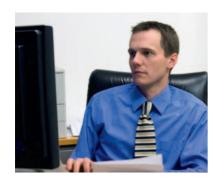
#### **171**

# Ad hoc persona example

#### **COMPANY: ACME PROFESSIONAL ASSOCIATION FOR CPAS**



# GARY GETTING STARTED Ouote

Yeah, I could build a career being a CPA, but is it the right thing for me? It's been a lot of work to get where I am and maybe it's crazy to change plans now, but I'm already so burned out!

#### Recommended priority: primary

Gary is exactly who we want to help. If we help him now, he will be loyal to us for the rest of his career. Also, he is radically underserved by other organizations.

#### **MEET GARY**

Gary is 25 years old and has been working for a CPA firm for 3 years. He just earned his CPA certification last year, but he's burned out from working too many hours in recent months and is questioning whether he's made the right career choice. When it's not tax season, Gary goes out a couple of nights a week with other young people he works with, but he's met few other people since he moved after college. Even though he theoretically has "flex time," Gary blames his lack of outside involvement on his crazy work hours. Gary is also questioning whether he should be doing something more meaningful with his life, whether within or outside of his career.

Gary's employer chooses the continuing education courses he gets to attend and pays for his professional association memberships. His employer is also encouraging Gary to get involved on boards or in leadership positions outside of the organization to advance his career.

## Gary's goals

- I want to figure out what I really want to do with my life.
- If I decide to change careers, I want to figure out what my options are!
- Whatever I end up doing, I want to build it into a career.

172

- I want my work life to be less overwhelming.
- I want to meet more people ... both professionally and socially.
- I want to find some activities to participate in that benefit society at-large and that I can accommodate to my schedule.
- I want discounts on purchases that benefit me personally, rather than professionally.

#### Gary's questions in his own terms

- Where can I find and interact with people like me?
- Where can I find career and personal development resources?
- Are there value-adds to membership that will benefit me personally?

#### How we want to answer Gary's questions

- The Acme Society of CPAs is the best place to connect with people like you.
- We have a number of sponsored programs that are fun and will fulfill your community service and personal development goals.
- We have many volunteer opportunities that are flexible enough to work within your time constraints that will support your career development goals.
- We are the best portal to connect you with other discount opportunities to benefit you personally.

### What we think Gary should know

(Oh, by the way, did you know we also do x and y and can be helpful in a and b ways ...?)

- Even if you decide to change careers, we're here to help. There are lots of ways the hard work you've done so far can benefit you in other careers.
- The CPA designation positions you well for many career options.
- There are fulfilling careers available for CPAs both in traditional and nontraditional roles.
- We have numerous educational opportunities that will also assist you in fulfilling your goals, available in various formats, including online. You have the opportunity to "try before you buy" by taking an online class without paying (you don't pay until you take the test for credit).

# Data-driven persona example



Tanner is an intense 9-year-old boy who loves computers, games, and gadgets of all types. He's an entertainment enthusiast and active gamer. Generally speaking, he just loves to play. Tanner is familiar with G4K game titles and is a likely frequent visitor to the G4K site to seek out new ways to entertain himself. Tanner has significant influence over his parents' spending on family fun. Note from the authors: Tanner was created several years ago, when many of these data sources were relevant. We do not recommend using 'old' data sources when creating new personas.

# **DESCRIPTION**

Tanner, a 9-year-old boy, is a fourth-grade student at Montgomery Elementary School, a public school. He lives with his mother and father (Laura and Shane Thompson) in a

suburb of Chicago, Illinois. Tanner has been using computers<sup>1</sup> at school since kindergarten<sup>2</sup> and has had a family computer<sup>3</sup> at home for 2 years. He has been using the Internet<sup>4</sup> in the computer lab at his school<sup>5</sup> for some time but only recently got Internet access<sup>6</sup> at his house (6 months ago through his family's AOL account<sup>7</sup>). Even though Tanner loves to be physically active (riding his skateboard and bike, playing in the yard and nearby creek, participating in organized sports, etc.), Tanner thinks computers are really, really fun and prefers the PC<sup>8</sup> to television. He uses the PC mostly to play games 10 and surf the Web for stuff, but he occasionally does research<sup>11</sup> for school projects. His favorite computer game of the moment is The Sims™ 2,12 which his uncle gave him for his birthday (his mother and father usually just buy him educational games). He also really likes Moneybags, 13 which he just got for his birthday, and RollerCoaster® Tycoon 3.14 Since his dad15 likes computer sports<sup>16</sup> games<sup>17</sup> such as NBA Live 2005, <sup>18</sup> Tanner sometimes play those with him, but<sup>19</sup> it

<sup>&</sup>lt;sup>1</sup> Computer use begins at an early age. About three-quarters of 5-year-olds use computers, and over 90% of teens (ages 13-17) do so. About 25% of 5-year-olds use the Internet, and this number rises to over 50% by age 9 and to at least 75% by ages 15 to 17 [28].

<sup>&</sup>lt;sup>2</sup>The youngest students were more likely than older students to report that they used computers at school. In 1996, 72% of fourth graders reported using a computer at school at least once a week, compared to 47% of eighth graders and 50% of 11th graders. However, eighth and eleventh graders were more likely than fourth graders to report using computers every day [12].

<sup>&</sup>lt;sup>3</sup>One strong incentive for parents to have Internet access is for their children. The vast majority of parents believe that their children need to know about computers and the Internet in order to succeed [20].

