE ACTIVITY



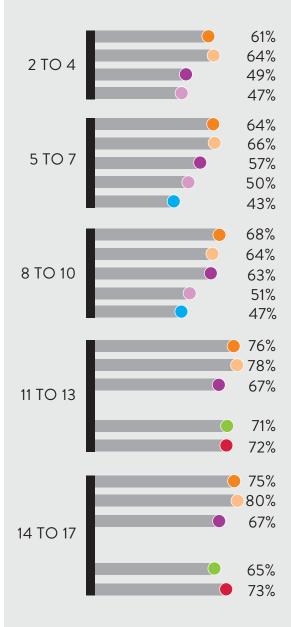
Read As: 7% of kids 2-4 went online for at least one minute in March 2014.

WEBSITE CATEGORIES ACCESSED BY KIDS

Children visit a variety of websites and broaden their selection as they age, though a core set of websites remain popular within all age groups. Information portals such as Google News, search websites such as Google and video content distributors such as YouTube are the top three most popular types of websites for all kids and teens aged 2-17. This may be due to the utility of information portals like google.com or bing.com, which are often the point of entry for any online activity. For example, a young child may know he wants to play a game, but may not know the web address where the game is hosted—so he has learned to use a search engine to find it. Kids are also very engaged with video platforms on the web.

While all kids visit certain types of website categories, we observe changes in preferences as kids get older. For example, younger kids (aged 2 to 10) are interested in websites that cater to kids' entertainment and platforms for online games. However, just as with TV viewing, around age 8 kids start to play fewer games and begin to watch more videos. Social networking incidence appears to decrease between ages 11 to 13 and 14 to 17, which is when kids may begin to use mobile devices with apps that are easier to access on-the-go.

TOP FIVE WEBSITE CATEGORIES VISITED ON A COMPUTER



- GENERAL INTEREST PORTALS
- SEARCH
- VIDEO CONTENT DISTRIBUTORS
- KIDS' ENTERTAINMENT
- SOCIAL NETWORKING
- ONLINE GAMES
- EMAIL & COMMUNICATION

Read As: 61% of kids 2 to 4 with access to a computer visited General Interest Portals in March 2014.

Based on the data presented so far, it appears that TV has not (yet) been dethroned as the most popular media consumption medium, despite the growing adoption of new media consumption platforms like computers and mobile devices. Most kids watch live and/or ondemand programming on TV within a given month, whereas far fewer children access the Internet on a computer. However, TV may be slowly supplemented with other devices such as tablets or smartphones, in line with a recent study (Council for Research Excellence, 2013). As regards computer usage, time spent on the computer has decreased in recent years, but this does not mean that fewer kids use computers. The incidence of computer usage has remained stable over the past few years. Kids use computers today just as they did a few years ago; they may just be spending comparatively less time on computers, as their time is now divided among multiple available devices.

From a demographic perspective, the difference between younger and older children is more visible in the most popular content they consume on TV than in the most popular types of websites they access on the computer—a surprising finding, given the wide range of content available online for anyone to access. For example, the genre most watched by younger kids on TV is children's programming, while teenagers are more likely to watch drama; however, search engines are the websites most visited by young kids and teenagers alike. What drives most kids to different types of TV content, but similar types of online content, as they get older? Since adults are often the ones who guide kids' media consumption in the household, we next look at co-viewing and assess to what extent adults' media interests overlap with (or guide) children's interests.

CO-VIEWING

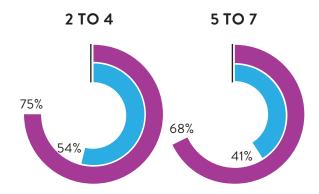
Co-viewing is defined as watching TV or using a computer to go online together with another person. We expect adults to co-view content on both the TV and computer more frequently with younger children than with older children for a variety of reasons. Younger children need more help using electronic devices and they are less likely to be the "driver" of the content consumed. Parents of older kids may be more inclined to give their child more freedom to select the content to view while younger children need more help finding the content they want to view. Adults are also more likely to be involved in, or to regulate younger children's viewing choices than to supervise older children's viewing choices. And, parents use co-viewing as an educational or family-bonding activity with younger children. As explained above, the types of content co-viewed also vary according to the children's age. The following data explore co-viewing on TVs and computers between adults and kids, as well as between kids and anyone else (including other kids).

