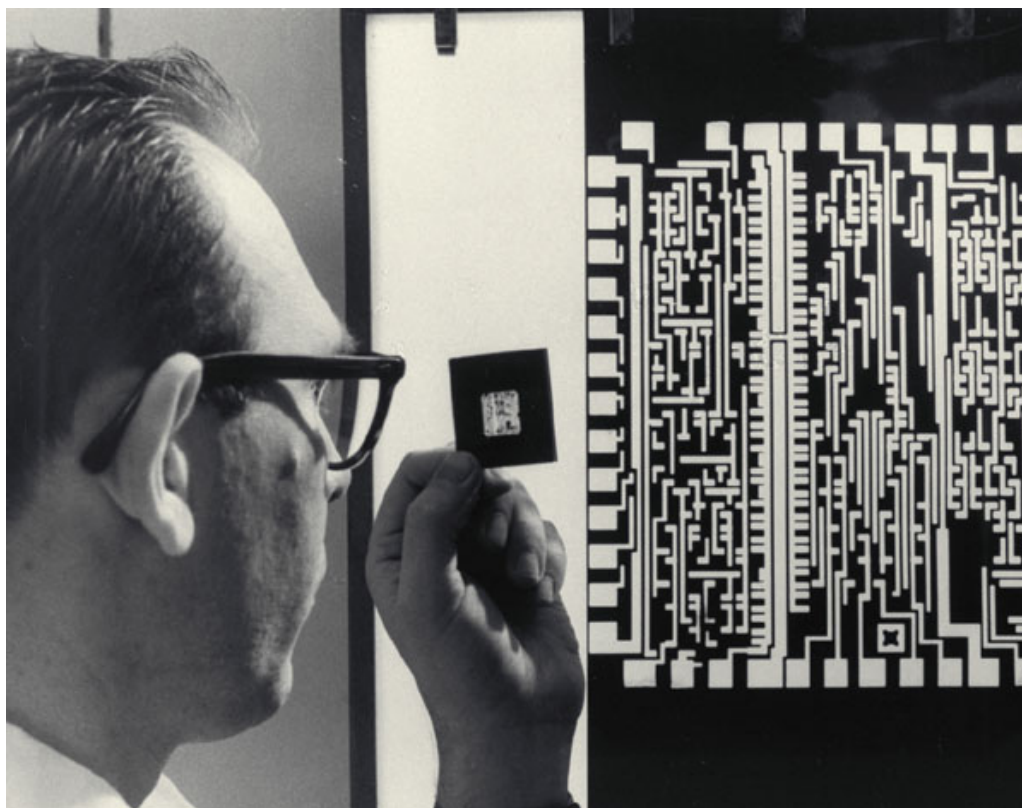



2030 Vision: Anticipating the Needs and Expectations of Museum Visitors of the Future



 Smithsonian Institution

Office of Policy and Analysis
Washington, DC 20013
July 2007

Preface

In 2006, members of the Smithsonian Board of Regents asked the Office of Policy and Analysis (OP&A) to undertake a series of studies on visitation. Kathleen M. Ernst, a senior OP&A analyst, focused on anticipating visitors' needs and expectations from now until the year 2030. The study emphasizes the need to come to grips with several generations' interests, lifestyles, and values including their uses of technology. The study also examines steps that museums have taken to appeal to diverse audiences including Generations X and Y.

Several OP&A staff commented on this report. I am indebted to both Kathleen and her peers for their insightful contributions. As always, the staff is mutually supportive.

Carole M.P. Neves, Director
Office of Policy and Analysis

2030 Vision: Anticipating the Needs and Expectations of Museum Visitors of the Future

Introduction

The average age of a Smithsonian visitor in summer 2004 was 37.5 years old. That person, one of the oldest members of Generation X, will be 63 when she walks into a museum in 2030. How are museums planning to appeal to and accommodate her, and even more so, the huge cohort of Baby Boomers who in 2030 will range in age from 65 to 84? With a major wave of retirements predicted to occur in the next four to five years as leading-edge Baby Boomers begin turning 65, an influx of older visitors may be just over the horizon if these traditional museum-goers can be expected to spend at least some of their new leisure time at museums.

A fundamental divide in communication styles and habits exists between those who grew up before and after the introduction of the Internet. Alongside the media reports of the tragic mass killing at Virginia Tech on April 16, 2007 were stories of just how profound a role new technology played during the event and in its aftermath, with students filming chilling footage inside besieged classrooms on their cell phones, using instant messaging (IM-ing) and social networking sites such as Facebook to locate friends, and turning not to traditional grief counselors but to Internet sites to communally mourn and pay tribute to the slain students and teachers. As one reporter wrote, “this is what this YouTube-Facebook-instant messaging generation does. Witness. Record. Share.” (Vargas, 2007).