<sup>&</sup>lt;sup>4</sup> Forty-five percent of America's children—or more than 30 million of those under the age of 18—have Internet access. Fully 73% of those between the ages of 12 and 17 have Internet access, and 29% of those under 12 have been online. Eighty-two percent of those living in households with more than \$75,000 in income now have Internet access, compared to 38% of those in households earning less than \$30,000 [27].

<sup>&</sup>lt;sup>5</sup> Ninety-five percent of all U.S. public schools had computers with Internet access in 1999. Within those schools, 63% of instructional rooms had computers with Internet access [39].

<sup>&</sup>lt;sup>6</sup> Parents are more likely to have broadband and wireless Internet access and are more willing to embrace these access capabilities in the future, thereby creating a lucrative market for online service providers [26].

<sup>&</sup>lt;sup>7</sup> AOL captures about 42% of access market; other ISPs have 37%. Not included in the "other" category are MSN®, EarthLink®, CompuServe®, AT&T™, and Prodigy [41].

<sup>&</sup>lt;sup>8</sup> Given a choice of six media, one-third of children ages 8 to 17 said that the Web would be the medium they would want to have if they couldn't have any others. Television was picked by 26% of kids, telephone by 21%, and radio by 15% [16].

<sup>&</sup>lt;sup>9</sup>When they are first beginning to use media, boys and girls spend the same amount of time watching TV, reading, listening to music, and using computers. They develop the same basic media-use skills and do so at roughly the same age. By the time they are in the 4- to 6-year-old range, however, there is a difference between boys and girls when it comes to video games, with boys being more likely to play and to play for longer periods of time [25]. <sup>10</sup> Fifty-two percent of boys ages 9 to 17 play games [11]. Other research has claimed that 90% of U.S. households with children rent or own video or computer games and that U.S. children spend an average of 20 minutes a day playing video games [33].

<sup>&</sup>lt;sup>11</sup> All of the kids in the G4K home site visits used the Internet for school project research [29]. Also, 29% of 9- to 17-year-olds used the Internet to do their homework [11], and 8.3% of first- to eighth-grade kids used a home computer for school assignments [39].

<sup>&</sup>lt;sup>12</sup>The Sims 2 was fifth on Game Developer Magazine's list of the top 20 PC first-person action game titles for the week of 2/11/05 [43].

<sup>&</sup>lt;sup>13</sup>According to internal G4K research, focus groups and sales data show that boys 9 to 11 years old chose to play Moneybags over other G4K titles [18].

<sup>&</sup>lt;sup>14</sup>RollerCoaster Tycoon 3 was number two on Game Daily Kids' list of the top 20 children's entertainment software titles for the week of 1/05/05 [42].

<sup>&</sup>lt;sup>15</sup> Of all adults with access to a computer at home, men continued to exhibit marginally higher rates of use than

women (72% versus 70%). Considering computer use at any location, there is no longer a gender gap [10]. <sup>16</sup>Three out of four Internet users have sought information about a hobby or interest online. The number of hobby seekers increased by 40% between March 2000 and January 2002—from 65 million to 91 million [21].

<sup>&</sup>lt;sup>17</sup>Those who have played games online increased by 45%—from 29 million in March 2000 to 42 million in June/ July 2002 [21].

<sup>&</sup>lt;sup>18</sup>NBA Live 2005 was number one on Game Developer Magazine's list of the top 20 PC sports game software titles for the week of 4/12/05 [43].

<sup>&</sup>lt;sup>19</sup>Mothers differ from other groups in the way they use the Internet; they praise the medium because it allows them to do research or write e-mail in 5- to 10-minute chunks of time [6]. Time savings is one prominent reason behind increased use of the Internet by parents, especially for shopping. Further, 59% of mothers regularly multitask to save time versus only 43% of men. Still, mothers are more likely than fathers to say they "surf for the fun of it" [7].

is really his mother<sup>20</sup> who spends the most time online with him. Tanner has a GameBoy Color<sup>m21</sup> and saves up his allowance to buy new games for it, but his parents say he can only play GameBoy for half an hour each day (they tell him "it will rot his brain").

Tanner is fairly involved with his school soccer team; he plays forward, not because he's fast but because he never runs out of energy (he simply has a lot of energy to expend, all of the time). In addition to soccer and other organized school activities, he likes to build things with LEGO® bricks (he wants to collect all the Star Wars® LEGO sets), play board games, ride his skateboard with friends, and just run around the neighborhood. He watches Dragon Ball Z® episodes as much as he can, and avidly follows the Chicago Fire<sup>22</sup> (big pro soccer team) with his dad. Although his parents limit his TV time, they make a point to watch *Malcolm in the Middle*<sup>23</sup> together every week.