CO-VIEWING ON TV

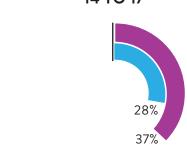
Data from prompted panelists show that the incidence of kids' co-viewing on a TV is quite different from the incidence of TV consumption among kids in general. While most kids watch TV in a given month, co-viewing TV decreases with age. As expected, kids 2 to 4 are the most likely to co-view TV content with adults and with individuals of all ages. This means that audience tends to be more diverse (in terms of age) and larger when young kids are behind the screen. This is also in line with the earlier finding that young kids watch the evening news since adults are behind this activity as "channel-setters". Teens are least likely to co-view with other adults or individuals of all ages. While co-viewing with individuals of all ages decreases by almost 10 percentage points with each age group, co-viewing with only adults appears to plateau and decrease only slightly after the age of 8.

We examined the top five genres co-viewed by kids on TV and compared them to the top five genres viewed on TV overall, and found that they are similar. There are six genres that appear in the top five co-viewed, just like when considering TV viewing overall. Besides children's programming, younger kids 2 to 4 also seem to co-view content not intended for their age group, such as news or drama. This can be explained by the fact that 75% of kids 2 to 4 co-view with an adult, and thus may view the content chosen by adults. Older kids, on the other hand, co-view more "age appropriate" content such as movies and sitcoms along with children's programming. Older kids are thus more likely to be drivers of the content even when others are participating in the TV viewing. Moreover, children's programming stops being the most commonly co-viewed genre after the age of 10 and is replaced with drama, indicating that around that age kids' viewing preferences start aligning with the preferences of those that they co-view with (i.e. adults).

INCIDENCE OF CO-VIEWING ON TV IN MARCH 2014









Read As: 54% of kids 2 to 4 with access to a TV co-viewed with an adult in March 2014.

TOP FIVE GENRES CO-VIEWED ON TV IN MARCH 2014

	2 TO 4	5 TO 7	8 TO 10	11 TO 13	14 TO 17
CHILDREN'S WEEKLY PROGRAMMING	93%	92%	91%	87%	76%
FEATURE FILM	89%	89%	90%	89%	87%
DRAMA	89%	88%	89%	89%	89%
SITUATIONAL COMEDY	84%	85%	86%	86%	83%
NEWS	84%	82%	81%		
DOCUMENTARY				81%	78%

Read as: 93% of kids 2 to 4 co-viewed children's programming in March 2014.

These patterns in co-viewing of TV programming have important implications for audience measurement. Parental choices appear to determine the TV content accessed, exposing kids to content intended for older ages. This implies that audience computations should take the presence of young children in the household into account and incorporate the likelihood that these kids are co-viewing content intended for different age categories.



CO-VIEWING ON A COMPUTER

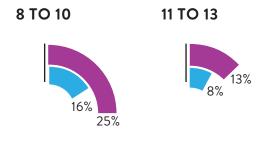
On the computer, co-viewing occurs less commonly across all age groups compared to TV viewing, since kids in general use computers less than they watch TV. However, the types of content co-viewed are, again, unique to the platform and in some ways the trends are opposite to those on TV. Just as on TV, kids 2 to 4 are the most likely to co-view on the computer (i.e., browse the Internet together with someone else). However, if they do go online with another person, that person is likely an adult. This is consistent with the findings for TV co-viewing, which is driven by adults deciding on the content to view. However, no single age category co-views exclusively with adults.

