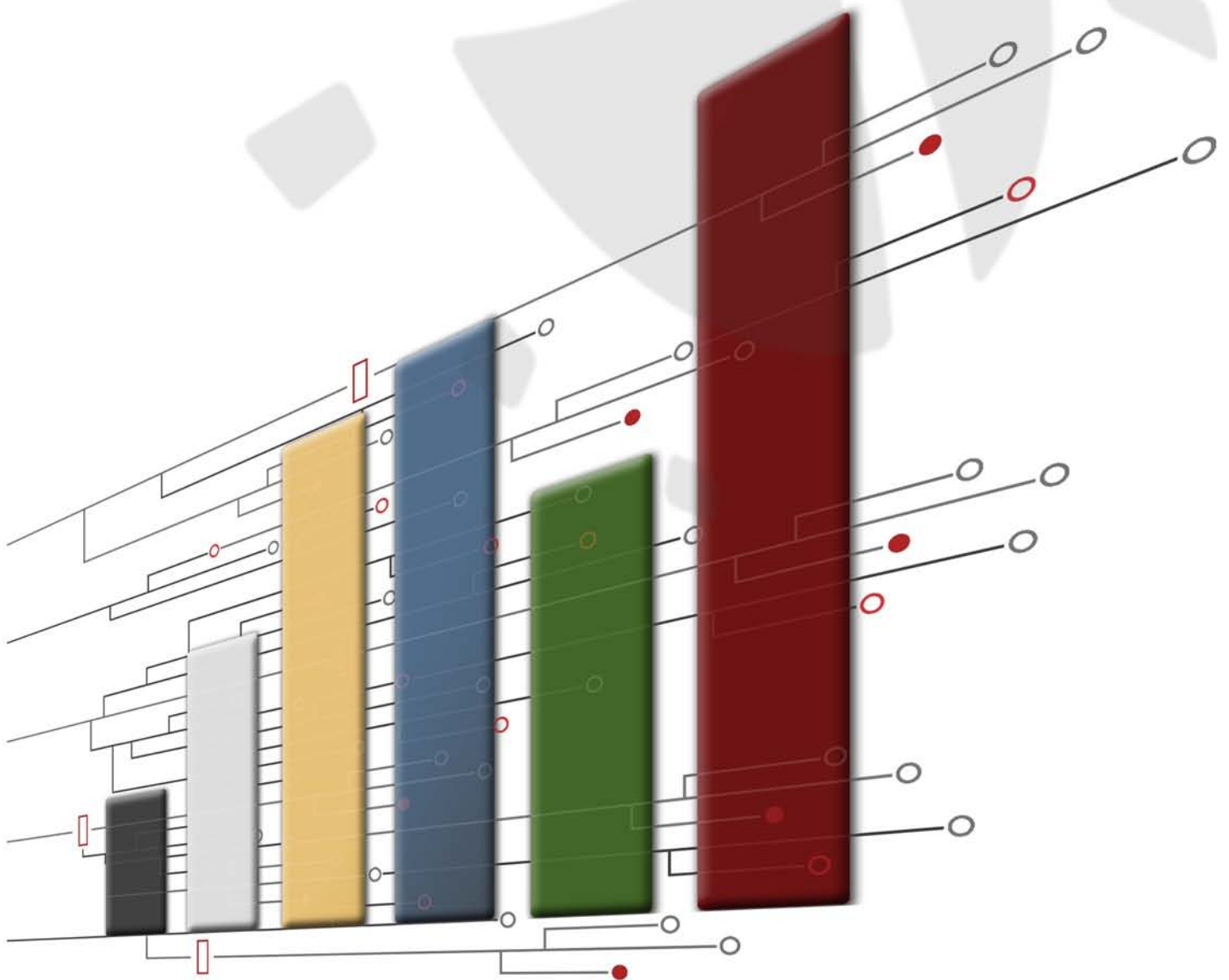


# High School Media Too: A School Day in the Lives of Fifteen Teenagers

Center for Media Design  
September 2007





# High School Media Too: A School Day in the Lives of Fifteen Teenagers

**Robert A. Papper**  
Department of Journalism,  
Media Studies and Public  
Relations  
Hofstra University

**Dr. Michael E. Holmes**  
Associate Director, Insight  
& Research  
Center for Media Design  
Ball State University

**Dr. James M. Nyce**  
Department of Anthropology  
Ball State University

**Mike Bloxham**  
Director, Insight & Research  
Center for Media Design  
Ball State University

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## High School Media Too: A School Day in the Lives of Fifteen Teenagers

Teenagers are a valued audience for media content providers and advertisers for a number of reasons. First, conventional wisdom is teenagers consume a great deal of media content and their habits foreshadow the future media ecosystem. Second, in our youth-oriented culture teens are an important market for many advertisers because of their spending levels and because they may have more-malleable brand loyalties than adults. Third, the broader influence of this group on household purchase decisions is well-known.

We have previously used field-based observational research (a “shadowing” method) to explore the media behavior and life activities of adults, generating rich and detailed data on media exposure across platforms, locations and life activities (see Middletown Media Studies I and II – [www.bsu.edu/cmd/insightandresearch/irmmstudies](http://www.bsu.edu/cmd/insightandresearch/irmmstudies)). Given the value of the teen audience, it is unsurprising that one of the audience questions we often hear when presenting the Middletown Media Studies is “Do you have this kind of data for teenagers?” So far we have had to answer “alas, no” to that question. The clear interest in the media lives of teens led us to this pilot study – we wanted to learn about the challenges of recruiting teens for a shadowing study and of observing them in school settings.

# About the Study



We recruited a total of 15 students for this pilot study, aged 12 through 18, in grades 7 through 12 at Burriss Laboratory School in Muncie, Indiana. This is a public laboratory school administered by Ball State University; however, admission is open to all area residents and is based solely on a lottery system. It is important to note that this study is based on a convenience sample within that student population. It would be folly to generalize our pilot study results to other teens given the small, non-random sample and single-school venue. However, the study does provide a detailed look at the “day in the life” of a small number of teens. While not generalizable, the results for these teens can be examined for qualitative insights and to generate questions for future research.

The study has also demonstrated that the method can be successfully applied to this audience with all its unique logistical and other challenges. On the basis of this experiment, we intend to further develop our plans to expand this study to a much larger sample in the future and to that end welcome comments and other input from readers of this document.


Demographics of study participants are as follows:

- Nine of the participants were aged 12 - 14 and six were aged 15 - 18. (For convenience, we’ll refer to the group as “teens” despite the one near-teen in the sample.)
- Four were in grade 7; four were in grade 8; three were in grade 9; two were in grade 10; one was in grade 12.
- There were seven boys and eight girls.
- Thirteen of the 15 were Caucasian; one was African American and one self-identified as multiracial.
- Only the 12th grader and one of the 10th graders had driver’s licenses.

We used observers trained in naturalistic research, institutional research board rules for human subjects research and the operation of the data-gathering equipment. This is a portable “smart keyboard” with touch-screen input. The device is programmed with custom “media collector” software for the observer to log changes in the participant’s location, life activities and media exposure. For this study we noted 5 locations (home, car/bus, school, work, other), seventeen life activities and fifteen media. The current state was recorded to a data file every 10 seconds, generating a fine-grained record of the participant’s day. Details about the observational method can be found in the Middletown Media Studies reports and white papers at [www.bsu.edu/cmd/insightandresearch/irmmstudies](http://www.bsu.edu/cmd/insightandresearch/irmmstudies).