## TANNER'S GOALS AND DESIRES<sup>24</sup>

- Be accepted and sought out as a friend by neighborhood kids and schoolmates.
  - o Impress his friends with knowledge and skills<sup>25</sup> related to the video and PC games they play (e.g., find out new hints for Dragon Ball  $Z^{26}$  before his friends do).
- Stay entertained (i.e., not bored).
  - Please his parents and teachers but get schoolwork<sup>27</sup> done fast so he can play.
  - Watch his favorite movies and TV shows, extending his interest in these things online (searching for info, chatting with others).
  - Find really fun but free online games<sup>28</sup> so he can have fresh experiences without having to ask for money<sup>29</sup> to buy stuff.
- Have cool stuff<sup>30</sup> and do cool<sup>31</sup> things.
  - Find out the best prices<sup>32</sup> on Nintendo 64s to show to his mom (so maybe she'll get him one for his next birthday<sup>33</sup>).
- <sup>20</sup>With 46% of them buying online, mothers are becoming an increasingly important segment of online purchasers to target. This is in comparison to 41% of all online women purchasers. Online mothers are also very loyal consumers; once they find a brand that they like, 70% find it difficult to change [26].
- <sup>21</sup> Thirty-seven percent of Americans who own consoles or computers reported that they also play games on mobile devices such as handheld systems, PDAs, and cell phones [44].
- <sup>22</sup>Boys are more likely than girls to go online to play games (52% versus 43%) and to get sports information or scores (40% versus 15%) [11].
- <sup>23</sup>Ten of 15 households mentioned watching regularly scheduled television shows together. Among those mentioned were *Malcolm in the Middle, Seventh Heaven, The OC,* and *America's Funniest Home Videos* [29]. <sup>24</sup>All goals were derived as underlying themes from the G4K site visits [29].
- <sup>25</sup> At age 9 or 10, children begin to think in abstract terms and become more focused on interactions with others. By 5 to 6 years of age, children have already formed their identities, can play cooperatively, and have developed fine motor skills. By age 9, a child's world has expanded beyond the immediate surroundings [3].
- <sup>26</sup> Overall, boys are more interested in technology, seeking out game-playing resources, building Web pages, downloading software, and even downloading music files. Teen boys largely use the Internet for game playing and game-playing advice [18].
- <sup>27</sup>The number of children age 12 and under going online for entertainment and games more than tripled between 1998 and 1999, reaching 9.2 million and surpassing homework as the most popular activity in this age bracket. Growth has been exceptionally fast among boys age 12 and under [1].
- <sup>28</sup>The popularity of online games has risen since 1999 when only 18% participated. A 2003 poll revealed that more than one-third of frequent game players go online to play—up from 31% in 2002 [9].
- <sup>29</sup>Thirty-one percent of parents would allow their children to purchase online if they could control the amount spent, although only 11% of parents were aware of services that allow parents to allocate money for kids to spend online [2]. <sup>30</sup>Kids seem to be highly aware of the age appropriateness of the products and media content around them. Boys in particular were very vocal about not wanting to do something or use something that was clearly intended for a younger audience [29].
- <sup>31</sup> More than half (54%) of teens said that the Internet helped them find out what's cool in fashion and music that they like. Younger girls, 12- to 14-years-old, were the most likely (64%) to say that the Internet helped them to find fashion and music; 59% of frequent users (those who go online every day) were also more likely to have used the Internet to find out what's cool [17].
- <sup>32</sup>More than 8 out of 10 Internet users have researched a product or service online [21].
- <sup>33</sup> Eight percent of online parents whose children go online indicated that they had made purchases as a direct result of information retrieved by their kids [7]; 15% of children have retrieved information online leading to a purchase by the parent [2].

- Make his parents get broadband (their dial-up connection is "sooooo slooooow").
- His dream is to convince his parents to go to Disney World® and Universal Studios during spring vacation.<sup>34</sup>

#### WHAT DOES TANNER WANT FROM G4KIDS.COM?

- Tanner knows all about G4K because he already loves our games. He loved the G4K Peter Plane and Hallie Helicopter interactive books series when he was a kid, and now G4K Moneybags and G4K Skatepunkz are two of his favorite games. He expects G4Kids.com to be very cool!
- He will likely seek out our site for game hints, new product information, and especially direct entertainment.
- Tanner has a short attention span and little patience. He will leave the site if we do not quickly engage him and provide enduring fun experiences.

# TANNER'S COMPUTER AND INTERNET USAGE School Use

Before Tanner had a computer at home,<sup>35</sup> he would sign up for free time on the computer in his classroom<sup>36</sup> as often as he could.<sup>37</sup> The kids in his class get 10-minute turns, and they have to use one of the teacher's choices of educational games,<sup>38</sup> which seem quite limited to him<sup>39</sup> (the computer is a Power Mac<sup>®</sup> G4, and the teacher<sup>40</sup> keeps Kid Pix<sup>™</sup>, HyperStudio<sup>®</sup>, and a bunch of JumpStart<sup>™</sup> and Blaster<sup>®</sup> math and reading stuff on it). Now that he has a computer at home, he has better games there and so doesn't fight for the classroom computer as much.

On Thursdays at school he spends an hour in the school computer lab.<sup>41</sup> He always has to start out practicing his typing (they use Read, Write & Type<sup>TM42</sup>) and then most of the rest

<sup>&</sup>lt;sup>34</sup>Thirty-four percent of online parents said their use of the Internet improves the way they plan weekend outings and family trips; 27% said it improves the way they shop for birthday and holiday gifts; 26% said it improves the way they spend time with their children; and 19% said it improves the way they care for their children's health [20]. <sup>35</sup>More school-age children use computers at school than have access to them at home [8]. Sixty-six percent of teenagers who are online have access from home, while 60% have access from school, 30% have access from both home and school, and only 11% have access from some other location [2].

<sup>&</sup>lt;sup>36</sup> Much like a school-issued textbook or a traditional library, students think of the Internet as the place to find primary and secondary source material for their reports, presentations, and projects. This is perhaps the most commonly used metaphor of the Internet for school—held by both students and many of their teachers alike [24].

<sup>&</sup>lt;sup>37</sup> Students think of the Internet as one way to receive instruction about material that interests them or about which they are confused. Others view the Internet as a way to complete their schoolwork as quickly and painlessly as possible, with minimal effort and minimal engagement. For some, this includes viewing the Internet as a mechanism to plagiarize material or otherwise cheat [24].