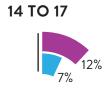
Co-viewing Internet content on computers occurs most frequently between the ages of 2 and 10. Younger kids around this age begin to use computers socially, for example, by playing online games and engaging in multiplayer activities with friends or siblings. Thus, online content intended towards these ages is likely to also reach other demographics, including adults. Conversely, teens are more apt to use computers for independent activities, with web content targeted to teens more likely to reach just teens.

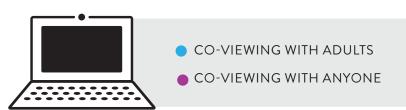
The finding that the top content consumed on TV by kids varies more by age than the top content consumed on the computer also reflects these trends. Kids co-view less on computers, and when they do co-view, they are able to drive the content (or at least influence the choice of content) instead of being exposed to content chosen by adults (such as the evening news). Using the computer requires active focus and attention, as opposed to TV viewing, which can be done more passively or even involuntarily, e.g. by being present in the room and hearing it without actively paying attention. Nielsen encourages panelists to log into the People Meter even when they are listening to TV, which explains why kids appear within the audience of the varied content that may be playing for others in the household.

INCIDENCE OF CO-VIEWING ON THE COMPUTER IN MARCH 2014









Read as: 27% of kids 2 to 4 with access to a computer co-viewed with an adult in March 2014.

Indeed, the top five co-viewed website categories do not vary much and represent overall age-appropriate content. General interest portals, search websites and video content distributors are popular across all age groups, similarly to kids' top five categories visited overall. Also consistent with the findings on categories visited by kids in general, kids' entertainment websites are popular to co-view between the ages of 2 and 10, while teens like to access social networking websites with others.

What is unique about kids' top five co-viewing categories compared to kids' websites overall is the presence and popularity of online games within each age group. Kids evidently like to socialize with multiplayer games on the computer, especially younger ones (age 2 to 4) who need help navigating the computer. Also different from the website categories visited by kids overall is the absence of email and communication websites. This isn't surprising given that email is more personal and less likely to be shown to others (and is also less entertaining than other social online activities). Another new category within the coviewed websites (compared to the ones visited overall) is education resources for teens 14 to 17, most likely because these sites are used to communicate schooling requirements to parents. Again, these findings show that kids and teens are likely to drive the content co-viewed on computers, which matches their interests rather than those of adults they may be co-viewing with, like on TV.

TOP FIVE WEBSITE CATEGORIES CO-VIEWED ON THE COMPUTER IN MARCH 2014*

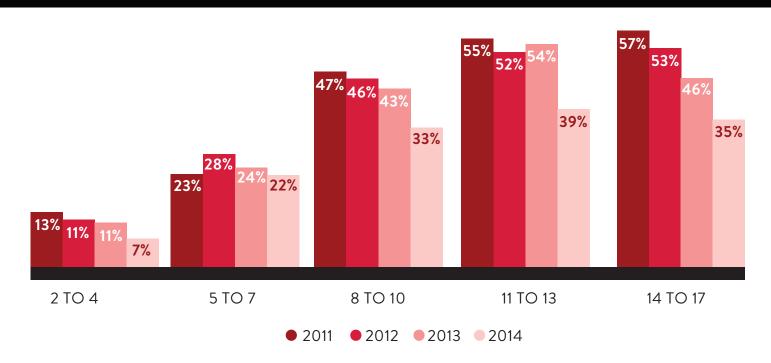
	2 TO 4	5 TO 7	8 TO 10	11 TO 13	14 TO 17
ONLINE GAMES	69%	57%	53%	35%	46%
VIDEO CONTENT DISTRIBUTORS	51%	43%	37%	33%	33%
KIDS' ENTERTAINMENT	53%	50%	49%		
GENERAL INTEREST PORTALS		36%	32%	24%	25%
SEARCH		34%	36%	22%	
SOCIAL NETWORKING				22%	35%
EDUCATION RESOURCES				29%	33%

Read as: 69% of kids 2 to 4 played online games on the computer with someone else in March 2014. *Not reported if raw audience < 100.