Teens were each observed for one day, from as soon after they got up in the morning as an observer was allowed into the home until as close to bedtime as the observer was allowed to stay. Observers followed the teens wherever they went, including school classes; we had an observer shift change in the afternoon, usually at the end of the school day. Upon arriving in the morning, observers prompted participants for short-term recall of activities and media exposure from awakening until the observer’s arrival. Similarly, we used a next-day follow-up phone call to reconstruct activities and media exposure from observer departure until the end of the person’s day. The average recorded day length, including early morning and late-night reconstructions, was 15.5 hours. Observations were distributed across weekdays; no weekend days were observed. All observations for this pilot study were conducted in November 2006 prior to the students’ Thanksgiving vacation.

We will begin by describing where these teens spent their time and what they were doing; we will then focus on media exposure and the relationship of media exposure to activities and locations.



Observers shadowed  
the teens wherever  
they went...

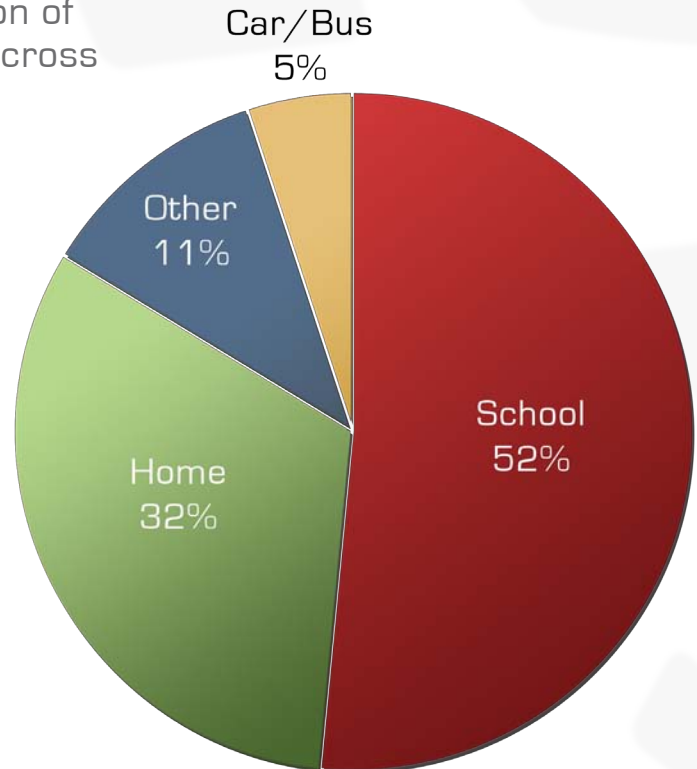
# Contexts of Use:

## Location and Life Activities

As expected, school is a primary location for these teens and education is a dominant activity. On average, approximately half of the day was spent at school, followed by home, other locations (friends' homes, retail settings, etc.) and transportation (Figure 1).

Despite the overwhelming amount of time we spend with media, being an audience or user is not yet the only thing we do. Media-related activities are only part of a complex mix of life activities making up the waking day. In this study we recorded these life activities using a category system adapted from Robinson and Godbey (1997). As expected, education at school is a dominant weekday life activity for our participants (Figure 2), accounting for 40% of all activity through the day. The only other life activity constituting more than 10% of the teens' day was "media only" (at 19%). Just as work and media consumption are large parts of a typical adult's day, school and

Figure 1. Distribution of participants' time across location.

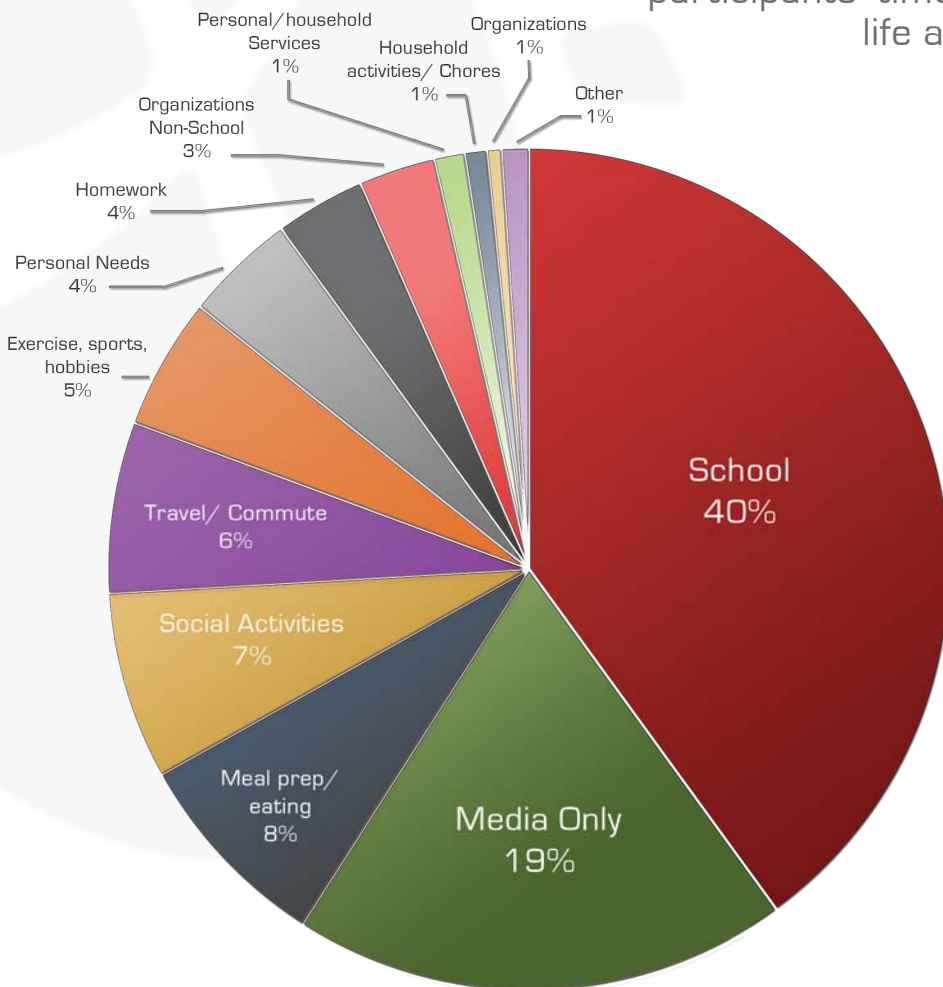




media consumption capture most of the day for these teens (none of the teens worked on the day of observation).

There is some variability in the incidence of activities once we get beyond common activities such as education, media consumption, meals, personal needs and socializing. The life activity reach/duration scatterplot in Figure 3 reveals three clusters of activities according to reach: the universal or near-universal activities already noted, homework and chores (both with 10 or more participants) and “optional” activities engaged in by 7 or fewer participants.

Figure 2. Distribution of participants' time across life activities.

