# Net Generation Profile Scale: This Is Only A Test Scale! 

Ronald A. Berk, PhD, Professor Emeritus, The Johns Hopkins University

## Author's Contact Information

Ronald A. Berk, LLC
10971 Swansfield Rd.
Columbia, MD 21044-2726, USA
410-940-7118
email: rberk@son.jhmi.edu
http://www.ronberk.com


#### Abstract

: More than 40 books and scores of articles and chapters have been written on the Net Generation (aka Millennials). Further, 10 national and international surveys have been conducted to identify their characteristics. A recent synthesis of that research evidence has extracted 20 learner characteristics that have specific implications for how professor teach. A scale was developed based on those characteristics so professors can assess the extent to which they and their students fit that profile. The 15-item Net Generation Profile (NGP) Scale is described and guidelines are outlined for using it in the classroom and interpreting the results to improve teaching effectiveness. An analysis of the scores can identify discrepancies between a professor's approach to teaching and his or her students' learning behaviors. These profile behaviors can suggest in-class and out-of-class experiences that are active, participatory, visual, collaborative, techy, fast moving, quick thinking, rapid responding, emotionally freeing, and spontaneous. Directions for future psychometric research on the scale are suggested, including collecting evidence of validity generalization.


## Key Words:

Net Generation, Millennials, learner characteristics, Net Gener profile, generation gap, multimedia teaching, technology in the classroom, multiple intelligences, learning styles, learner-centered teaching.

## Introduction

To date, more than 40 books and scores of articles and chapters have been written on the Net Generation (aka Millennials). Those specifically related to education include Bonner (in press), Howe and Strauss (2000), Junco and Mastrodicasa (2007), Oblinger and Oblinger (2005), Palfrey and Gasser (2008), Pletka (2007), Strauss and Howe (2003, 2006), and Sturgess (2008). They describe the Net Geners' distinguishing characteristics from previous generations and their implications for all aspects of education.

Additional characteristics have also been derived from 10 major national and international surveys. A synthesis of the results from that research has yielded 20 learner characteristics and five social characteristics (Berk, 2009) typical of most Net Geners. However, there are many students who do not fit that complete profile in the U.S. and internationally. Social and economic class differences, especially, can account for the Net Geners' proficiency or lack thereof with the technology and their daily habits. Those differences may be evident in your classes. For the 18-years-old to 20-something group of current undergraduate and graduate students in this cohort (born 1982-2003), specific teaching strategies matched to those characteristics have also been suggested (Berk, 2009, in press).

## The Generation Gap

The current mounting body of evidence strongly suggests that your students probably behave and think differently than you do if you're a Gen Xer (born 1961-1981) or a Boomer (born 1943-1960). (Exception Noted: Since the upper limit of the Net Geners is 27 years old, there may be a few newbie faculty members and TAs who fit their students' profile.) Otherwise, for the rest of you, the generational disconnect may compromise your teaching effectiveness. Consider the following questions:

1. How closely do you embody the major characteristics of your students?
2. In what areas have you changed that narrow your generation gap?
3. What are the areas of greatest difference?
4. How can these differences affect your teaching effectiveness?

The more you can think like your students in planning HOW you teach, the more successful you can be. So, just how different are you from your students? In order to answer the preceding questions, I developed a scale that you and your students can complete in five minutes or less. A description is given next according to the following categories: (1) scale development, (2) scale uses, and (3) score interpretation.

## Net Geners Profile (NGP) Scale

## Scale Development

Based on my previous analyses of the Net Geners' characteristics (Berk, 2009, in press), I extracted 15 behaviors that capture a typical profile of most of these students. Those 15 have been assembled in the form of a rating scale (see Figure 1).

Figure 1

## NET GENER PROFILE (NGP)) SCALE

DIRECTIONS: Read each statement in the context of your own daily activities. If you do it MOST or ALL OF THE TIME, place an $\mathbf{X}$ in the YES box; otherwise, mark the NO box. Add the Xs in the YES column to determine your $N G P$ score at the bottom.

## IN MY DAILY ACTIVITIES:

1. I function at high speed or close to it in everything I do.
2. I use a PC/Mac, iPhone, MP3 player, and other hi-tech equipment.
3. I multitask easily with various tech equipment.
4. I use search engines like Google to find whatever I need.
5. I respond quickly to messages (phone, texting, e-mail, etc.).
6. I use Facebook, MySpace, Twitter, or other online social networks to

YES

$\square$ stay connected with family and friends.
7. I prefer to learn by trial and error rather than to read a manual.
8. I learn best by doing rather than by reading or observing.
9. I prefer to collaborate with others on projects rather than to work alone.
10. Working at home is more convenient than going to the library or elsewhere.
11. I download music, videos, and software easily, sometimes for free.
12. I contribute to my own Website, blog, or a video on YouTube.
13. If I'm not actively doing something, I get bored or impatient.
14. I enjoy being with people from diverse racial, ethnic, and cultural backgrounds.
15. I prefer visuals, graphics, and images to just reading text material.

Score 1 point for each $\mathbf{X}$ in the YES column. Write your total score in this box: $\square$

NET GENER PROFILE (NGP) CATEGORY:

$$
\begin{array}{cl}
13-15 & \text { High } \\
9-12 & \text { Moderate } \\
0-8 & \text { Low }
\end{array}
$$

COPYRIGHT © 2010 Ronald A. Berk, LLC

In order to establish the validity of those behaviors in scale form, the scale was pilottested with a small, but relatively diverse, sample of 20 college students (age 18-27; $75 \%$ male; $80 \%$ white, $20 \%$ mixed race; $75 \%$ U.S., $25 \%$ European) representing a variety of disciplines. The scale was distributed electronically. Participants were requested to simply submit their final scores and item numbers answered "NO" within a two-week window. All scores fell within the 13-15 range and 70\% of the sample produced perfect scores. There was no discernable pattern for the few items answered NO. Unfortunately, the sample size was inadequate to perform a comprehensive psychometric analysis of the validity and reliability of the scale scores.