KIDS' SIMULTANEOUS USAGE OF TV AND COMPUTER

With a plethora of portable devices easily available to use anywhere while other screens are in sight, we expect adults to access content simultaneously on their lap and on a big screen on a wall—but do kids engage in this multi-tasking behavior as well? Nielsen found that 56% of persons aged 2 and up simultaneously use the Internet and watch TV with an average time of 10 minutes per user, per day (Nielsen, 2009). Moreover, numerous studies have established that younger generations are the most likely to simultaneously consume media (Fishbein, 2007; Sultan & Bardhi, 2009). On a typical day in 2010, school age children packed almost 8 hours of media exposure into 5.5 hours of time (Rideout, Foher & Roberts, 2010). How have trends of simultaneous usage of TV and computer changed since then?

SIMULTANEOUS PLATFORM USAGE OF TV AND COMPUTER



Read as: 13% of kids aged 2 to 4 with access to a TV and computer simultaneously used both platforms in March 2011.

Our data from 2011 through 2014 show that kids of all ages still engage in simultaneous media consumption, with the incidence of simultaneous viewing increasing with age until reaching a plateau around age 11. In 2014, kids 8 to 17 seem to be simultaneously using TV about the same amount of time. Longitudinal data from 2011 until 2014 show that multitasking between TV and computer has decreased for children of all age groups. Have children started paying attention to one screen, or has one of the screens been replaced with a third? Have mobile devices taken the place of the computer in front of the TV or under other circumstances?

MEDIA CONTENT CONSUMPTION ON MOBILE DEVICES

Mobile devices change the way in which adults and kids engage in media consumption both in terms of the type of content consumed and in terms of the environment in which it is consumed. Portable and easy to use devices allow adults and kids alike to find and view content instantly and show it to others with only a few steps or a stretch of the arm. Parents use mobile devices as babysitters, and kids use them as play buddies, at home or elsewhere.

Nielsen recently reported that 70% of children under 12 live in households with tablets, and use the available tablet (Nielsen, 2012). Moreover, 27% of teens own a tablet (Nielsen, 2013). Smartphones, on the other hand, are used and owned by older kids. More than half of teens 13 to 17 are using smartphones, up from 36% in 2011 (Nielsen, 2012). Younger kids also often use their parents' smartphones. In 2011, parents reported that a third of the apps on their smartphones were downloaded by their kids. Even further, the average age at which kids start downloading apps on their own is 9 years old (Nielsen, 2011). Kids are growing up in a cross-platform world and learning to use mobile devices quickly to access digital content of their choice. Mobile devices are an exponentially expanding, yet not well-charted territory, where much of the kids' audience seems to migrate. To provide some initial evidence on the effect of mobile devices on the cross-platform media landscape, we discuss findings from a representative survey on mobile device usage, focusing on children and teens aged 12 to 17.

METHODOLOGY

Between December 2013 and February 2014, Nielsen surveyed 4,000 mobile device users around the U.S. The probability sample was dual frame (landline and cell phone) and collected via Random Digit Dial. What is unique about this research, compared to other studies about mobile devices, is its focus on the behavioral activities at the respondent and the household level. Respondents (age 12 and older) were asked to provide information about how all members of their household (including kids 2 to 11) use the mobile devices that respondents also use. Through these proxy responses, Nielsen collected data on the usage of mobile devices among kids, as well as on the activities performed by kids on these mobile devices alone or with someone else.

KIDS' USE OF TABLETS AND SMARTPHONES

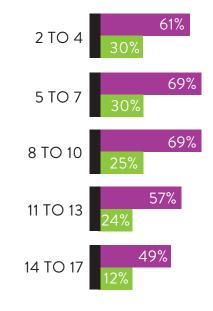
Between the ages of 2 and 4, at least 61% of kids use a tablet if one is available in the household, and 30% use a smartphone if it is available. Tablet and smartphone use may be even higher in reality, since these percentages reflect usage of the same devices used by the main survey respondent, but kids could also be using other devices that are not shared with the survey respondent. Kids' use of tablets (as reported by the survey respondents) peaks at 69% around age 10, and decreases to 57% between ages 11 and 13. Similarly, kids aged 2 to 7 are most likely to use respondent's smartphone, and older kids are least likely. Thus, older kids share someone else's devices less—perhaps because they start acquiring their own.