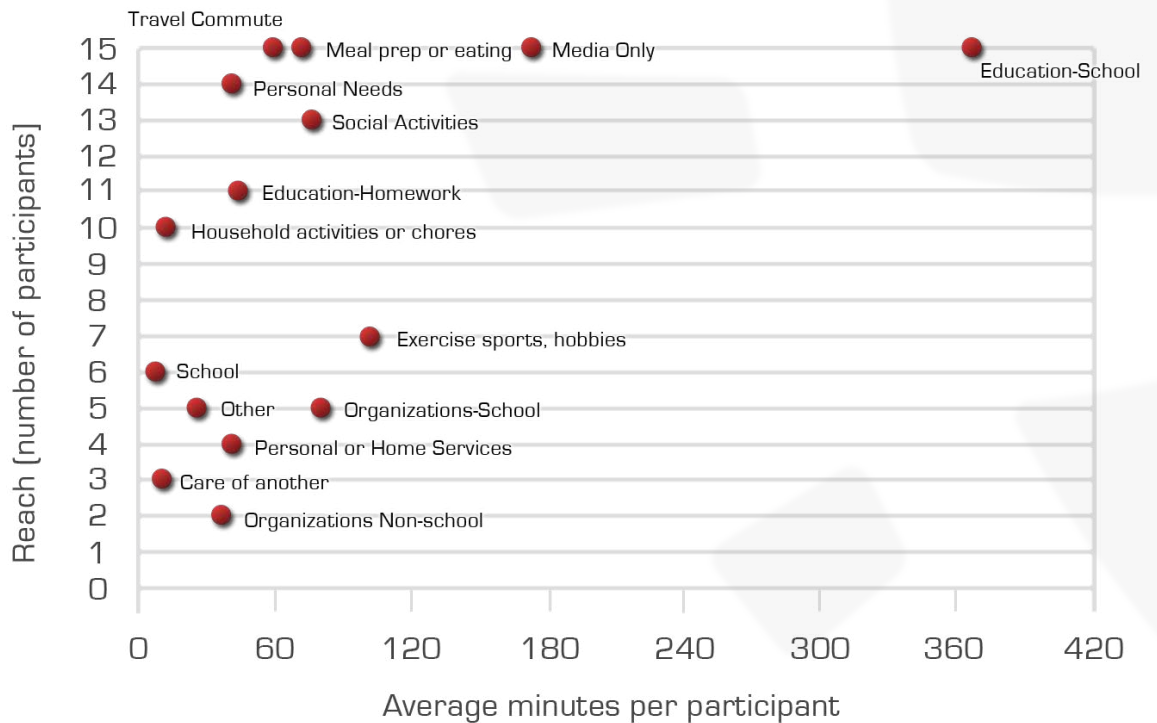


# Contexts of Use:

Continued

The overall picture is of typical teen life on a school day: going to school, consuming media, socializing, doing homework and chores—and for some, engaging in sports or hobbies, shopping, being active in organizations, or engaging in other activities. Given that school is the location where these teens spent the largest block of time and education is by far the dominant activity in their day, we should expect to see indicators of these two influences in their patterns of media exposure.

Figure 3. Reach and Average Total Duration of Life Activities.





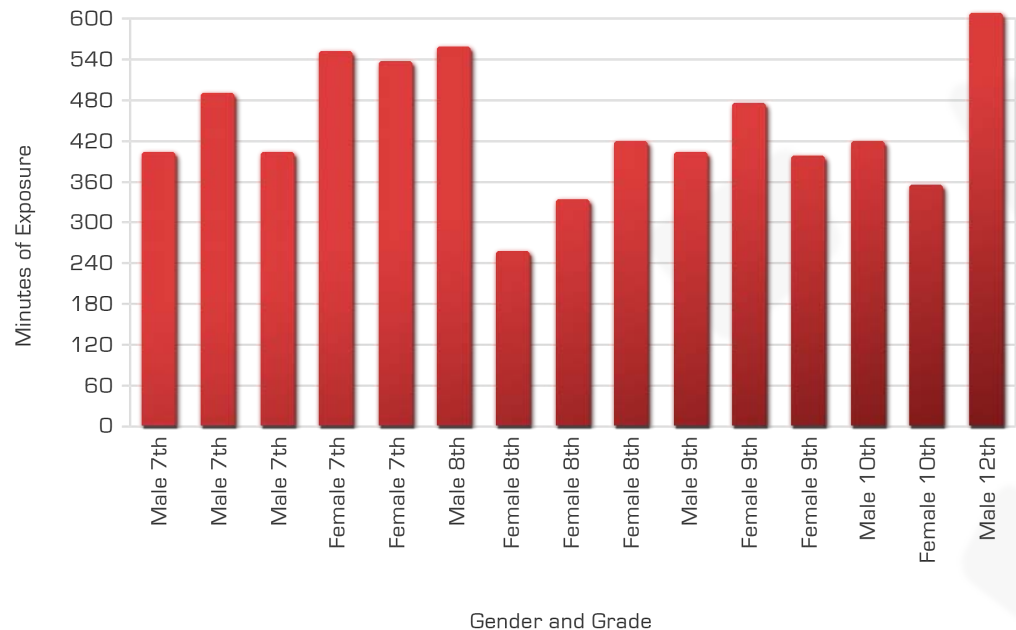
Charting location and activities during weekends and vacation days would paint a very different picture of life as a teen, and may reveal different media-use patterns.

# The Media Day

Conventional wisdom is that teens are heavy media users, and overall, these teens supported that assumption (Figure 4). Time spent with one or more media during the day ranged from just over 4 hours to 10 hours, with an average of 425 minutes (a little over 7 hours).

Average total time with media for these teens was less than for adults 18+ in the same region (521 minutes per day average in Middletown Media Studies II). That comparison is deceptive, however. While the teens used media 46% of the recorded day, the comparatively small amount of media exposure in school really made the difference. Excluding school, the teens used media 64% of the (non-school) recorded day. That is close to the figure we found in Middletown

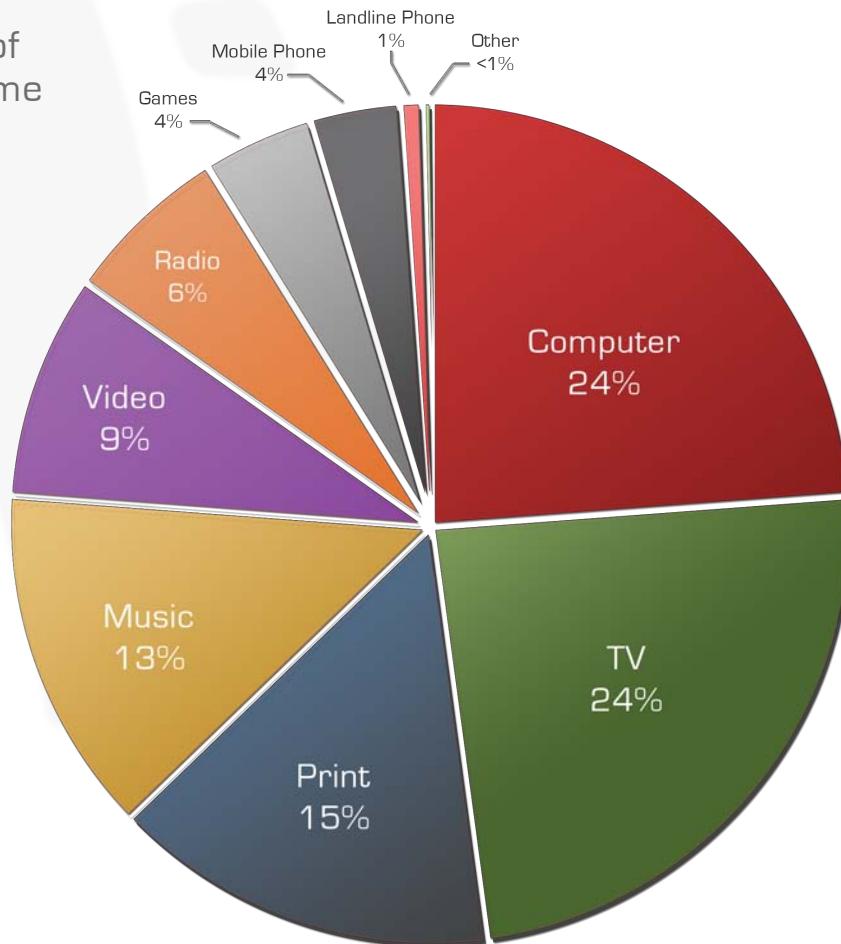
Figure 4. Total minutes spent with one or more media for each participant.