## Scale Uses

There are three primary uses of the scale: (1) faculty self-assessment, (2) classroom student assessment, and (3) discrepancy analysis of faculty and students' results. When you complete the scale, you will have an indication of how similar or different you are to the survey research-based "Net Gener Profile." If you choose to administer it to your students in class or online, you will be able to obtain an overall impression of how closely your students resemble that profile. A comparison of your results with your students can reveal areas of discrepancy in the ways you think about your teaching methods and the how those methods are received by your students. Let's examine how the scores can be interpreted in terms of the preceding three uses.

## Score Interpretation

Faculty self-assessment. The total score on the scale will indicate how closely you fit the mold of the typical Net Gener-high, moderate, or low. If you score in the high range, you may have drifted into the world of the Net Gener without even knowing it. An item analysis of the NO responses will pinpoint the areas of greatest difference. It can furnish a diagnostic profile of the items that may link to some of your teaching strategies. Maybe this self-diagnosis will improve your understanding of Net Geners and yourself.

Over the past two decades, as you have grown with the technology and other cultural changes, you may more closely resemble the Net Geners. The thousands of students I have taught have had a profound effect on my professional and personal behaviors. The students with whom I continue to correspond have also had a major impact on my practices. They have all increased my understanding of their culture and behaviors. That knowledge has changed the way I teach faculty and students. During that change process, I mutated into a Net Gen Monster (NGM). Although I'm a Boomer, I have become more like them. Maybe you have gone through a similar mutation.

Classroom student assessment. Just how do your students stack up against the research-based profile? The total score distribution sorted into the three categories of high, moderate, and low will indicate the degree of congruence. The percentages for each category can be very informative. If large percentages fall into the moderate and low categories, an item analysis of the frequency and pattern of the "NO" responses will identify areas that may need to be addressed in your teaching. For example, on the use of tech equipment, search engines, and online social networks, the playing field may need to be leveled if these tools are used in your teaching.

Discrepancy analysis of scores. Another type of analysis can determine whether you and your students are on the same channel or the "Discovery Channel." Just compare your total score and item responses with your class' responses. Here are two levels of analysis to accomplish that comparison:

1. How does your score category compare to the class distribution? If most of your students are in the moderate and high categories, and you're in the low category, you're in deep trouble! Not really, but you're in "Discovery Channel-Land." You and your students are operating on different wavelengths.
2. How do your YES responses to the 15 items compare to your students' YES responses? This analysis can pinpoint areas that may need to be addressed in your teaching. Identify those areas and decide what changes need to made to increase the match between your methods and the students' learning behaviors and styles.

## Conclusions

Since you are all at different levels and seasons of your teaching careers, what are the most critical ingredients that will improve the quality of your teaching for your current students and those to follow? The 15-item NGP Scale of Net Gener characteristics can measure the extent to which you and your students fit the research-based profile. A comparison of the scores can identify discrepancies between your approach to teaching and your students' learning behaviors.

Admittedly, further research is needed to determine the teacher-student relationship on the scale and individual items. A large-scale field-test of the instrument with a diverse sample of faculty and their respective students in a variety of disciplines should also be conducted. Comprehensive analyses of the scale's psychometric properties and its validity generalization to different classroom populations are essential. Also, a study of the discriminant validity of the high, moderate, and low cut-off scores should be considered.

The 15 behaviors measured by the NGP Scale indicate in-class and out-of-class experiences that are active, participatory, visual, collaborative, techy, fast moving, quick thinking, rapid responding, emotionally freeing, and spontaneous. Your students must be ENGAGED in a learner-centered environment. I challenge you to administer the NGP Scale and use the results to make teaching adjustments to better meet their instructional needs.

## References

Berk, R. A. (2009). Teaching strategies for the net generation. Transformative Dialogues: Teaching \& Learning Journal, 3(2), 1-23.
Berk, R. A. (in press). Characteristics of the net generation: Technology implications for the classroom. International Journal on Technology in Teaching and Learning, 6(1).
Bonner, F. A., II. (in press). Diverse millennials in college. Sterling, VA. Stylus Publishing.
Howe, N., \& Strauss, W. (2000). Millennials rising: The next great generation. NY: Vintage Books.

Junco, R., \& Mastrodicasa, J. (2007). Connecting to the net.generation: What higher education professionals need to know about today's students. Washington, DC: Student Affairs Administrators in Higher Education (NASPA).
Oblinger, D. C. \& Oblinger, J. L. (Eds.). (2005). Educating the net generation. EDUCAUSE. Retrieved November 14, 2006, from http://www.educause.edu.
Palfrey, J., \& Gasser, U. (2008). Born digital: Understanding the first generation of digital natives. NY: Basic Books.
Pletka, B. (2007). Educating the net generation: How to engage students in the $21^{\text {st }}$ century. Santa Monica, CA: Santa Monica Press.
Strauss, W., \& Howe, N. (2003). Millennials go to college: Strategies for a new generation on campus. Great Falls, VA: American Association of Collegiate Registrars.
Strauss, W., \& Howe, N. (2006). Millennials and the pop culture: Strategies for a new generation of consumers in music, movies, television,, the Internet, and video games. Great Falls, VA: LifeCourse Associates.
Sturgess, M. (2008). Teaching the net generation: Reflections on the practice of blended learning in first-year post-secondary education. Saarbrücken, Germany: VDM Verlag.