Among respondents aged 12 to 17, smartphone usage is much more common: 70% of respondents 12 to 13 and 80% of respondents 14 to 17 indicated they use a smartphone, if one is available in the household. However, tablet usage among teens remains similar to tablet usage among younger children: 50% of teens aged 12 to 17 indicated they use a tablet. These percentages reflect usage by respondents themselves (as opposed to proxy responses about other users as previously discussed), so they are not directly comparable to the percentages reported for kids under 12. However, they may indicate that the apparent decrease in mobile device usage observed after age 11 is actually a decrease in device sharing, which suggests that today's kids start acquiring mobile devices at very young ages—12 and, possibly, even 10 years old.



MOBILE DEVICE USAGE

KIDS USING THE RESPONDENT'S DEVICE



RESPONDENT



TABLETSMARTPHONE

Read as: 61% of kids 2 to 4 with access to a tablet in the household, use a tablet.

KIDS' ACTIVITIES ON TABLETS AND SMARTPHONES

Kids are using tablets and smartphones similarly—primarily to watch videos and use apps. Browsing the web increases with age on both smartphones and tablets, since older children are more independent and savvy mobile users, with greater (often social or school-driven) needs for searching and gathering information. For teen respondents, browsing the web occurs much more commonly than using apps on tablets, perhaps because tablets have larger screens and keyboards, which makes it easier to type into a browser (as opposed to downloading an app for every content need). Teens also have the dexterity and savviness required to search for information online. Kids, on the other hand, may find it easier to use an app which is usually located in the same place on the screen and allows them to access their preferred content each time. Conversely, on smartphones, teen respondents browse the web and use apps equally.

Tablets are also a preferred environment to watch videos, with a majority of kids in all age buckets doing so (when considering data provided by respondents about themselves, in addition to data provided by respondents about others using their devices). The likelihood of watching videos on tablets increases with age: between 57% and 72% of kids under 14 watch videos on someone else's (i.e., the respondent's) tablet and 90% of teen respondents between 12 and 17 watch videos on the tablet they use the most (which may be their own). This demonstrates the high potential of media content on this environment to reach the teen demographic, as well as the potential of tablets to supplement (or even replace) TV as the preferred platform to view video.

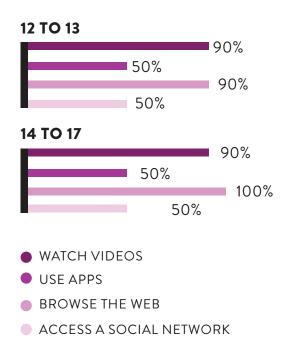
Kids 2 to 7 typically use their parents' devices to watch videos. However, around the age of 8, kids become much more interested in using a smartphone to access apps. This behavioral change is similar to how kids use computers; kids at this age become independent, coordinated and tech-savvy enough to start playing online games, which are more often accessed via an app on a mobile device. Perhaps the new focus on interactive activities temporarily replaces the focus on passively watching videos. Social networking is also a highly popular activity on mobile devices, with 50% of teens using their tablets and 80% using their smartphones to access a social network.