What are museums doing now and what should they plan to do to draw in and hold the attention of the Internet generations? Generation Y, a cohort even larger than the Baby Boomers, will be 38 to 53 year olds in 2030. Today’s tech-savvy teens will be in their thirties and moving through peak parenting years. Howe and Strauss have documented historical archetypal patterns of generations, which can be used as a tool in predicting

future behavior: “To anticipate what 40-year-olds will be like 20 years from now, don’t look at today’s 40-year-olds; look at today’s 20-year-olds.” (Howe and Strauss, 2007). Museums might begin to anticipate the needs and expectations of the youngest museum visitors of the future by understanding the interests and learning styles of today’s teenagers.

Table 1. Generational distribution of Smithsonian visitors in summer 2004¹

Generation	Age range in 2004	Percent of all SI museum visitors	Age range in 2015	Age range in 2030
Generation Y 1977 to 1992	12 to 27	30	23 to 38	38 to 53
Generation X 1966 to 1976	28 to 38	24	39 to 49	54 to 64
Trailing Edge Baby Boomer 1955 to 1965	39 to 49	24	50 to 60	65 to 75
Leading Edge Baby Boomer 1946 to 1954	50 to 58	13	61 to 69	76 to 84
Pre- Baby Boom Generations Pre-1946	59 and older	9	70 and older	85 and older

Source: Smithsonian Institution, Office of Policy and Analysis. 2004. *Results of the 2004 Smithsonian-wide Survey of Museum Visitors*. October 2004.

A paper prepared by the Office of Policy and Analysis in August 2006, *Changing Faces: Museum Visitorship and Demographic Change*, describes the U.S. demographic landscape that museums can expect to see as the nation moves toward the middle of the century: the number of persons in earlier generations (e.g., born before World War II) will decrease due to death. The aging of the Baby Boomers and other generations will generate a larger proportion of elderly Americans. At the same time, the number of children will continue to increase, with a larger share among both Hispanics and non-whites as overall Americans become racially and ethnically more diverse. Interestingly, the convergence of these trends will mean that the *average* American will be older in 2020 than he is today, but will be younger in 2050 than he is in 2020.

¹ The boundaries that separate generations are indistinct and different authors/sources use somewhat different ages to define generations.

Anticipating future older visitors

The U.S. older population—people aged 65 and older—has increased as a percent of the total population throughout the course of the 20th and into the 21st century, growing from 3.1 million (4%) in 1900 to 35.9 million (12%) in 2003. A substantial increase in the older population will occur in 2011 when the first Baby Boomers turn 65, with the entire older group projected to reach 72 million – nearly 20% or one-out-of-five Americans – in 2030. (He, et. al. 2005)

The interests, lifestyles, and values of future older visitors of the baby boom generation are different than their predecessor generations. For one thing, Boomers feel uncomfortable with the very word retirement. The main American magazine devoted to this cohort has changed its name from

Modern Maturity to *AARP the Magazine*; as

one author writes, “‘maturity’ is about as popular in our language as ‘malignant.’”

(See, 2007). Matt Thornhill, president of the Boomer Project, a consulting firm, describes Boomers as “people who refuse to believe they’re over the hill until they’re six feet

under it.” Motorcycle riding, surfing “geezerjocks” would balk at anything labeling them as senior citizens. (Mui, 2006).



Accessibility. Assuming the population of museum visitors changes along with the American population, museums can expect a higher percentage of older visitors who will have physical accessibility needs in getting through exhibits, reading information, and manually operating interactives. In planning and designing these elements, museums can learn from the retail and marketing industries, which have already begun a shift to downplay age-related design features to appeal to Boomer consumers who “don’t want to concede they are older.” For example, OXO International, the manufacturer of Good Grips utensils, offers easy-to-use tools with oversize handles for better leverage, but which appeal to twenty-somethings alike for their cool design. Moen Inc. has a new line

of shower stall grab bars designed with sleek metallic finishes and special detailing. And Whirlpool Corp. is offering a front-loading washing machine mounted on a pedestal to reduce back strain. (Mui, 2007).