<sup>&</sup>lt;sup>38</sup> Sixty-six percent of public school teachers reported using computers or the Internet for instruction during class time [19].

<sup>&</sup>lt;sup>39</sup>Two-thirds of teachers agree that the Internet is not well integrated into their classrooms, and only 26% of them feel pressure to use it in learning activities. Forty-four percent of teachers cited lack of knowledge about how to use the Internet as the reason for not logging on, and 78% of teachers cited lack of time as the number one reason for not logging on to the Internet [14].

<sup>&</sup>lt;sup>40</sup> More than 8 out of 10 teachers (84%) believed that computers and access to the Internet improve the quality of education [14].

<sup>&</sup>lt;sup>41</sup> In 1996, 79% of fourth graders, 91% of eighth graders, and 96% of 11th graders reported using a computer at home or at school to write stories or papers, a substantial increase from 1984. The percentage of students who used a computer to learn things also increased between 1984 and 1996 for all three grades [12].

<sup>&</sup>lt;sup>42</sup> Elementary school teachers were more likely than secondary school teachers to assign students practice drills using computers (39% versus 12%) and to have their students use computers or the Internet to solve problems (31% versus 20%). Secondary school teachers, however, were more likely to assign research using the Internet (41% versus 25%) [19].

of the time is taken up with a class assignment using the Internet, HyperStudio, Word, or Excel<sup>®</sup>.<sup>43</sup> Tanner really likes it<sup>44</sup> when his teacher gives an Internet assignment<sup>45</sup> and he can go online to find out something. Even though the teacher says the Internet is an unlimited resource, 46 they're only allowed to go to certain sites, such as PBS® or Encyclopaedia Britannica<sup>®</sup>, and sometimes he can't even get to those because the filter the school uses

Tanner and his friends don't<sup>47</sup> use instant messaging<sup>48</sup> as much as some of the girls<sup>49</sup> in his class do. He doesn't e-mail<sup>50</sup> very often either, but mostly because he doesn't have his own e-mail account<sup>51</sup> (the whole family shares one e-mail address), but occasionally (at his mother's urging) he'll reply to notes from family<sup>52</sup> members.

## **Tanner at Play**

Tanner likes using the computer at his home, because he gets to play around<sup>53</sup> and do what he wants.<sup>54</sup> He uses the computer at home to go online about three times a week,<sup>55</sup> mostly on Saturdays or Sundays and occasionally on a weekday when he doesn't have soccer practice. His mom says he has to do his homework first, 56 before he gets on the computer for fun on a weekday, but if he has to do some research for a report<sup>57</sup> or look up words he might use Encarta<sup>™</sup> or go online with his parents' AOL account to search the Web.

- <sup>43</sup> Forty-one percent of teachers reported assigning students work that involved computer applications such as word processing and spreadsheets to a moderate or large extent, 31% of teachers reported assigning practice drills, and 30% reported assigning research using the Internet to a moderate or large extent [19].
- <sup>44</sup>Young people believe that online use benefits them in a number of ways. Forty-four percent said it had increased their interest in current events, while 36% thought it had improved their writing or language skills. Altogether, 33% thought that it had improved their performance as a student overall. Online use benefits kids' relationships as well, with 39% saying it has improved the quality of their friendships. Virtually no online young people said that online use negatively impacted these areas of their lives [11].
- <sup>45</sup>Online- or PC-based homework or school assignments are more common as the age of the child increases. Browsing or informal learning activities are now performed by over 5 million children age 12 and under, three times as many as were doing this in 1998. Growth has been somewhat faster among boys and children age 9 to 12 [1].
- <sup>46</sup> Seventy-five percent of teachers said the Internet is an important tool for finding new resources to meet new standards [14].
- <sup>47</sup> Just over 3 million children age 12 and under go online for e-mail or chat. E-mail and online chats are the second most popular activities among online teenagers, surpassing entertainment and games. However, very few children age 8 and under go online for communications purposes, and this number hasn't grown appreciably in the past year. This activity segment has an even split between boys and girls, with growth being faster among teenage girls over the past year [1].
- <sup>48</sup>Communication tops the list of favorite online activities. Three out of the five activities most engaged in by young people involve communicating with friends and family—writing letters or notes to friends (59%), using instant messages (52%), and writing letters or notes to relatives (36%). Other popular activities include playing games (48%) and getting information about rock stars or music groups (35%) [11].
- $^{49}$  Girls are more likely to go online to socialize than boys (68% versus 50% among 9- to 17-year-olds) [11].
- <sup>50</sup>Only 32% of 9- to 11-year-olds e-mail friends [11].
- <sup>51</sup> Almost half of all online parents share access with a spouse or partner [7].
- <sup>52</sup> Of 9- to 17-year-olds, 36% say they go online to write letters or notes to relatives "very often" or "pretty often" [11]. <sup>53</sup> Young people display a strong interest in a range of new online activities, including sending and receiving pictures from family and friends online (78%), downloading music or songs online (76%), having a live video conference with a friend online (70%), and watching short cartoons or video clips online (63%) [11].
- <sup>54</sup>Younger children are more likely than older children to go online to play games (58% of 9- to 11-year-olds versus 40% of 15- to 17-year-olds) and to get information about TV shows (23% versus 13%) [11].
- <sup>55</sup>Online use grows as young people get older. The amount of time per week young people report spending online increases as they mature: 2.8 days per week for 9- to 11-year-olds to 4.5 days per week for 15- to 17-year-olds. Eight out of ten young Internet users (79%) say they go online, on average, at least an hour daily [11].
- <sup>56</sup> Half or more of online young people said that their parents have rules about going online only after homework is completed [67%], limiting the amount of time spent online [51%], or checking with an adult before going online [50%]. Younger children were most likely to say their parents set rules (76% of 9- to 11-year-olds), although half (52%) of online teens between the ages of 15 and 17 also said their parents set rules for them about going online [11].