TABLET ACTIVITIES

KIDS USING THE RESPONDENT'S TABLET

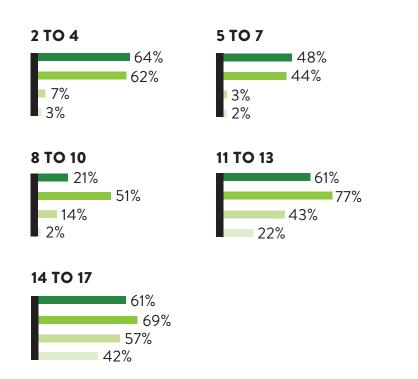


RESPONDENT TABLET USE

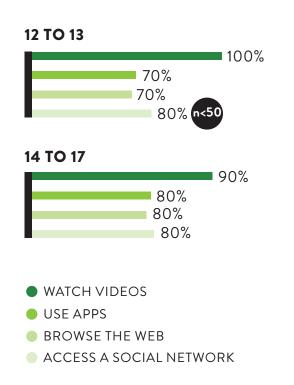


SMARTPHONE ACTIVITIES

KIDS USING THE RESPONDENT'S SMARTPHONE



RESPONDENT SMARTPHONE USE

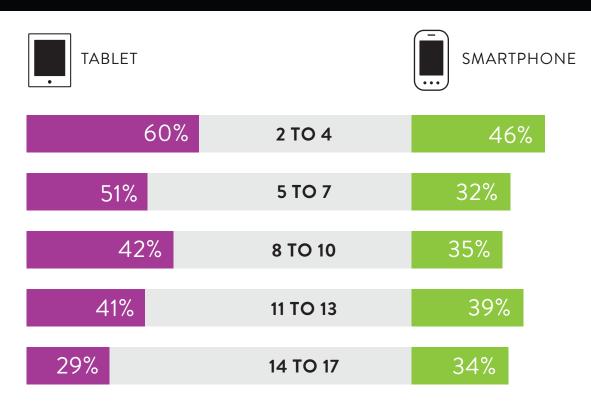


CO-VIEWING ON MOBILE DEVICES

Watching videos appears to be one of the most common activities for kids on both smartphones and tablets. Do kids co-view videos on mobile devices as much as they co-view on TVs and computers, despite the smaller screen size?

Based on the survey findings, co-viewing on tablets displays a trend similar to TV and computer co-viewing: younger children are more likely to co-view with an adult (60% of 2 to 4 year olds) compared to teens (29%). Tablets are used more often for co-viewing except for teens who prefer to use a smartphone to co-view videos. In general, young children are most likely to co-view with adults on both tablets and smartphones. While 2 to 4 is the most likely age group to co-view on a smartphone (46%), other age groups have a similar incidence of co-viewing. As is the case for TVs, content intended for young kids will likely reach adults but not so much for teens.

INCIDENCE OF CO-VIEWING ON MOBILE DEVICES

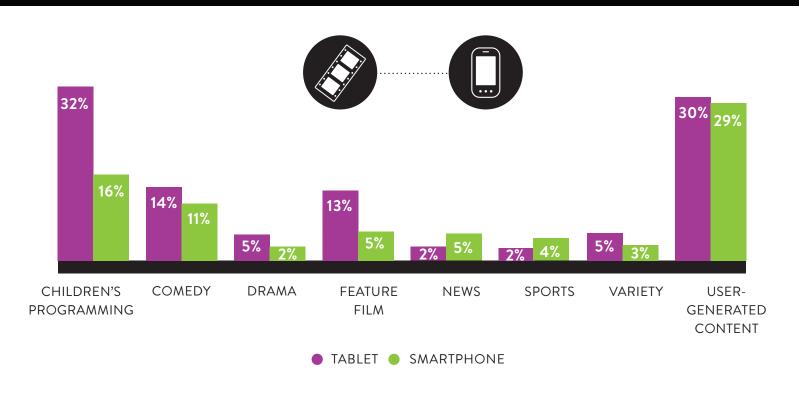


Read As: 60% of kids 2 to 4 with access to a tablet, use the tablet to co-view video content.

VIDEO CONTENT CO-VIEWED ON MOBILE DEVICES

The type of video content consumed is similar on both tablets and smartphones. User-generated content is the most popular on both tablets (30%) and smartphones (29%). Children's programming is the second most popular video content accessed by kids. However, it is much more likely to be co-viewed on a tablet (32%) than on a smartphone (16%) and by younger children (because younger children co-view more on tablets in general). Feature films are also popular content co-viewed on tablets (13%) compared to smartphones (5%). This is likely due to the larger screen size of a tablet, which makes for more comfortable viewing of long-form content like movies. Thus, both live TV content (such as children's programming) and native digital content (such as user-generated videos) will reach demographically diverse audiences on both tablets and smartphones.