Media Studies II with adults exposed to media for 69% of the total recorded day. Bottom line: we did not find these teens were heavier media users than adults—indeed, we found them to have less media exposure; however, usage levels for these teens and adults in the area are similar after taking teens’ reduced media exposure during the school day into account.

The distribution of total average media time (for all participants) across media is displayed in Figure 5. Overall, four media dominate the teenage landscape: the computer, the television, music (CD, MP3, etc.) and print. Note the dominance of screen-based media; even if we exclude the mobile phone, screen media account for just over 60% of all media exposure for these teens. Total time at the computer (any online or offline computer use) ties with TV

Figure 5. Distribution of average total media time across media.



# The Media Day:

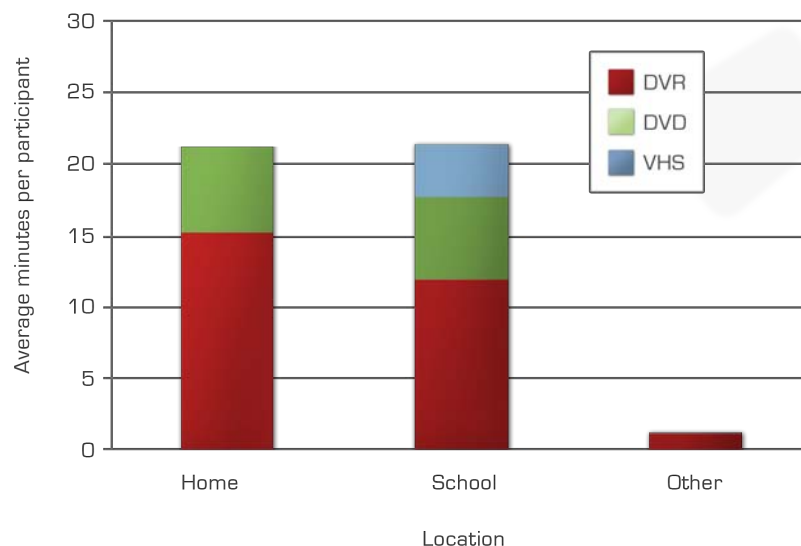
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exposure at an average 120 minutes. Two-thirds of that computer time (80 minutes) involves being online. Television is still arguably the discretionary media leader among teens. A third of the computer use of these students is at school (and presumably non-discretionary), but there is little TV viewing at school.

In third place is the combination of all tracked forms of print, at 75 minutes. Two-thirds of the print total time involved school books and over two-thirds of that time was generated by reading at school. Most of the rest (18 minutes) were non-school-related books. Newspapers and magazines both had negligible presence.

Music is a strong fourth place with an average 66 minutes of exposure. This figure includes listening to various forms of recorded music (CD's and portable digital players such as iPods) but does not include music on the radio, which would raise the music total to 113 minutes. Well behind in fifth place is video playback (44 minutes). Home and school shared video playback time equally (Figure 6). There is some indication VHS tapes are a legacy technology associated with in-school media exposure. Tapes were not viewed

Figure 6. Average minutes for all participants for video playback source, by location.



at home but were the source of over half of in-school video viewing. DVD viewing was more than double DVR viewing in the home, while DVD and DVR viewing combined were still less than VHS viewing in the school.

A “day in the life” timeline of a 15-year old male in 10th grade is shown on the following pages. This teen has the median amount of time spent with one or more media through the day, at 411 minutes. The timeline shows the teen’s day from 7:05 a.m. to 10:00 p.m.; vertical bars denote the top of each hour. The complexity of the flow of activities and media exposure is clear as he moves from home to school (from 8:00 a.m. to 3:00 p.m. except for a brief lunch) to other locations and then home again from approximately 6:30 p.m. to 10:00 p.m. The media mix during the school day is clearly different in intensity from the media mix at home; his lightest media use is from 8:00 to 10:00 a.m. and 2:00 to 3:00 p.m. at school; his heaviest media use (and most concurrent media exposure) is from 7:00pm to 10:00 p.m. at home.

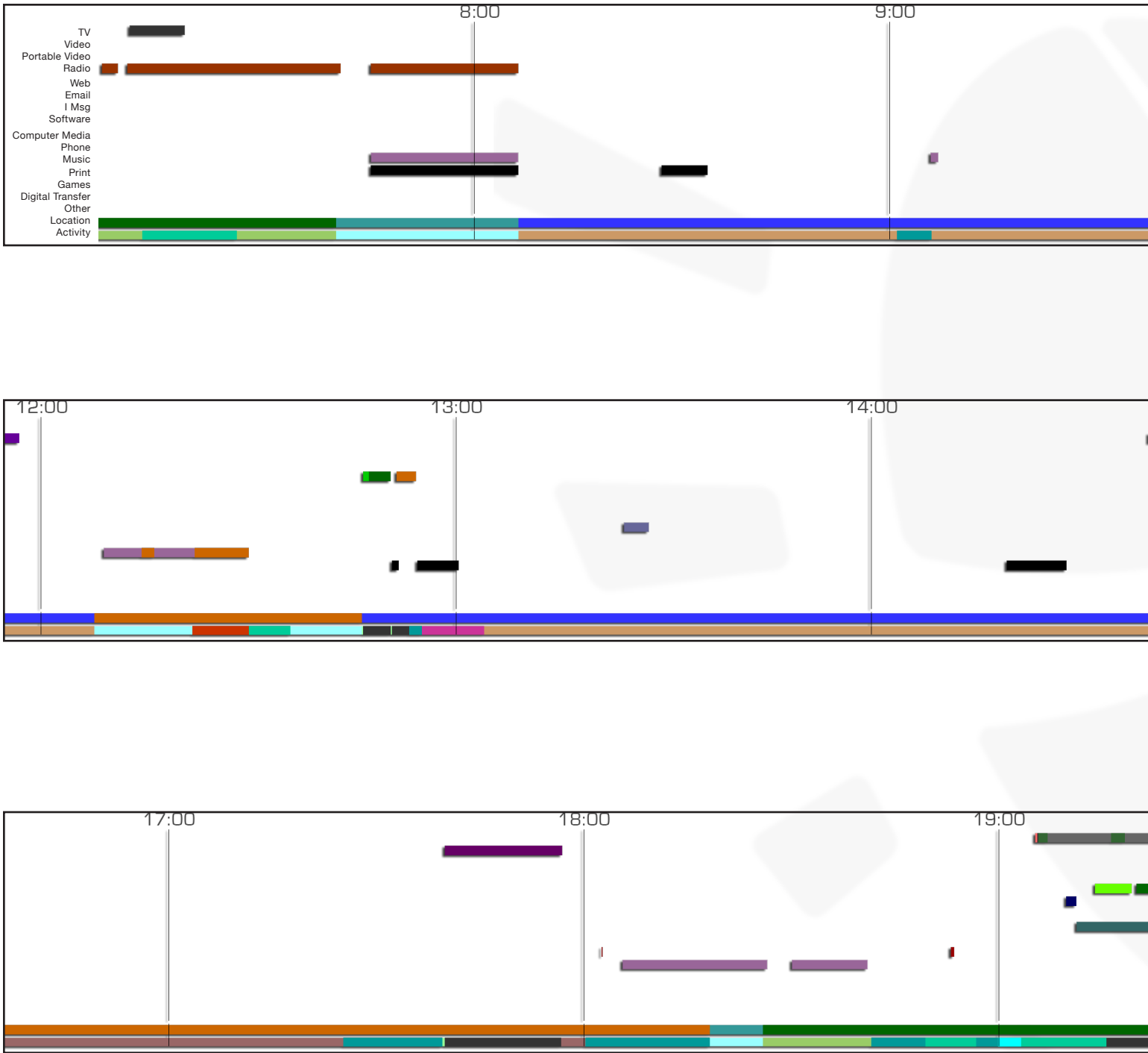
The day-in-the-life timeline is a reminder that average total media use is, of course, composed of media with varying levels of use among these teens. Figure 8 displays media reach (number of study participants using the medium on the day observed) and duration (average minutes per user).