<sup>57</sup> Fifty-five percent of 9- to 17-year-olds said they prefer to use the Internet as a resource for homework [11].

Not surprisingly, most of Tanner's time on the computer is spent playing PC games,<sup>58</sup> both online<sup>59</sup> and off. Once he gets into a Half-Life<sup>m</sup> game he can stay involved with it for hours. His mom will usually have to say, "That's enough," and make him go outside. Several times a week, he goes online to play instead of starting a more traditional PC game.

When Tanner goes online for fun<sup>60</sup> he likes to surf around for just about anything that comes to mind,<sup>61</sup> and he'll stay online for at least an hour<sup>62</sup> or so. Because of the ISP they use, he usually starts at AOL Kids and uses familiar links<sup>63</sup> there, or he sometimes goes to Yahooligans™ and uses their categories to get back to favorite sites. He sometimes checks out the scores<sup>64</sup> and stats for the Chicago Fire and the Cubs, and he goes to links for DragonBall Z® stuff, GameBoy® games, and Half-Life 2 (to look up cheat codes that his friends have told him about). He often tries out new games<sup>65</sup> on Yahooligans, Nick, Disney, or LEGO and has downloaded music.<sup>66</sup> Generally, his online<sup>67</sup> activity is more like a flowing stream of consciousness<sup>68</sup> rather than a planned event; if something catches his attention, he's off to it until something else does. His bedroom reflects this<sup>69</sup> disposition, as the walls littered with posters, printouts, and other artifacts representing his varied interests.

#### Tanner and the Family Computer

The family's 56k modem is sometimes too slow and makes surfing frustrating. not to mention that sometimes he gets disconnected from AOL<sup>70</sup> (often in the middle of a game or something cool). Slow connections and getting kicked off really make him mad. He doesn't

<sup>&</sup>lt;sup>58</sup> Boys and girls use computers almost equally but for different activities. While 42% of girls used the household computer for word processing, only 36% of boys did. In addition, 79% of girls played games on the home computer compared with 87% of boys [10].

<sup>&</sup>lt;sup>59</sup> Younger children are most likely to go online to play games (58% of 9- to 11-year-olds versus 40% of 15- to 17-year-olds) and to get information about TV shows (23% vs. 13%) [11].

<sup>&</sup>lt;sup>60</sup>Young people prefer online to television and telephone. The centrality of Internet use can be seen in the degree to which it has supplanted other favorite activities. Sixty-three percent of those surveyed preferred going online to watching television, and 55% chose going online over talking on the telephone [11].

<sup>&</sup>lt;sup>61</sup> The number of online Americans who said that they sometimes go online for no particular reason, just to browse for fun or to pass the time, increased by 444% from 2000 to 2002. These recreational users of the Web grew from 54 million in 2000 to 78 million in January 2002 [21].

<sup>&</sup>lt;sup>62</sup> Sixty-nine percent of online youth-access websites are related to favorite hobbies. This compares to the 78% of adults who search for hobby information. Boys are more likely to go to hobby websites than girls, with 76% of boys having ever done this, compared to 62% of girls [17].

<sup>&</sup>lt;sup>63</sup> Nine to 11-year-olds spend an average of 1.15 hours online per session [11].

<sup>&</sup>lt;sup>64</sup> Kids in our site visit study around this age were less likely to add sites to favorites; they tended to just recreate the actions that got them to a specific page in the first place. For example, if they found what they wanted from their home page, they'd simply try to remember the path and repeat it the next time [29].

<sup>&</sup>lt;sup>65</sup> Forty percent of 9- to 17-year-old boys said they go online "pretty often" to get sports information or scores [11]. <sup>66</sup> The popularity of online games has risen since 1999, when only 18% participated. A 2003 poll revealed that more than one-third (37%) of frequent game players went online to play, up from 31% in 2002 [9].

<sup>&</sup>lt;sup>67</sup> More than half of the children (53%) in that age bracket (ages 12 to 17) have downloaded music. It was particularly popular with online boys, some 60% of whom said they downloaded music compared to 47% of girls. Some 73% of older boys (ages 15 to 17) had downloaded music. There was some evidence that the prevalence of downloading increased with age; for example, 44% of kids between the ages of 12 and 14 had downloaded music, and fully 61% of those 15 and 17 years of age had done so [23].

<sup>&</sup>lt;sup>68</sup> Forty-one percent of tweens said that they do other things while surfing the Internet. Some split their attention between surfing and talking on the phone, eating, or listening to music. Still others said they watch TV while working at their computer [4].

<sup>&</sup>lt;sup>69</sup> Both boys and girls spent significant effort making their bedroom (and sometimes playroom) personal and unique. There was clearly a need to identify themselves and make a statement [29].