VIDEO GENRES CO-VIEWED ON MOBILE DEVICES



Read as: 32% of kids 2-17 co-view children's programming on a tabet with another member of their household.

CONCLUSION

Overall, traditional TV remains the most popular media consumption platform across kids' age groups. However, there appears to be a slight downward trend in the time spent viewing TV. This may indicate a shift in media consumption toward other screens, that may supplement (rather than replace) TV viewing. However, kids' likelihood to go online on the computer has not changed over time, changing instead with the age of the child. Older children have more digital dexterity and are more likely to access the internet

The content consumed by kids also varies with age. Younger kids tend to visit websites for entertainment and games, often with adults who can help them find and use these websites. However, around the age of 8, kids become more likely to access the Internet independently from adults and access more informational and networking sites online. Kids at this age are also the most likely to co-view on the computer with others, for example sharing the experience through multiplayer games and videos.

Data on co-viewing with others also showed how often the same content reaches different demographics at once. The likelihood of co-viewing varies inversely with age, with younger audiences much more likely to be accompanied by someone else. However, co-viewing is much more infrequent on the computer. When kids do co-view on the computer, the content consumed is more often interactive (e.g., games) than passive (e.g., videos).

While panel-based data on the usage of mobile devices was not available at the time of writing, we explored mobile use based on our recent projectable survey research. Findings show that many kids regularly use both tablets and smartphones for a variety of activities. Tablets are particularly popular with young kids, while teens appear to acquire their own smartphones and use tablets less often.

Despite widespread use of both tablets and smartphones, the integration of these devices in the home does not seem to be lessening kids' use of TVs or computers overall. However, kids' simultaneous usage of the TV and computer has been declining since 2011. This suggests that tablets and smartphones could be replacing computers for multitasking activities in front of the TV. Mobile devices' touch-screen and small size make them more accessible than computers for kids of younger ages, and more flexible than the stationary desktop or laptop, which may only be available in certain rooms of a house, or for only certain household members. Portable, easy to lift and carry, and intuitive to use, mobile devices are ideal for browsing the web, using apps or playing games without knowing how to use a mouse, or how to read. It goes without saying that mobile devices should become a core component of audience measurement, especially among kids. Nielsen is starting to chart this space by gathering both cross-sectional survey insights and longitudinal, panel-based insights on kids as individual content consumers embedded in cross-platform households.





APPENDIX

APPENDIX 1. RAW SAMPLE SIZES OF NIELSEN CROSS-PLATFORM PANEL PERSONS, 2011-2014*

 TV

COMPUTER

	2011	2012	2013	2014	2012	2013	2014
2 TO 4	2,381	2,248	2,388	2,207	380	314	240
5 TO 7	2,299	2,316	2,312	2,400	711	643	619
8 TO 10	2,393	2,264	2,276	2,392	1,143	1,073	927
11 TO 13	2,465	2,323	2,335	2,348	1,426	1,382	1,116
14 TO 17	3,028	3,103	3,052	3,121	2,154	1,827	1,536
YEAR TOTAL	12,566	12,254	12,363	12,468	5,814	5,239	4,438
YEAR TOTAL SAMPLE	55,211	54,585	54,989	54,876	19,815	18,530	15,761

^{*}Sample size data in 2011 are unavailable for active computer homes.