Programming. The generation that started the fitness craze and popularized nutrition is now turning to brain-healthy foods and brain workouts to retain their cognitive edge and stave off memory loss or dementia. Examples of this trend include web sites such as HappyNeuron.com, where one can sign up for cranial calisthenics, and MyBrainTrainer.com, which targets those who wish they “could be a little quicker, a little sharper mentally.” Nintendo is marketing its video game *Brain Age*, based on a Japanese neuroscientist’s research, to the over-50 set, with claims in the instructions that it will “give your prefrontal cortex a workout.” (Belluck, 2007; Kornreich 2007). Museums have everything in place to tap into Boomers’ fear of aging and position themselves as the place for a “total brain health experience.” A brain healthy day at the museum could include a brain muscle workout from stimulating exhibitions and interactives, cardiovascular exercise walking the miles of exhibition pathways, and a lunch rich in antioxidants and omega-3 fatty acids.

Volunteer pool. Baby Boomers currently volunteer at higher rates than past generations did at roughly the same age – the volunteer rate for the majority of Baby Boomers (those ages 46 to 57 today) is 30.9%, significantly higher than the 23.2% recorded for that age cohort in 1989 (Silent Generation, born 1931-1945) or the 25.3% recorded in 1974 (Greatest Generation, born 1910-1930). It is predicted that Boomers will increase the number of volunteers age 65 and older in the U.S. by 50% in 2020 – from just under nine million in 2007 to over 13 million. (Corporation for National and Community Service in Boomer Project, 2007). The literature shows that Boomers have different priorities when it comes to volunteering, opting for religious, youth, and educational organizations, in that order, compared to prior generations’ preference for religious, civic, political, business, and international organizations. (Boomer Project, 2007).

This is good news for museums with their education mandate and mission.

Generation X. A smaller cohort half the size of the Boomers, Generation Xers, who will be in their fifties and sixties in 2030, are the generation who inherited an economic recession and grew up “marked” by divorce, AIDS, and crack cocaine, as well as Sesame Street and MTV. (Obalil, 2004). The over-educated and under-employed group was known during the 1990s for its jaded pragmatism, bringing such slogans as “been there, done that” and “McJobs” into common parlance. The first “latch-key” kids of two working parents learned self-sufficiency at an early age and continue to be independent and entrepreneurial.

Generation X is the most educated yet of the generations. Compared to earlier generations, Gen X moms are more likely to have attended college, left hometowns, established careers, and married and had children later... and they are more likely to be economic and educational peers of their spouses. Gen X dads are less likely to identify themselves with their careers; they spend twice as much time with their kids as Boomer dads did, and wish for even more time with their family. (Reach Advisors, 2007). All of these data are extremely pertinent to museums where education is highly correlated with museum attendance. These future Gen X grandparents will be looking for the same things they now demand as parents, including family and dad-focused programming (such as the Bronx Zoo’s ‘Daddy and Me’ program), outdoor space, reading/nursing rooms, and family bathrooms. (Reach Advisors, 2007).

Sponge Bob more Iconic Draw than Mickey?

In announcing plans for Marriott International to join with Nickelodeon in creating a chain of upscale water park resorts, Bill Marriott, standing next to Mr. Square Pants, said that they were entering the family-themed vacation business to tap into travel dollars being spent by Generation X – people now in their 30s and early 40s, many with families. GenXers came of age with the Nickelodeon brand, which traces its origins to 1979. Now, a Nickelodeon generation is well heeled and traveling. The 75-year-old chairman explained, “They have the kind of respect for it that we had for Disney when we were growing up, so there’s a lot of allegiance here.”

Source: Rosenwald, 2007

Gen Xers feel a greater need than earlier generations to become involved in their neighborhoods and communities – 55% say they want more contact with people in their community compared with 48% of Baby Boomers and 45% of earlier generations. Reach, 2007). This change in values and attitude can also be seen in the housing market where Gen Xers are opting for space designed for family usage rather than individual usage and are forgoing the “starter castles” desired by Boomers for row houses, condos, and co-housing around community spaces. (The Real Estate Blogger, 2007). Museums can respond to this need for greater contact by presenting opportunities for civic engagement and maintaining social interaction. Reach Advisors offers evidence that museums that offer meeting space and foster external partnerships that will establish the museum as a “community hub” have benefited from higher visitation, greater audience diversity, increased revenue from memberships and programs, and greater community relevance. However, pursuing a “community hub” strategy would raise some special questions for Smithsonian museums because they must serve national as well as local constituencies (see discussion in companion paper *Museums as a Leisure Time Choice*.)