<sup>&</sup>lt;sup>70</sup> Most of the families in our site visits reported being very frustrated because they were often disconnected or dropped in the middle of a session [29].

have much patience<sup>71</sup> for slow sites, so if a Web page is loading slowly he often clicks the "back" button or opens another browser window and finds a different link to follow.<sup>72</sup> In addition to broadband, Tanner really wants his parents to get a new PC for the house (so he can get the old one for his room<sup>73</sup>). His parents are considering it, mostly because they are tired of Tanner messing things up.<sup>74</sup>

Tanner knows his mom is worried<sup>75</sup> about what he might see on the Internet.<sup>76</sup> That is one reason<sup>77</sup> why their PC is placed in the family room.<sup>78</sup> He hasn't really been interested in going into chat rooms, but his mom said she wouldn't let him anyway, and he has to ask one of his parents before he can go online. He's a little worried that his parents might turn on the parental controls<sup>79</sup> or get some other filtering software like "the dumb one at school," but they haven't gotten around to doing it yet. He knows he's not supposed to look at anything "gross" and his mom checks in periodically<sup>80</sup> when he's online to make sure he's not into anything bad. His mom likes to sit with him<sup>81</sup> when he goes online for school stuff<sup>82</sup>—she gives him ideas<sup>83</sup> on where to look for certain things<sup>84</sup> and helps him type in search questions. Sometimes she even plays games<sup>85</sup> and online activities with him.<sup>86</sup> He helps his

<sup>&</sup>lt;sup>71</sup>We witnessed lots of kids being impatient with slow-loading pages, and many times they assumed that the page was down or broken if nothing happened quickly [29].

<sup>&</sup>lt;sup>72</sup> Across our site visits, kids of all ages just don't show a lot of patience—or at least they are highly excitable and easily distracted. Regarding Internet behavior specifically, they won't wait for pages to load. Instead, they either click on a different link, type a new URL, or open a completely new browser and get distracted with something else [29].

<sup>&</sup>lt;sup>73</sup> Only 25 of the 103 (24%) computers in the sample were located in a private space—a parent's or child's bedroom. This placement is surprising, in part, because so many of the families in the sample got their computers for their children. Families were more likely to place the computer in public spaces, such as the dining room, kitchen, family room, spare room, or basement (50% of computers) or in a semiprivate space, such as a study; these computers had adult owners but could be used by all household members (26%). This made it difficult to use the computer for tasks such as e-mail, finances, or word processing that require a degree of peace and quietness [15].

<sup>&</sup>lt;sup>74</sup> Parents often complained that their kids "messed up" the computer regularly, by freely tinkering with settings, downloading unknown items, and installing all kinds of applications [29].

<sup>&</sup>lt;sup>75</sup> Eighty percent of parents surveyed thought that Internet filtering was a good idea. Parents worried about their kids seeing pornography (81%) or violence (74%) on the Internet [26].

<sup>&</sup>lt;sup>76</sup> Online teens, as a group, are generally much less concerned than parents about online content and do not feel as strongly that they need to be protected [17].

<sup>&</sup>lt;sup>77</sup> Many parents selected a public place precisely because it denied privacy to their children as they used the Internet. By placing the computer in a public place, parents could casually inspect what their children were doing online. As they walked past, they could see what was on screen, for example, and ask questions about their children's behavior [15].

<sup>78</sup> While 75% of tweens (7- to 14-years-old) had a computer at home, one-fifth of the older ones (13 and 14) had a PC in their own bedroom [4].

<sup>&</sup>lt;sup>79</sup>Another tool that parents use to control what their children see and do online is to actually sit down and surf alongside their children. Close to 7 out of 10 parents (68%) reported sitting down at the computer with their children. More mothers than fathers reported sitting down at their computers with their children. Interestingly, 34% of parents who said that they "do not go online" said that they do sit down and go online with their children [17]. <sup>80</sup>Some parents used the public location of the computer as a deterrent, believing that their children would be less likely to visit sexually explicit websites or converse with strangers in chat rooms if their behavior was subject to parental oversight. Conversely, children lobbied to have the computer placed in their rooms because of the privacy it afforded them [15].

<sup>&</sup>lt;sup>81</sup> A majority of young people (56%) said they go online sitting together with their parents. The younger the children, the more likely they are to say they go online together with their parents—two-thirds (67%) of 9- to 11-year-olds said so, compared to half of 15- to 17-year-olds (49%) [11]. Nine out of 10 parents "always or sometimes" surfed the Internet with their kids [4].

<sup>&</sup>lt;sup>82</sup> Across studies, it has been found that younger children prefer and spend more time playing education games than do older children [13].

<sup>&</sup>lt;sup>83</sup> Seventy-four percent of 9- to 11-year-olds said that their parents give them new online ideas [11].

<sup>&</sup>lt;sup>84</sup> More than 8 out 10 Internet users have searched the Internet to answer specific questions [21].

<sup>&</sup>lt;sup>85</sup>A range of age groups are getting in on the gaming action, and the activity is becoming quite popular with women [9].