APPENDIX 2. EXAMPLES OF TV PROGRAMS THAT KIDS WATCH OR CO-VIEW

CHILDREN'S WEEKLY PROGRAMMING	Kids Choice Awards 2014	SpongeBob The Movie	SpongeBob Truth or Square
FEATURE FILM	Despicable Me	Tangled	Warner Bros. Vol 38
DOCUMENTARY	Weekend Adventures	Cosmos	Marvel Studios
DRAMA	NCIS	Blacklist	NCIS: Los Angeles
NEWS	Masterpiece 4408	NBC Nightly News	ABC World News Tonight
SITUATIONAL COMEDY	The Big Bang Theory	How I Met Your Mother	Modern Family

APPENDIX 3. EXAMPLES OF WEBSITES THAT KIDS VISIT ON THE COMPUTER

EMAIL & COMMUNICATION	Accounts.google.com	Docs.google.com	Drive.google.com	
GENERAL SEARCH	Google.com	Bing.com	Search.yahoo.com	
INFORMATIONAL PORTALS	Google.com	Yahoo.com	msn.com	
KIDS' ENTERTAINMENT	Pbskids.org	Nickjr.com	Cartoonnetwork.com	
ONLINE GAMES	Play.clubpenguin.com	Games.disney.com	Kizi.com	
SOCIAL NETWORKING	Facebook.com	Twitter.com	Plus.google.com	
VIDEO CONTENT DISTRIBUTORS	Youtube.com	Netflix.com	IMDB.com	

REFERENCES

Brasel, S. Adam, and James Gips. (2011). Media multitasking behavior: Concurrent television and computer usage. Cyberpsychology, Behavior, and Social Networking 14, no. 9: 527-534.

Council for Research Excellence. (2013). TV Untethered: Following the Mobile Path of TV Content. http://www.researchexcellence.com/documents/research/43.pdf

Jeong S. & Fishbein M. (2007). Predictors of multitasking with media: Media factors and audience factors. Media Psychology. 10:364–384.

Michael Cohen Group and U.S. Department of Education Ready to Learn Program. (2007). Children, families & media: A benchmark. New York: Michael Cohen Group, LLC.

O'Hara, Jim. (2009) Multitasking at home: Simultaneous use of media grows. blog. nielsen.com. The Nielsen Company.

Rideout, V., Foehr, U. G., & Roberts, D. (2010). Generation M2: Media in the lives of 8- to 18-year-olds. Menlo Park, CA: Henry J. Kaiser Family Foundation.

Nielsen. (2009). A2/M2 Three Screen Report. New York: The Nielsen Company.

Nielsen. (2009). Youth and media...Television and beyond. New York: The Nielsen Company.

Nielsen. (2011). U.S. parents say almost a third of the apps on their phone were downloaded by their children. New York: The Nielsen Company

Nielsen. (2012). American families see tablets as playmate, teacher and babysitter. New York: The Nielsen Company.

Nielsen. (2012). State of the media: The cross-platform report. New York: The Nielsen Company.

Nielsen. (2012). Young adults and teens lead growth among smartphone owners. New York: The Nielsen Company.

Nielsen. (2013). The teen transition: Adolescents of today, adults of tomorrow. New York: The Nielsen Company.

Nielsen. (2013). Viewing on demand: The cross-platform report. New York: The Nielsen Company.

Nielsen. (2014). An era of growth: The cross-platform report. New York: The Nielsen Company.

ABOUT NIELSEN

Nielsen N.V. (NYSE: NLSN) is a global performance management company that provides a comprehensive understanding of what consumers Watch and Buy. Nielsen's Watch segment provides media and advertising clients with Total Audience measurement services across all devices where content — video, audio and text — is consumed. The Buy segment offers consumer packaged goods manufacturers and retailers the industry's only global view of retail performance measurement. By integrating information from its Watch and Buy segments and other data sources, Nielsen provides its clients with both world-class measurement as well as analytics that help improve performance. Nielsen, an S&P 500 company, has operations in over 100 countries that cover more than 90 percent of the world's population.

For more information, visit www.nielsen.com.

Copyright © 2015 The Nielsen Company. All rights reserved. Nielsen and the Nielsen logo are trademarks or registered trademarks of CZT/ACN Trademarks, L.L.C. Other product and service names are trademarks or registered trademarks of their respective companies.15/9011