Anticipating future younger visitors

Younger generations and technology. The most recent generations – with blurry distinction between what is called Generation Y or Generation Next and the teens and pre-teens referred to as Millennials or Generation M – represent a fundamental paradigm shift in how one gathers, works with, translates, and shares information. These generations have a special relationship to technology that sets them apart from older generations. As Lee Rainie, director of the Pew Internet & American Life Project explains, “they are not all ‘tech savvy’ in the sense that they know what is going on ‘under the hood’ of their gadgets, but they have a unique attachment to the communications power of these new technology tools.” (Rainie, 2006).

Generation Y. This generation of young adults some 80 million strong came of age in the shadow of September 11. They grew up with personal computers, cell phones, and the internet. OP&A visitor studies and other research suggest that the social experience in a

museum is very important to this generation. Research also suggests that effective marketing for this generation requires different approaches than those museums typically use. For example, Gen Y's distinctive mode of communication and strong social orientation are explored in a recent Pew Research Center report, *A Portrait of Generation Next*² (January 2007), which found that:

- Gen Nexters stay in constant contact with friends using text messaging, instant messaging and email. About half say they sent or received a text message in the past day – twice as many as those in Generation X.
- A majority of GenNexters have used one of the social networking sites Facebook, MySpace, and My Yearbook. More than four in ten have created a personal profile that may include photos and descriptions of interests and hobbies.

The Power of Social Network Sites

On the day Senator Barack Obama announced his bid for President, Farouk Olu Aregbe started a group on Facebook.com called "One Million Strong for Barack." Farouk's group had 100 members in the first hour, 10,000 in less than five days, 200,000 in three weeks, and close to 300,000 in one month.

Source: Vargas, 2007.

Generation M. A number of recent studies offer a plethora of data on teens' use of technology that point up even more stark contrasts between this generation's and today's adults' preferred modes of communication and uses of media. For example, from the Pew/Internet report *Teens and Technology* (July 2005):

- 87% of U.S. teens ages 12-17 use the internet compared to 66% of adults.
- 75% of online teens use instant messaging compared to 42% of online adults.
- 81% of online teens say they are gamers compared to 32% of online adults.

And from the from the Pew/Internet report *Teen Content Creators and Consumers* (November 2005):

² Generation Y as used in this report refers to individuals born between 1977 and 1992. Generation Next as used in the Pew report refers to individuals born between 1981 and 1988.

- Over half of teens ages 12-17 (57%) say they create content online, e.g., create a blog; work on a personal webpage or one for a friend, school, or organization; share original content such as artwork, photos, stories, or videos; or remix content found online.
- 19% of online youth ages 12-17 have created their own blog compared to 7% of adult internet users.
- 38% of online teens say they read blogs compared to 27% of online adults.
- 51% of online teens say they download music files from the internet compared with 18% of online adults.
- 31% of online teens say they download video files to their computer so they can play them at any time compared with 14% of online adults.

Lee Rainie, director of the Pew Internet & American Life Project, offers several “realities” of today’s 9 to 19 year-old “Millennials” that help foretell how future visitors will expect to interact with museums:

- Millennials are immersed in a world of media and gadgets. They expect to be able to gather and share information in multiple devices in multiple places. Their information and communication needs are contextual and contingent; they prefer to get the material they want on a cell phone when that gizmo is in their hand and like IM-ing when they are sitting at a computer.
- Their technology is mobile – use of wireless connections is growing and storage devices are small enough to be portable, thus allowing them to shift the way they spend time with media and the places where they consume media and information.
- The Internet plays a special role in their world. While they are not the most intense internet users across the board, they show a distinct profile in key dimensions of internet use including seeking information about movies and TV, playing online games, getting news, instant messaging, and downloading music. This is the first generation to have grown up with interactive media and they want to manipulate, remix, and share content.
- They are multi-taskers.

- The way they approach learning and research tasks will be shaped by their new techno-world – more self directed and less dependent on top-down instruction, better arrayed to capture new information inputs, more reliant on feedback and response, more tied to group knowledge, and more open to cross-discipline insights, creating its own ‘tagged’ taxonomies.

(Rainie, 2006)



A 2004 meeting of the Smithsonian Institution Council that focused in part on ways to appeal to younger audiences also acknowledged that younger people are looking for the experiential, participatory experiences shaped by their lifelong exposure to the Internet, cell phones, video games, and commercial brands. Museums must think of audiences as active participants and not passive consumers of information; further, museums must be willing to place young people in positions of real authority to affect programs and outreach. SI Council Chair Glenn Lowry observed how the warp speed of changing technology familiar to young visitors will influence their museum expectations:

With the scale of the Smithsonian's operations and its many constituencies, the issue of velocity—the speed at which you can process information, shape programs, get them out to the public, react to the public's reaction, and recast those programs—is a major concern. The institutions that can do this well are those that will resonate with Generation X and Generation Y. Those that cannot will struggle mightily.