<sup>&</sup>lt;sup>86</sup> Parents' use of online content is closely linked to things their kids want to do online. This is especially true for children under 12 who go online [7].

mom out sometimes, <sup>87</sup> too; for example, he showed her<sup>88</sup> the Ask Jeeves<sup>®</sup> site that they use at school. She really liked it. <sup>89</sup>

Tanner wishes he could play games<sup>90</sup> more often than he actually gets to; however, his mom limits his time playing PC or online games<sup>91</sup> as well as with the GameBoy, particularly if it is something that she thinks is not very educational or social. He has a few friends who have a Nintendo<sup>®</sup> game console that they play with together,<sup>92</sup> and he wants one *really badly*.<sup>93</sup> He talks about it all the time and points out prices and cool games<sup>94</sup> (even educational ones) to his parents.<sup>95</sup>

#### RESEARCH REPORT REFERENCES

- 1. Cyber Dialogue, The Internet Consumer: Online Children, December 1999 (http://www.cyberdialogue.com/).
- Cyber Dialogue, Cyberfacts: Teenagers on the Internet; summary datasheet in PDF format, based on data from the American Internet User Survey (http://www.cyberdialogue.com/; http://mslibrary/research/mktresearch/findsvp/pages/AIUS.htm).
- 3. Dina Demner, Children on the Internet, April 2001 (http://www.otal.umd.edu/UUPractice/children/).
- 4. Media Awareness Network, *Children's Internet Use (Canada)*, October 2000 (http://www.media-awareness.ca/english/resources/research\_documents/statistics/internet/childrens\_internet\_use.cfm).
- 5. Robert Brooks and Lynne S. Dumas, *Curiosity: Five to Eleven*, Sesame Street Workshop, 2007 (http://www.sesameworkshop.org/parents/advice/article.php?contentId=75002).
- 6. Rachel Konrad, Why Net Marketers Love Mom, May 2002 (http://news.cnet.com/2100-1017-900615.html).
- 7. Internet Consumer Industry Brief, Families Online, February 1999 (http://www.cyberdialogue.com/).
- 8. U.S. Census Bureau, *Home Computers and Internet Use in the United States*, August 2000 (http://www.census.gov/population/www/socdemo/computer.html).
- 9. Robyn Greenspan, Gamers growing up: the big picture demographics, *CyberAtlas*, August 29, 2003 (http://cyberatlas.internet.com/big\_picture/demographics/article/0,,5901\_3070391,00.html; http://cyberatlas.internet.com/).
- 10. U.S. Census Bureau, Computer Use in the United States, October 1997 (http://www.census.gov/population/www/socdemo/computer.html).
- 11. Roper Starch Worldwide, Inc., America Online/Roper Starch Youth Cyberstudy 1999, November (http://corp.aol.com/press/roper.html).
- 12. National Center for Educational Statistics, *Student Computer Use: Indicator of the Month*, ED433008, August 1999, Education Resources Information Center (http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=1999011).
- 13. Ellen Wartell, June H. Lee, and Allison G. Caplovitz, *Children and Interactive Media: An Updated Research Compendium*, 2002 (http://www.digital-kids.net/modules/downloads/file\_archive/final\_compendium\_ac.pdf).
- <sup>87</sup> Ninety-one percent of those parents say they supervise their kids' online sessions some of the time and 62% all of the time [7].
- <sup>88</sup>Young boys in this study promoted themselves as the household "computer guru." A quote from one 11-year-old participant: "I sometimes have to hang out while my parents try to use the computer—just in case they get confused or something." However, observation of actual skill and knowledge indicated that parents and children are actually not that different in this regard [29].
- <sup>89</sup> Among adult users of home computers, 70% used them for word processing, the most common use. Other common uses included games (54%), e-mail and communications (44%), bookkeeping/finances/taxes/household records (44%), and working at home (34%) [10].
- <sup>90</sup> Use of home computers for playing games and for work on school assignments is common. A majority (59%) of 5- to 17-year-olds use home computers to play games; 46% use computers to connect to the Internet and 44% to complete school assignments. Middle-school-age and high-school-age youths (ages 11–17) use home computers to complete school assignments (57–64%), to connect to the Internet (54–63%), and to play games (60–63%) [28]. <sup>91</sup> Claiming computer time was a heated issue in many of the families we visited. Families did not sit down calmly at the beginning of the week to schedule time slots together. According to our informants, they watched where the computer sits, trying to figure out each other's plans and fighting for a seat [15].
- <sup>92</sup> PC gaming and general PC usage, as opposed to gaming consoles, were treated as individual activities. Game playing with dedicate consoles was more social in nature [29].
- <sup>93</sup> Boys in our study tended not to care about brands. They knew specific products (and either loved or hated them), but they didn't particularly know or care who made them. As an example, in one family, even though they had one specific gaming console that they seemed to enjoy, the two boys in the family repeatedly discussed wanting specific games made only for other platforms. Girls, on the other hand, tended to appreciate not just specific products but the companies that made them. They expressed interest in having other products by the same specific company or brand [29].
- <sup>94</sup> A majority of parents (77%) thought teens, who represent a very lucrative market, should be allowed to shop online [26].
- <sup>95</sup> Nearly two-thirds (63%) of parents planned to purchase at least one computer video game in 2003, as did 56% of all Americans under age 45 [9].