Note that composite media categories, subsuming multiple specific media also displayed on the chart, are included in the case of computer and print to illustrate major media platforms. In Figure 8 we see media in three clusters by reach: high-reach media with 12 or more users among the 15 teens, medium-reach media with 7 to 10 users, and low-reach media with 5 or fewer users.

**Screens dominate teens’ attention, especially out of school: Over 60% of all media exposure for these teens was to screen-based media.**



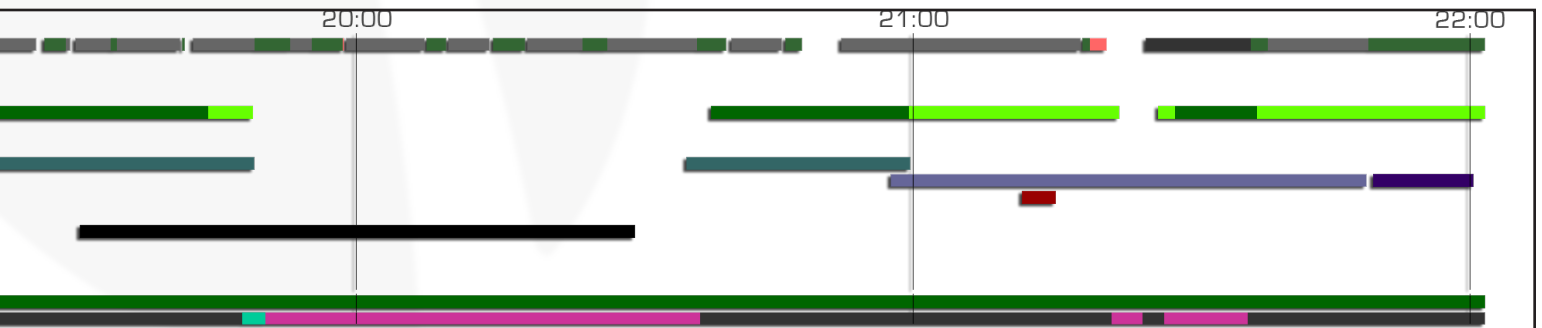
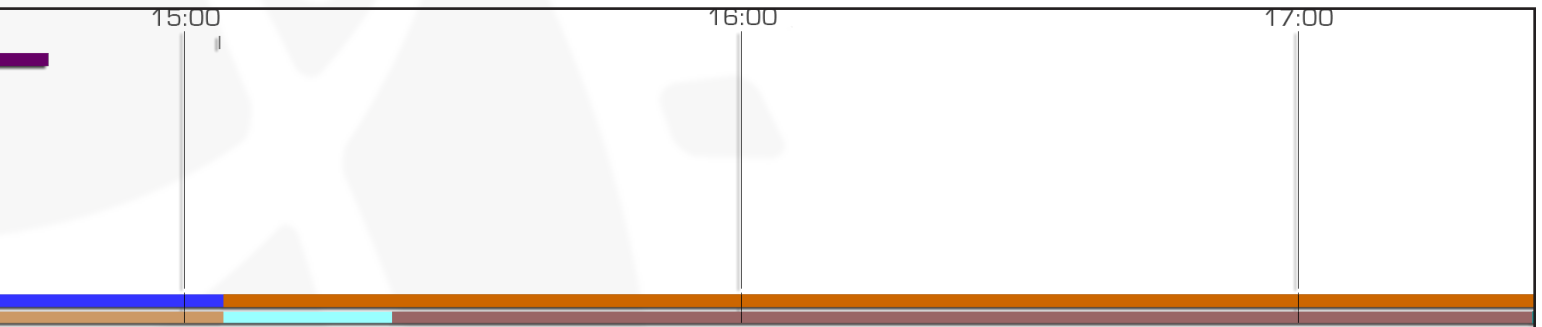
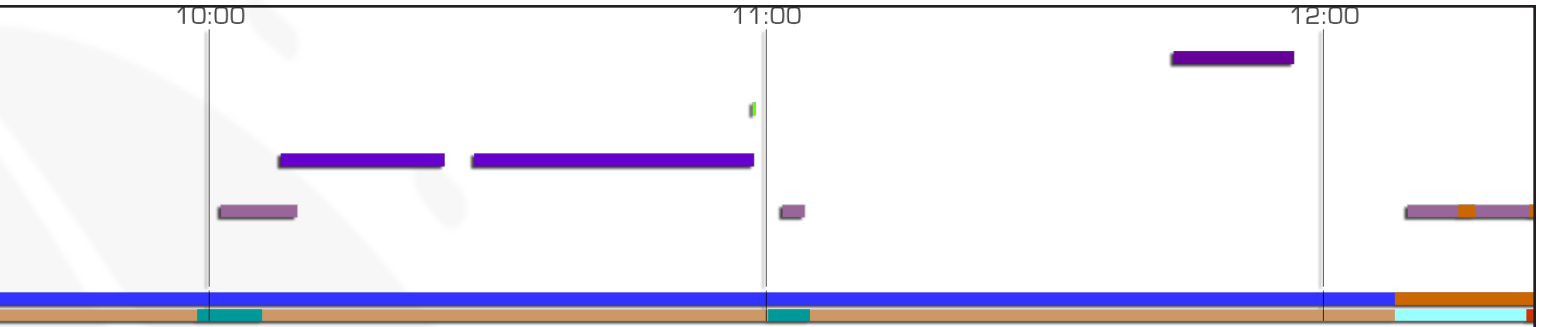
Figure 7. A participant's day-in-life timeline of life activities, location and media.





# Location Legend

- Home
- Car/Bus
- Work
- School
- Other



# The Media Day:

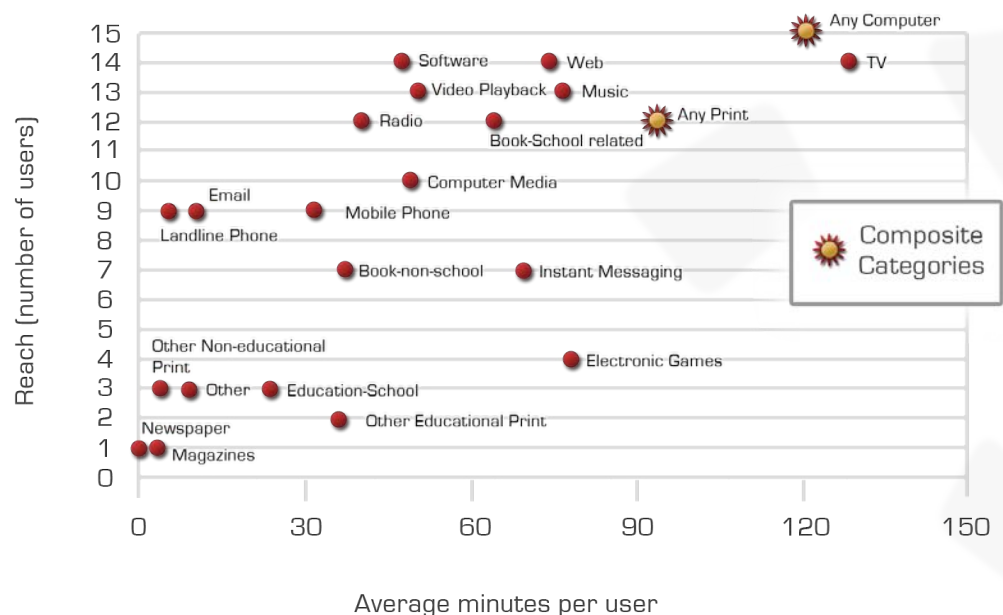
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High-reach media also tend to be medium-to-high in average minutes per user. Medium-reach media ranged from low to medium average minutes, and with the exception of console games, low-reach media also accrued low average minutes.