What museums are doing

The literature suggests that many museums have taken steps to appeal to the younger generations by utilizing more of their media of preference – cell phones, iPods and other MP3 players – and relying more and more on participatory media, such as blogs, wikis, personal “tagging” of text, and “folksonomies” as distinguished from top-down

taxonomies, where the boundaries between the creator and the user become blurred or indistinct.³ The result, according to one author, is a subtle shift that is turning institutions, which are closed, assume a hierarchy, and have trouble admitting fallibility, into “conversations,” which are open-ended, assume equality, and eagerly concede fallibility. (The Economist, 2006)

Podcasting. A recent *New York Times* article reported how podcasting – the practice of posting recordings online so that they can be listened to through a computer or downloaded to a mobile device such as an iPod or other MP3 player – has revolutionized the world of museum audio tours. The technology was barely noticed until spring 2005 when students and their professor at Marymount Manhattan College created their own, unauthorized MP3 audio tour of the Museum of Modern Art, which received much publicity and prompted the museum to post its official audio tour programs for free downloading. Since then, the idea has exploded, with large, small, and relatively obscure museums now offering tours, curators’ comments, and artist and scholar interviews as downloadable podcasts.⁴ The San Francisco Museum of Art offers a \$2 admission discount to visitors who can show an MP3 player with the museum’s podcasts on it; SF MOMA at the same time explains that its desire is to “free the audio tour from the confines of the museum” to be listened to on your commute as much as in the gallery. A paper prepared by SF Moma on its “Artcasting” program quoted statistics from a study done by Bridge Ratings in 2005, which found that 4.8 million people had at one time used a podcast. Podcast audience growth was conservatively estimated to reach 45 million users in 2010, with aggressive estimates closer to 75 million. A conclusion was that the statistics map to the growing pattern of teen content creators, and that podcasting is a potential two-way educational tool to reach this most “finicky” of audiences. (Samis and Pau, 2006 and Bridge Ratings, 2005).

³ Participatory media has introduced issues of authority and control of inappropriate or incorrect content – Wikipedia is addressing this issue.

⁴ The Smithsonian’s main web site has a link to all podcasts available from its various museums and research centers at <http://www.si.edu/podcasts/default.htm>.

A Departure from Mr. Museum Voice

For its British fashion exhibition “Anglomania,” the Metropolitan Museum in New York recruited John Lydon, better known as Johnny Rotten of the band the Sex Pistols, for a “snarling disquisition on the decline of the British Empire and the rise of punk.” At the end of the podcast, he signs off with a smacking sound, saying, “You’ve been kissed by Johnny Rotten.”

Source: Kennedy, 2006

In addition to podcasts, more and more museums (e.g., Walker Art Center, Brooklyn Museum, Virginia Museum of Fine Arts) now allow visitors to use their cell phones to listen to exhibition information by dialing a number provided at the museum and using the phone’s keypad to navigate the tour. (Kennedy, 2006). Espro, a Paris firm, is testing a device, similar to a global positioning system, at the Musee d’Orsey that will guide users wirelessly through the museum. Espro is also reinventing hand-held gaming consoles as touch-screen audio-video guides; some—adapted to provide tours in sign language—are in use at the Guggenheim in Bilbao, Spain and the Victoria and Albert Museum. At the Galata Maritime Museum in Genoa, Italy, wireless infrared headphones developed by a New York company, Unwired Technology, provide visitors with audio tours in eight languages. (Marriott, 2007).

Tagging refers to definitive keywords or terms associated with an item of information (e.g., a picture, article, or video clip) that enable keyword-based classification of the information. Tagging, also referred to as metadata, is usually informal and personal, as opposed to formal classification systems, and has become associated with the Web because of its flexible and dynamic use in classifying computer files, web pages, digital images, and internet bookmarks. (Wikipedia, 2007). Tagging has generated much interest, first because of the fact that it is a bottom-up building of categories and as such encourages alternatives to organizing information from formal, hierarchical systems like the Dewey Decimal method, and second because of its social aspect of sharing personal classifications publicly. According to Pew Internet & American Life Project, 28% of internet users say they have tagged or categorized content online such as photos, news stories or blog posts. A growing use of tagging is seen on such youth-associated internet

sites as <http://del.icio.us/> (sharing browser bookmarks); <http://www.flickr.com/> (photo sharing); <http://youtube.com/> (video sharing); and <http://technorati.com/> (blog search engine). (Rainie, 2007).