- 14. Michael Pastore, Teachers say Internet improves quality of education, *ClickZ*, April 5, 2001 (http://www.clickz.com/734761).
- 15. David Frohlich and Robert Kraut, *The Social Context of Home Computing*, 2003, (www.hpl.hp.com/techreports/2003/HPL-2003-70.pdf).
- 16. Dick Halpern, More Kids Say Internet Is the Medium They Can't Live Without, April 5, 2002 (http://www.sriresearch.com/press/pr040402.htm).
- 17. Pew Internet & American Life Project, Teenage Life Online: The Rise of the Instant-Message Generation and the Internet's Impact on Friendships and Family Relationships, June 20, 2001 (http://www.pewinternet.org/Press-Releases/2001/The-Rise-of-the-InstantMessage-Generation.aspx).
- 18. Jupiter Communications, *Targeting Teens Is a Gender Game*, August 2000 (http://us.mediametrix.com/data/teensconcept.pdf).
- 19. Cassandra Rowand, Teacher use of computers and the Internet in public schools, *Education Statistics Quarterly*, April 2000 (http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2000090).
- 20. Pew Internet & American Life Project, *Parents Online*, November 17, 2002 (http://www.pewinternet.org/reports/toc.asp?Report=75).
- 21. Pew Internet & American Life Project, *America's Online Pursuits: The Changing Picture of Who's Online and What They Do, December 22, 2003 (http://www.pewinternet.org/reports/toc.asp?Report=106).*
- 22. Pew Internet & American Life Project, *The Ever-Shifting Internet Population: A New Look at Internet Access and the Digital Divide*, April 16, 2003 (http://www.pewinternet.org/reports/toc.asp?Report=88).
- 23. Pew Internet & American Life Project, *The Music Downloading Deluge: 37 Million American Adults and Youths Have Retrieved Music Files on the Internet*, April 24, 2001 (http://www.pewinternet.org/reports/toc.asp?Report=33).
- 24. Pew Internet & American Life Project, *The Digital Disconnect: The Widening Gap Between Internet-Savvy Students and Their Schools*, August 14, 2002 (http://www.pewinternet.org/reports/toc.asp?Report=67).
- Victoria J. Rideout, Elizabeth A. Vandewater, and Ellen A. Wartella, Zero to Six: Electronic Media in the Lives of Infants, Toddlers and Preschoolers, Kaiser Family Foundation Report, Fall 2003 (http://www.kff.org/entmedia/3378.cfm).
- 26. Cyber Dialogue, Online parents: gateway to a new generation, *The Internet Consumer*, 7, 2000 (http://www.cyberdialogue.com/index.html; http://mslibrary/research/mktresearch/FindSVP/indbriefs/ic-ib-2000-07.pdf).
- 27. Pew Internet & American Life Project, More Online, Doing More: 16 Million Newcomers Gain Internet Access in the Last Half of 2000 As Women, Minorities, and Families with Modest Incomes Continue To Surge Online, February 18, 2001 (http://www.pewinternet.org/reports/toc.asp?Report=30).
- 28. Matthew DeBell and Chris Chapman, Computer and Internet Use by Children and Adolescents in 2001, National Center for Education Statistics, October 2003. (http://nces.ed.gov/pubSearch/pubsinfo.asp?pubid=2004014).
- 29. G4K Home Site Visits (Summer 2004): Visit Notes for 15 Homes with 1 or More Children Between the Ages 5 and 12 (\\g4k\user\_research\site\_visits\summer\_2004).
- 30. Anne Kleiner and Laurie Lewis, *Internet Access in U.S. Public Schools and Classrooms*: 1994–2002, National Center for Education Statistics, October 2003 (http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2004011).
- 31. Pew Internet & American Life Project, *The Internet and Education: Findings of the Pew Internet & American Life Project*, September 1, 2001 (http://www.pewinternet.org/reports/toc.asp?Report=39).
- 32. Pew Internet & American Life Project, Consumption of Information Goods and Services in the United States: There Is a Trendsetting Technology Elite in the U.S. Who Chart the Course for the Use of Information, Goods, and Services, November 23, 2003 (http://www.pewinternet.org/reports/toc.asp?Report=103).
- 33. Pew Internet & American Life Project, Let the Games Begin: Gaming Technology and Entertainment Among College Students, July 6, 2003 (http://www.pewinternet.org/reports/toc.asp?Report=93).
- 34. Pew Internet & American Life Project, Cities Online: Urban Development and the Internet, November 20, 2001 (http://www.pewinternet.org/reports/toc.asp?Report=50).
- 35. Pew Internet & American Life Project. *Spam: How It Is Hurting Email and Degrading Life on the Internet,* October 22, 2003 (http://www.pewinternet.org/reports/toc.asp?Report=102).
- 36. Pew Internet & American Life Project, *Tracking Online Life: How Women Use the Internet To Cultivate Relationships with Family and Friends*, May 10, 2000 (http://www.pewinternet.org/reports/toc.asp?Report=11).
- 37. Pew Internet & American Life Project, Broadband Adoption at Home: A Pew Internet Project Data Memo, May 18, 2003 (http://www.pewinternet.org/reports/toc.asp?Report=90).
- 38. MSN Kidz Usability Test, IDIS #7285. \minerva\usabilit\reports\7285\MSNKidsReview.doc
- 39. Thomas Snyder and Charlene Hoffman, *Digest of Education Statistics*, 2000, National Center for Education Statistics, 2001 (http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2001034).
- 40. Susan Solomon, Content for kids, *ClickZ*, July 9, 2002 (http://www.clickz.com/experts/design/cont\_dev/article .php/1381161).
- 41. Internet Service Provider Review, G4K Marketing Group, 2005.
- 42. GameDaily (http://www.gamedaily.com).
- 43. Game Developer Magazine (http://www.gdmag.com/).
- 44. Robyn Greenspan, Games people play, *ClickZ*, May 31, 2002 (http://www.clickz.com/stats/sectors/software/article.php/1152221).
- 45. Get-in-the-Game News (http://www.gignews.com/).
- 46. E3 Expo online news (http://www.e3expo.com/).
- 47. Firing Squad: Home of the Hardcore Gamer (http://www.firingsquad.com/).
- 48. G4K Holiday Usage Focus Groups, December 2004 \\G4Kmarketresearch\reports\12-18-2004.doc.