Other media reach results displayed in Figure 8 include:

- All participants used media; all used a computer, went online and listened to music.
- All but one watched TV, surfed the web and used computer software.
- All but two watched videos; the same number used a phone.
- Twelve listened to radio and read something.
- Nine used a landline phone, a mobile phone and email.

Figure 8. Media reach (number of users) and average minutes per user. [redo w/ composites: print, video, computer]



- Just under half used instant messaging.
- Four played console games.
- Three teens did digital transfers (transferring content between a media device and a computer).

The reach/duration scatterplot reminds us that “all participant” averages can be misleading: while some media have high reach and duration (TV, computer), others have relatively high reach and lower total duration (landline phones, email) and some have lower reach and high duration (console games). For example, the average cell phone use for all participants (at 19 minutes) was slightly below average minutes for console games for all participants (at 21 minutes); however, nine of the teens placed phone calls but only four used console games. The per-user average total time with cell phones was 32 minutes while the per-user average for console games was 120 minutes. (Incidentally, two-thirds of mobile phone minutes were mobile voice calls, less than one quarter was text messaging.)

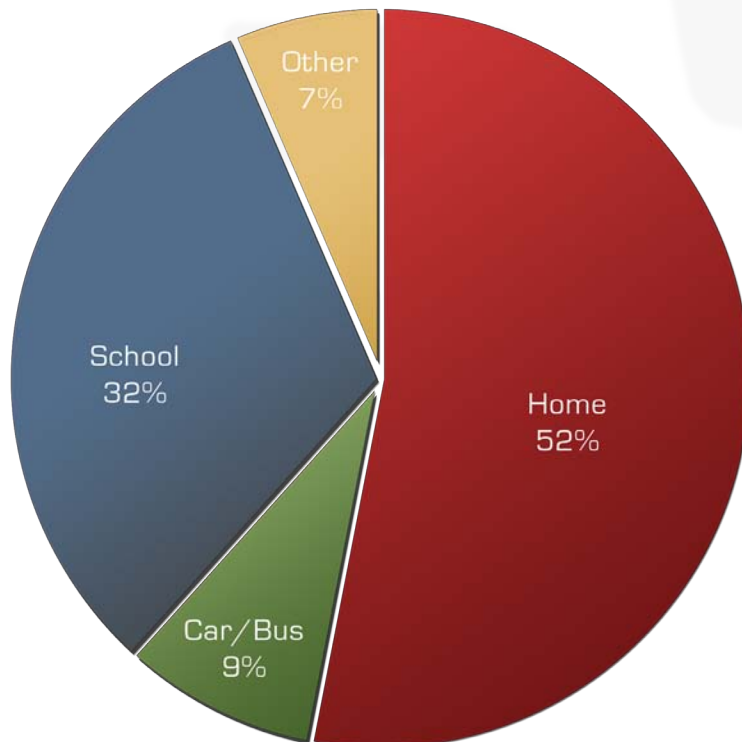


Although the “all-participant average” for low-reach media like console gaming may be low, the per-user average was 120 minutes. Considering the amount of time teens spend in school when activities like gaming are not available, this is a large part of game players’ out-of-school media time.

# Media & Location/Activity

One of the strengths of an observational study is that it can be people-based rather than location-based. We started observing the teens in the morning at home, but when they went to school, or shopping or got together with friends, our observers went, too. This feature of the method allows us to have a unique, cross-location view of media exposure. Figure 9 underscores how important location information can be, as only 52% of all media exposure time was in the home. Patterns of media use are

Figure 9. Distribution of total time spent with media across locations.



critically location-based. In both the car/bus and at home, media exposure includes three-quarters of the total time spent at those locations (76% at home and 77% in the car/bus). But media use drops below 30% both at school and in other locations (28% at school and 27% in other locations). The relative shares of the waking day and shares of total media time are reversed across home and school locations, once again highlighting the impact of location and activity on patterns of media use.

Figure 10 shows distribution of average minutes (for all participants) for each medium across locations. (Note that we have subdivided computer time into its subcategories to display some interesting location-based differences among those categories.) TV is, unsurprisingly, an overwhelmingly “at home” medium for these teens. Most of the tracked media accrued the majority of their minutes at home, with the exceptions of print (primarily book reading in the school), software (word processing—much of it at school—accounts for over half of all software use), video (as noted previously), radio (for which the car is a dominant location) and music (where the car and other locations are important).

**Future studies including weekends and vacation time, when teens are likely to spend more time at home or out of school, may show dramatic increases in overall media use.**



# Media & Location/Activity:

Continued

Figure 10. Media minutes by location (average for all participants.)