Profile of a Tagger

- More likely to be under age 40
- More likely to have higher levels of education and income
- Considerably more likely to have broadband connection at home vs. dial up
- Equally likely to be male or female
- A bit more likely to be online minorities vs. whites

Source: Rainie, 2007

Museums are also experimenting with social tagging projects. One example is www.steve.museum, a collaborative online research project run by volunteers from primarily art museums, which seeks to understand the potential for user-generated descriptions of the subjects of artworks to improve access to museum collections and engagement with cultural content. Another example is the recently launched Smithsonian Photography Initiative <http://photography.si.edu/> that allows users to explore the collections through user-generated keywords.

Other demographic trends

Minorities becoming majority. As outlined in the OP&A report *Changing Faces: Museum Visitorship and Demographic Change*, by mid-century America is projected to go from a majority white population to a population where no single group will constitute more half of the population. The U.S. population is expected to grow from 282 million people in 2000 to 364 million in 2030 – an increase of 29%. The surge in the Hispanic population through immigration and higher birth rates is contributing to the gains, with the percentage of Hispanics in the population expected to increase from 12.6% in 2000 to 20 percent in 2030. Other minorities will also increase at a slower rate, for example

African Americans from 12.7% to 13.9%, and Asians from 3.8% to 6.2%. (U.S. Census Bureau, 2004).

Household composition. Of interest to museums in planning for future visitors is a national trend away from the traditional family unit of [heterosexual] married couples with children – represented today by fewer than one in every four households, half what it was in 1960.⁵ (Harden, 2007). The rapid increase in different types of households is fueled in part by the values and attitudes towards social issues of the huge cohort of young adults that make up Generation Y. According to the Pew Research Center report on “Generation Next,” this group is the least likely to agree that they have old fashioned values about family and marriage – 67% compared to 80% of 18-25 year-olds in 1987-88 (Generation X). (Pew, 2007).

Attitudinal Shift. Generations Y and M, which came of age, or are coming of age, in our increasingly diverse country, are the most tolerant on social issues such as immigration, race, and homosexuality. According to the Pew Research Center report on “Generation Next,” over half of 18 to 25 year-olds (52%) believe immigrants to the U.S. strengthen the country with their hard work and talents compared to 38% of all other age groups. On the subject of interracial dating, 89% of white 18-25 year-olds in 2002-2003 agreed that it is okay for blacks and whites to date, compared with 70% of those over 25. And 58% of Gen Nexters say homosexuality is a way of life that should be accepted by society, compared with 50% of those over 25. (Pew, 2007).

Generation M teens follow in step with Generation Y in their attitudes toward social issues. In a national survey of 14 to 18 year-olds conducted in 2005, 94% responded that they had a friend of a different race, and 35% said they had dated someone of a different race. Fifty-three percent of the teens said that it should be legal for gay and lesbian couples to get married. (Washington Post/Kaiser/Harvard, 2005). In another survey of 14 to 18 year-olds conducted in the Washington, DC region, 80% of respondents said they

⁵ Marriage has declined across all income groups, but it has declined far less among the most highly educated and well-paid. (Harden, 2007).

would consider marrying someone of a different race, and 90%, when asked “considering everything, do you think it’s better for people to marry someone of their own race, better to marry someone of a different race, or doesn’t make any difference?” responded that it doesn’t make any difference. (Washington Post/Kaiser/Harvard, 2005a).

Gen Y and Racial Mixing

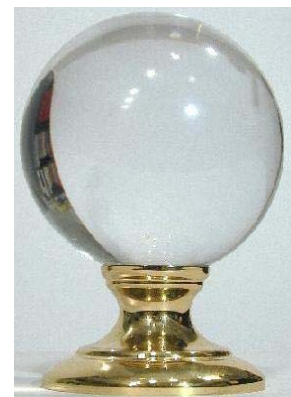
“A similar carefree attitude toward racial mixing reigned at Springbrook High School in Silver Spring, where I shared cafeteria tables and Nintendo controls with friends whose parents hailed from Pakistan, Haiti, Ethiopia, Colombia – and Pittsburgh. To my parents’ generation, our devil-may-care attitude toward diversity is striking, a symbol of racial progress. Ninety-five percent of 18-to-29 year olds have friends from different racial backgrounds, according to a Washington Post-Kaiser-Harvard poll. Many Millennials take it further: To us, differences in skin color are largely irrelevant. That’s not to say that young minorities never experience racial inequality. Prejudices still exist, and serious economic gaps still yawn between racial and cultural groups. But I feel fortunate to live in an era when, in choosing friends or dates, race can be among the least of my concerns. Essentially, it’s no big deal.”