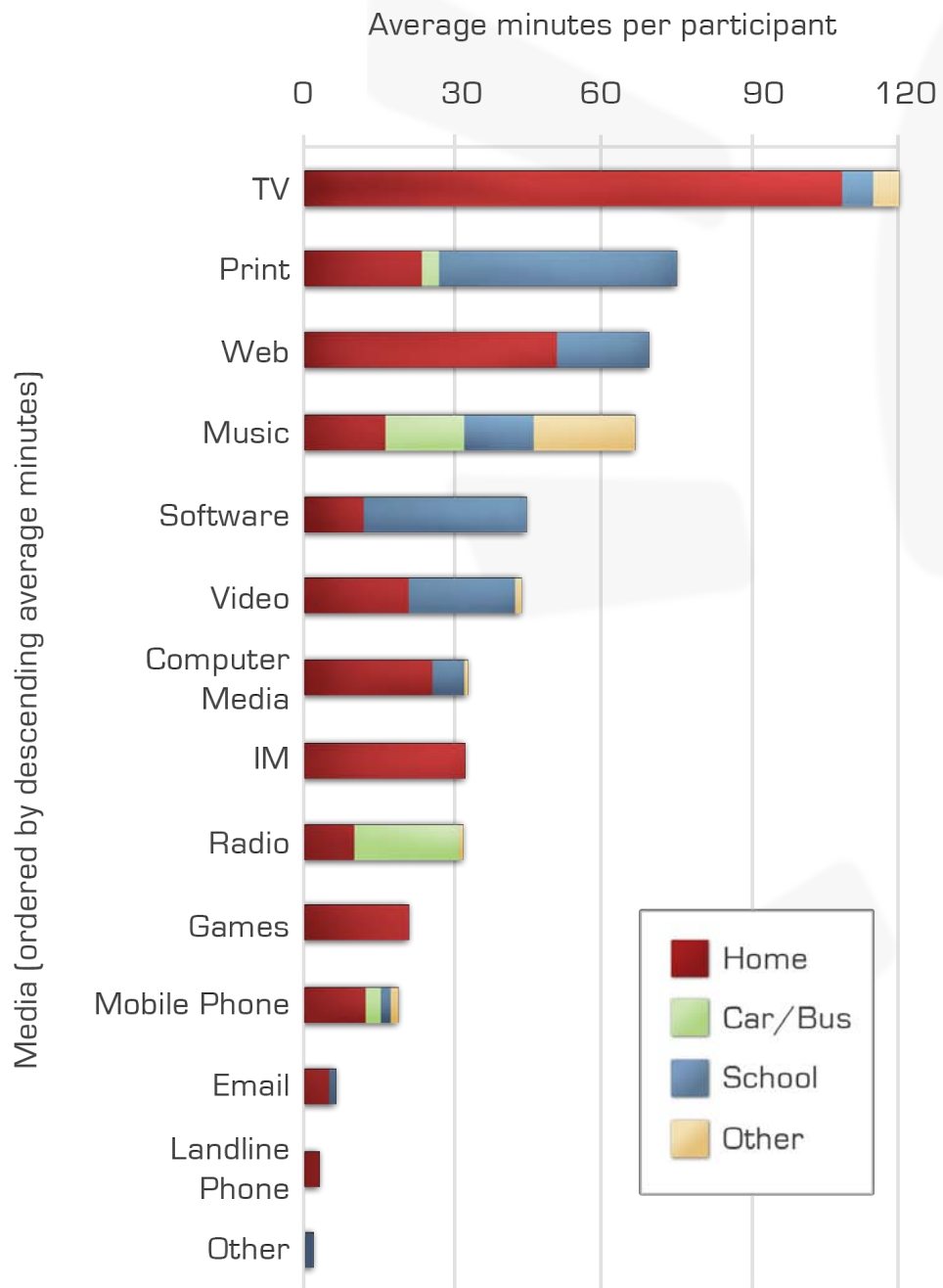
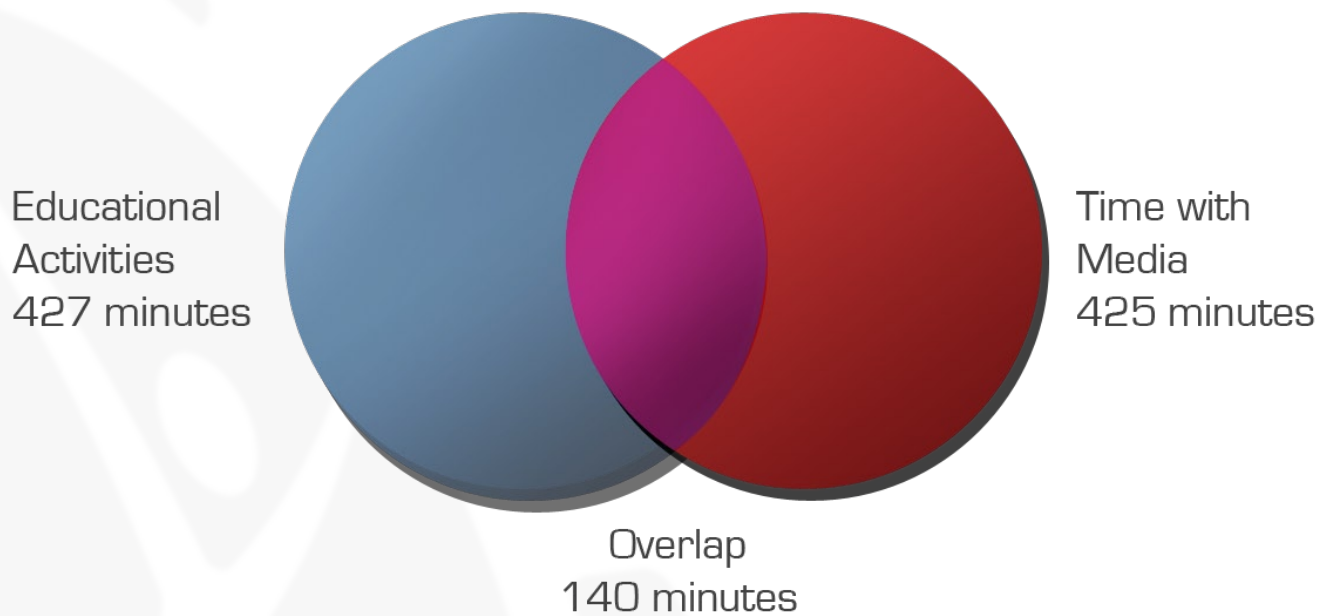


Figure 11. Overlap of time with media and time with educational activities (in and out of school).



For these teens, total media exposure in school and out of school (425 minutes) is similar to all time spent in educational activities (education at school plus time with homework and school organizations; 427 minutes). A portion of exposure occurs as part of educational activities in and out of school (140 minutes); the overlap between media exposure and educational activities is shown in Figure 11.

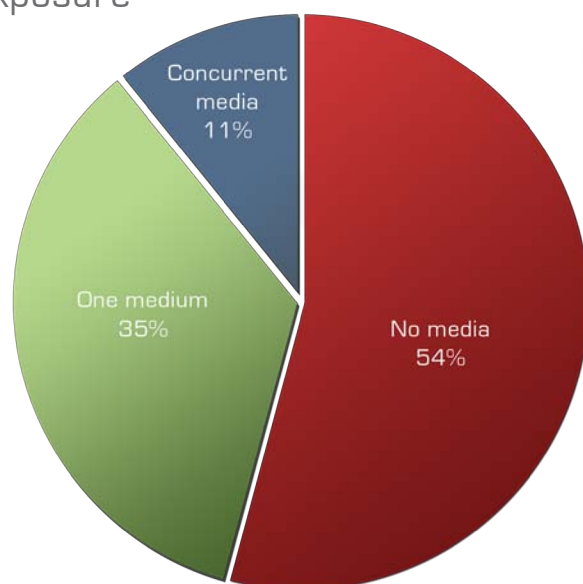
The importance of place in shaping the media days of our participants is underscored by these results. Every medium except the catch-all “other” category gets some use at home among this sample. The heaviest in-school media—print, software and video—are those we would expect to have an instructional role. Instant messaging and games, as social and recreational media, were used only in the students’ homes.

# Concurrent Media Exposure



Another conventional wisdom about teen media use is that they are heavy “multitaskers,” often exposed to concurrent multiple media. We use the phrase “concurrent media exposure” (CME) as an alternative to “media multitasking” to lessen ambiguity and to avoid the implication that consumers are wholly engaged with more than one medium at a time. We define CME as exposure to content from multiple media simultaneously available through shared or shifting attention. On average, nearly half of the recorded day—46%, or just over seven hours—involved exposure to one or more media (Figure 12). Of that 7.1 hours, more than an hour and a half (23% of time with media, or 11% of the total day) involved concurrent exposure to two or more media. This is well below the CME level we found for adults in Middletown Media Studies II (31% of all media time). Not only is media use per se heavily location-dependent, so is concurrent media exposure (Figure 13). Of the time that our participants spent in the home with media, 34% involves concurrent exposure to two or more media. This is, nearly three times the level recorded in the car/bus (13%) or at school (13%) – both of which introduce their own environmental

Figure 12. Distribution of the day across media exposure modes.