Source: Britt-Gibson, 2007 (25 year-old)

The upshot for museums is that planning and marketing in the future must account for the intersection of (1) an increased proportion of minorities in the population, (2) a greater number of non-traditional types of households, and (3) increased diversity in youth social groups.

Conclusion

Looking through the crystal ball of demographic, attitudinal, technological, and other trends lends important clues about what visitors to museums 25 years hence will want and expect. One truth, articulated by the Smithsonian Council when they met to discuss addressing diverse audiences in 2004, is that “our constituencies are changing faster than we are.” Responding to audiences that increasingly, look, think, behave, and process information differently requires museums to not only get to know these audiences better, but to be willing to make bold changes in marketing, programming, and infrastructure to meet future visitor needs.



References

- Bartholomew, Dana. 2007. "Baby Boomers try to use their heads." *Dailynews.com*. February 16, 2007. http://www.dailynews.com/ci_4969337. Accessed 2/16/07
- Bedno, Jane and Ed Bedno. 1999. "Museum Exhibitions: Past Imperfect, Future Tense," *Museum News*. The American Association of Museums. September/October 1999. www.uarts.edu/graduate/ms/article.html. Accessed 2/14/2007.
- Belluck, Pam. 2007. "Brain gyms play on boomers' fear of aging." *Naples Daily News*. January 9, 2007. <http://www.naplesnews.com/news/2007/jan/09/brain>. Accessed 2/16/07
- Boomer Project. 2007. *Boomer Marketing News*. Vol. 1, Number 7, April 2007
- Bridge Ratings. 2005. *Bridge Ratings Industry Update – The Podcasting Outlook*. November 12, 2005. http://www.bridgeratings.com/press_11.12.05.PodProj.htm. Accessed 2/21/07
- Britt-Gibson, Justin. 2007. "What's Wrong With this Picture? Race Isn't a Factor When My Generation Chooses Friends" *The Washington Post*. March 18, 2007. B01. <http://www.washingtonpost.com/wp-dyn/content/article/2007/03/16>. Accessed 4/18/2007
- Harden, Blaine. 2007. "Numbers Drop for Married With Children: Institution Becoming the Choice of the Educated, Affluent." *The Washington Post*. March 4, 2007. <http://www.washingtonpost.com/wp-dyn/content/article/2007/03/03>. Accessed 3/5/07.
- Haselhoff, K. and Ong, P. 2005. "Museum Attendance, Population Shifts, and Changing Tastes." *SCS Fact Sheet*, vol. 1, No. 7, UCLA Lewis Center for Regional Policy Studies
- He, Wan, Manisha Sengupta, Victoria A. Valkoff, and Kimberly A. DeBarros. 2005. *65+ in the United States: 2005*. Current Population Reports Special Studies. National Institute on Aging and U.S. Census Bureau. December 2005.
- Howe, Neil and William Strauss. 2007. "The Next 20 Years: How Customer and Workforce Attitudes Will Evolve." *Harvard Business Review*. July-August 2007, pp. 41-52.
- Kennedy, Randy. 2006. "At Museums: Invasion of the Podcasts." *The New York Times*. May 19, 2006. <http://www.nytimes.com/2006/05/19/arts/design/19pod.html>. Accessed 2/5/07.