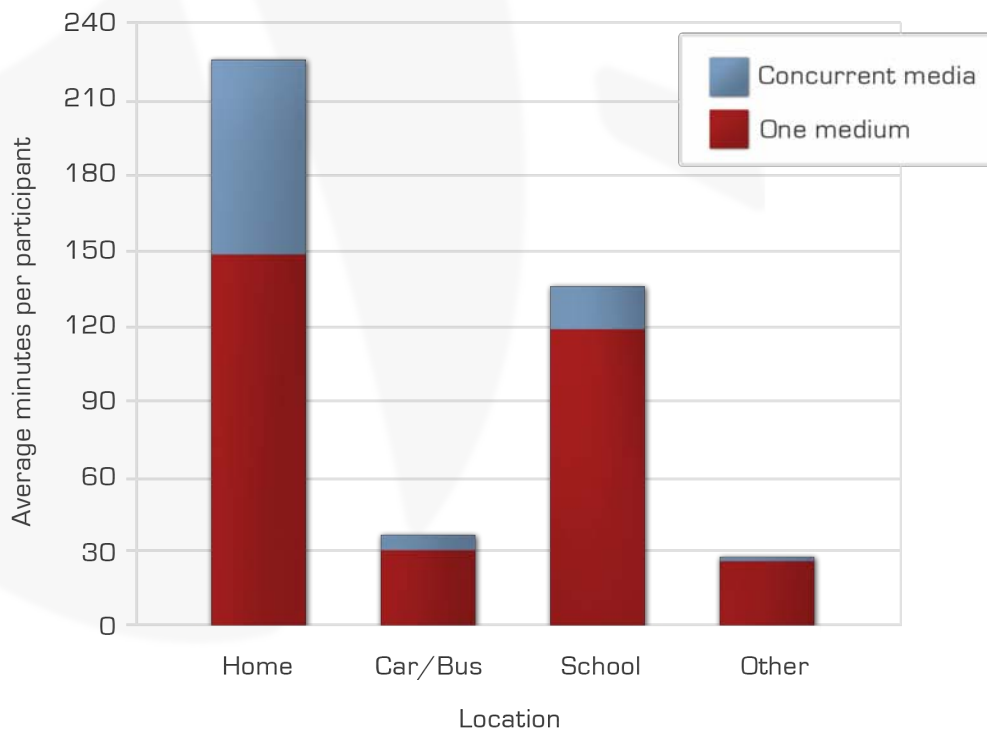




constraints. At least part of the apparent difference with adults is that although these teens spend much more time reading than adults, most of it involves school books read at school – and there is little CME involved with that. Perhaps most significantly, a large part of CME recorded in our studies with adults involves workplace CME where media pairings such as the telephone and computer (to name but one) are common and account for much CME.

The teens in this study showed themselves to be much more likely to be exposed to more than one medium at a time when left to their own devices (when at home, for example), which leads us to surmise that a study including weekends and vacation time may show significantly different patterns of media use and consumption.

Figure 13. Minutes spent in single-medium and CME modes by location.



# Conclusion

As previously stated, the sample for this study is not large enough to allow for the results to be generalized, but rather, it provides a close look at the day in the media life of a group of teenagers on typical school days. The level of detail is richly illustrated in the timelines provided on the following pages showing all participants' exposure to selected media, screen-based media and all media combined. These help to provide texture to the contextual nature of media use described in this document and open a window to a more qualitative assessment of the insights that could be inferred. They also serve to illustrate the potential richness of a much larger sample.

One of the key results suggested by this research is the impact of location and activities on media patterns. While not a revelation in itself, this is seldom emphasized in other research and is here highlighted by the constraints placed on media use within the school. No doubt other audiences within the general population would show their own distinct environmentally influenced patterns of consumption that could be detailed in similarly detailed fashion.

Other interesting points included the result that in this study at least, we found our teens not to be heavier media consumers than adults. This is partly due to the comparative amount of media consumed by adults in the workplace versus that consumed by teens in school. It is also accounted for by the lower recorded level of CME among teens.

Due to our desire not to over-state what can be done with this pilot sample we have deliberately omitted detail based on consideration of gender, age, within-media genres, media pairings etc. However, the richness of the method provides for valuable analyses if undertaken with a larger and multi-school sample with the addition of weekends and – ideally – some vacation time

media use. Only then will we be able to truly understand the media consumption patterns of teenagers across all media and locations throughout the week, in or out of school.

Having proven to ourselves the viability of conducting this research among a teen sample – with all the unique logistical challenges involved – it is now our aspiration to repeat the success of our Middletown Media Studies with a similar exercise focused exclusively on this important segment of the population.

Comments and suggestions relating to this study and its future development should be directed to Professor Michael Holmes, Associate Director, Insight & Research at the Center for Media Design ([mholmes@bsu.edu](mailto:mholmes@bsu.edu)).

Figure 13. Composite timelines for selected media categories.  
 Note: Each horizontal row represents one participant's exposure to the indicated medium. Color changes within a given medium indicate different platform or genre categories

Any media



Any screen-based media (i.e., TV, video, computer, console game, cell phone)



Television

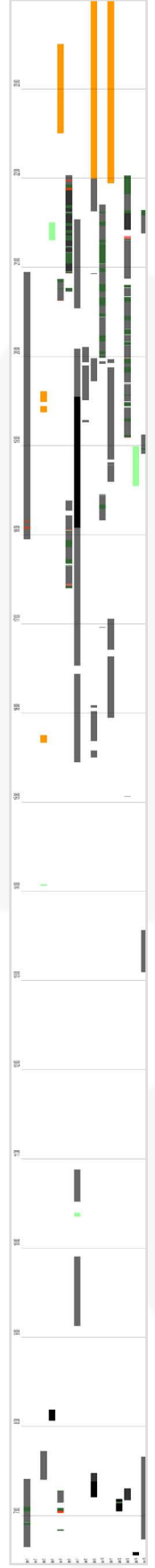
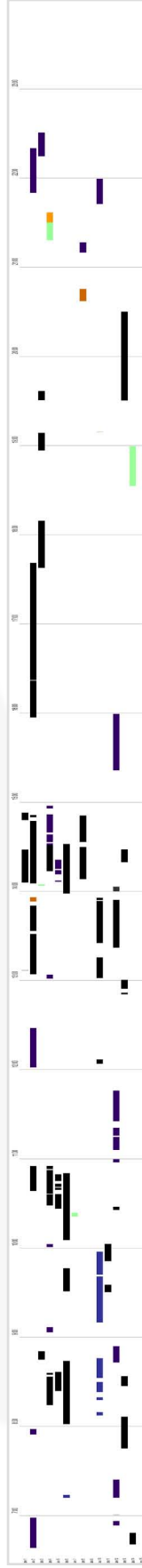
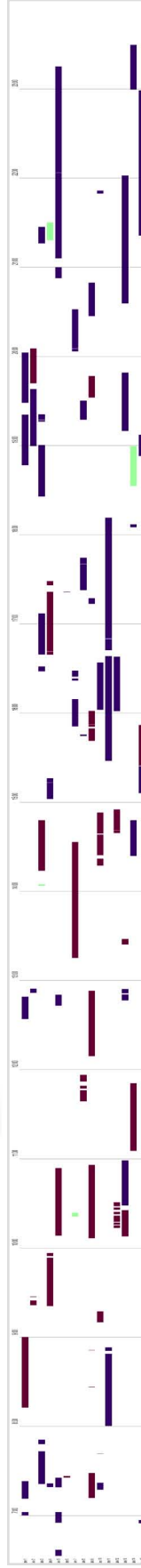


Figure 13 (continued). Composite timelines for selected media categories.  
 Note: Each horizontal row represents one participant's exposure to the indicated medium. Color changes within a given medium indicate different platform or genre categories within that medium.

Print (note the preponderance of print media during the school day, 8:00 a.m. to 3:00 p.m.)



Computer



Music (note the heavy presence of music after school to early evening)