- Kluth, Andreas. 2006. "Survey: New Media. Among the Audience." *The Economist*. April 20, 2006.
- Kornreich, Leron. 2007. "A Nintendo for Grandma." *Time Magazine*. January 3, 2007. <http://www.time.com/time/nation/article/0,8599,1573749,00.html>. Accessed 2/16/07
- Lenhart, Amanda, Mary Madden, and Paul Hitlin. 2005. *Teens and Technology: Youth are leading the transition to a fully wired and mobile nation*. Pew Internet & American Life Project. July 27, 2005
- Lenhart, Amanda and Mary Madden. 2005. *Teen Content Creators and Consumers*. Pew Internet & American Life Project. November 2, 2005. http://www.pewinternet.org/PPE/r/166/report_display.asp
- Marriott, Michel. 2007. "IPods and Cellphones Join the Audio Tour." *The New York Times*. March 28, 2007. <http://www.nytimes.com/2007/03/28/arts/artsspecial/28tech.html>. Accessed 7/23/07.
- Mui, Ylan Q. 2006. "Retailers Redesign As Boomers Hit 60 But Marketing to the Aging Group Is Tricky." *The Washington Post*. January 17, 2006
- Obalil, Deborah. 2005. *Reaching the NeXt Generation of Museum Users*. Presentation to Smithsonian Institution Council by Deborah Obalil of Alliance of Artists Communities, October 2004.
- The Pew Research Center for the People & the Press. 2007. *A Portrait of "Generation Next": How Young People View their Lives, Futures, and Politics*. January 9, 2007.
- Pew Internet & American Life Project. 2005. *Teen Content Creators and Consumers*. November 2, 2005.
- _____. 2005. *Teens and Technology*. July 27, 2005.
- Rainie, Lee. 2007. *28% of Online Americans Have Used the Internet to Tag Content*. Pew Internet & American Life Project, January 31, 2007.
- _____. 2006. *Life Online: Teens and technology and the world to come*. Speech to annual conference of the Public Library Association, Boston. March 23, 2006.
- Reach Advisors. 2007. *Museums + Families + Communities*. April 2006 Keynote Address for the Museum Association of New York and Upstate History Alliance Annual Conference; presented to the Smithsonian by James Chung on January 24, 2007.

- The Real Estate Blogger (2006). "Generation X is looking for a Different Home than the Baby Boomers." November 7, 2006. Accessed February 22, 2007.
<http://www.therealestatebloggers.com/2006/11/07/generation-x-is-looking-for-a-different...>
- Rosenwald, Michael S. 2007. "Slides, Slime and Suites: Marriott, Nickelodeon Team to Create Water Park Resorts." *The Washington Post*. June 1, 2007.
<http://www.washingtonpost.com/wp-dyn/content/article/2007/05/31>. Accessed 6/4/2007
- Samis Peter and Stephanie Pau. 2006. "'Artcasting' at SFMOMA: First-Year Lessons, Future Challenges for Museum Podcasters broad audience of use," in J. Trant and D. Bearman (eds.). *Museums and the Web 2006: Proceedings*, Toronto: Archives & Museum Informatics, published March 1, 2006 at
<http://www.archimuse.co/mw2006/papers/samis.html>
- See, Carolyn. 2007. Review of Davidson, Sara, *LEAP! What Will We Do With the Rest of Our Lives?* *The Washington Post*, March 2, 2007; Page C04
- Smithsonian Institution, Office of Policy and Analysis. 2007. *Museum Visitation as a Leisure Time Choice*. October 2007
- _____. 2006. *Changing Faces: Museum Visitorship and Demographic Change*. August 2006.
- _____. 2004. *Results of the 2004 Smithsonian-wide Survey of Museum Visitors*. October 2004.
http://www.si.edu/opanda/Reports/Reports/SI2004_Survey_Booklet.pdf
- _____. 2004a. *Increasing and Diversifying Audiences: An Overview of the 2004 Meeting of the Smithsonian Institution Council*. December 2004.
- U.S. Census Bureau. 2004. U.S. Interim Projections by Age, Sex, Race, and Hispanic Origin. <http://www.census.gov/ipc/www/usinterimproj/>
- Vargas, Jose Antonio. 2007. "Students Make Connections at a Time of Total Disconnect" *The Washington Post*. April 17, 2007. <http://www.washingtonpost.com/wp-dyn/content/article/2007/04/16>. Accessed 4/18/2007
- _____. 2007a. "Young Voters Find Voice on Facebook: Site's Candidate Groups are Grass-Roots Politics for the Web Generation." *The Washington Post*. February 17, 2007. <http://www.washingtonpost.com/wp-dyn/content/article/2007/02/16>. Accessed 2/23/07

The Washington Post/Henry J. Kaiser Family Foundation/Harvard University. 2005.
High Schoolers View the Future. National Teens Comparison Survey, conducted August 3-8, 2005.

_____. 2005a. *High Schoolers View the Future*. A Survey of Teens and Parents in the Washington Region, conducted April 26 and May 29, 2005.

Wallis, Claudia. 2006. "The Multitasking Generation." *Time Magazine*. March 27, 2006.

Wikipedia. 2007. Tag (metadata) <http://en.wikipedia.org/wiki/Tags>. accessed 4/27/07

Zolli, Andrew (2006). "Demographics: the Population Hourglass." *FastCompany Magazine*. Issue 103, March 2006, Page 56
http://www.fastcompany.com/magazine/103/open_essay-demographics.html