

# **Diversity Beneath the Skin: Using DNA Tracing to Explore Cultural Identity and Awareness**

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## **ABSTRACT**

The article describes an inductive exploratory initiative in which DNA tracing was incorporated into cultural diversity courses and how the participants responded to the results. Supported by an \$8,500 resource grant from AncestryDNA, a sample of some thirty participants enrolled in cultural diversity courses, embarked on an exploratory journey and challenged presumptions about their ethnic identities. Within a cultural diversity course framework, the participants consulted the literature and various theories regarding cultural identities. They also took an AncestryDNA cultural tracing test in order to discover more about their own individual ancestral heritage. The collection of individual cultural ethnic data yielded a striking collective discovery regarding the plethora of ethnicities that existed beneath six skins: “Black” “Brown” “White” “Yellow” “Tan” and “Red,” as well as, surfaced new cultural identities and countries with which the participants could subsequently associate and re-accurturate. The article also discusses the implication of DNA tracing on “White” identity theory and “Black” identity theory, stereotypes and presumptions of skin pigmentation, as well as implications for school culture, extended cultural family associations and character formation.

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## **INTRODUCTION**

There can be little question that social media has paved the way for new connections with people in the United States and other parts of the world, thereby exposing them to other cultures. From a “smart” portable handheld device, peoples, governments, and economies are being impacted by cross-cultural interactions on a daily basis. This “social shrink” of the world also provides a reflective context for educators to consider what they know about multiculturalism in the United States and abroad. Additionally, they have an opportunity to explore what they know about their own cultural identities and the degree, if any, to which their own cultural identities do or should play a role as culturally responsive educational professionals in places of employment and elsewhere. Cross-cultural exposure and interaction, furthermore, has opened the door to discussions regarding the commonalities and distinctions between cultural identities and racial identities, namely, those distinctions that genetically determined, such as skin pigmentation, and others that are socially acculturated, regardless of race.

People in general, educators included, have been socialized to accept cultural identities as ethnic categories rooted in perceptions and attitudes associated with skin pigmentations; racial categories such as “Black” “Brown” “White” “Yellow” “Tan” and “Red.” Skin pigmentations have been associated with racial categories, such as “Black or

African-American,” “Hispanic,” “White,” “Asian,” Middle Eastern,” and “Native American.” These racial categories, whether on forms or elsewhere, readily lack inclusiveness.

Census officials for the 2020 census propose the use of these major racial categories, but also plan to supplement them with representative examples of cultural ethnicities. So, for instance, the category of “White” would feature examples such as German, Irish, English, Italian, Polish, etc. Black/African-American would list examples such as African-American, Haitian, Jamaican, Nigerian, Ethiopian, Somalian, etc. For Hispanic, examples such as Mexican, Mexican-American, Puerto Rican, Dominican, Cuban, Columbian, etc. would be listed. Such examples would likewise be provided for Native American, Middle Eastern, Native Hawaiian/Pacific Islander, and Asian categories (Cohn, 2015).

Despite these attempts to bridge the gap between ethnic and racial identities, people generally describe themselves by the major racial categories associated with skin pigmentation, “Black” “Brown” “White” “Yellow” “Tan” and “Red,” when in fact there is much more diversity beneath the skin. The person who checks off “Black” may in fact be an “Oreo,” like the cookie—racially black on the outside, but culturally white on the inside.

Skin pigmentation notwithstanding, how does a person really know his/her ethno-cultural origin? First- or second-generation immigrants are the most likely to be able to trace the racial-cultural heritage by virtue of having newly arrived or by having arrived within a memorable number of years. For most other individuals, cultural identities have been inferred from the blood line of parents and grandparents, commonly accompanied by oral histories that may or may not be accurate or complete, thus adding various degrees of uncertainty.

As a side note, the participants in the exploratory completed a pre-project survey. In one of the questions, they were asked, on a scale from 1-5 (with 1 being “not confident at all” and 5 being “very confident”), how confident were they in identifying their cultural heritage. Over 85% of the participants said that they were either “confident” or “very confident” with their identification (which was also captured on video tape) – a confidence based almost exclusively on bloodline deduction and family oral histories. Of the 85%, there was about 5% who had done some extensive family tree research, and who were “very confident” was based on that research.

In 2013, professional golfer Tiger Woods articulated a confidence in his racial-cultural identity. He decided to describe his cultural self as “Cablinasian,” a composite of Caucasian, Black, Indian and Asian (Kelly, 2017). Based upon his skin pigmentation, however, it is easy to classify him as an African-American, when in fact there is quite a bit of diversity beneath his skin. One way to get to the diversity beneath the skin is to use DNA evidence.

The use DNA tracing as a scientific basis for rooting one’s cultural identity has been popularized by Henry Louis “Skip” Gates Jr, Professor at Harvard University and host of the television special “Finding Your Roots.” In like fashion, I pursued and received an \$8,500-dollar resource grant from AncestryDNA to explore, among other variables, the possibility of finding ethno-cultural diversity beneath the skins of in-service teachers who were in a pre-service principal preparation program. The exploratory study also allowed for discussion about pre- and post- perception of cultural “selves,” as well as enabled the development of an approach for incorporating DNA tracing in cultural diversity courses.

The AncestryDNA project was such a meaningful experience for the participants that I thought it was worthy of an article. The goal of this article, then, is three-fold: 1) discuss the design of the AncestryDNA project in a manner that allows for reduplication and extension, 2) discuss the DNA results of the participants as a whole, and 3) discuss the implication of the project for conversations around perception of race and culture among educational professions and others.

### **Exploratory Questions**

- 1) How might a cultural diversity course be organized around AncestryDNA tracing?
- 2) What range of ethnic diversity, if any, might AncestryDNA tracing uncover?
- 3) In light of the findings, what might be some implications for discussions around perception of race in the education profession and society at large?

## **LITERATURE REVIEW**

DNA has been used for a number of purposes. The medical and health fields have used it to isolate genes and establish correlations between causes and diseases, both physical and mental, thereby putting health care professionals in a position to provide innovative treatments. It has also been used to make generational health predictions and offer considerations for prevention (Steakley, 2012).

DNA has been used to connect criminals to crimes, as well as to exonerate the unjustly accused. In the legal field, Barry Scheck, member of the O.J. Simpson “dream team” and founder of the Innocence Project, has saved numerous unduly convicted individuals from death row through the use of DNA (Morrison, 2014). DNA has been used as a source of forensic evidence, and in social and human services it is readily utilized to establish or exclude paternity (Houck, 2015).

DNA, within an anthropological and social science context, has also been used to connect people of many cultures around the world to their ancestral legacy. A number of companies such as Family Tree DNA/Ancestry, AfricanDNA.com, Genelex/Gene-Tree, Gentest.ch, BritiansDNA, and Sorenson Genomics, just to mention a few, have specialized in human genetics and have used haplogroup analyses to help individuals explore their cultural legacy (Sommer, 2010). Over a million people have employed DNA testing to learn more about themselves and their families through using AncestryDNA alone (Swayne, 2015). For some it has been a life-changing experience (Arogundada, 2016).

While there is quite of bit of literature that speaks to the use of DNA tracing in the fields of medicine and criminal justice, there is a dearth of literature in the field of education, and understandably so. Even when working with well-educated adults in higher education, who are simply asked to spit in a small plastic tube, IRB (Institutional Review Board) inspection has to be passed. School-age children are not allowed to make themselves readily accessible for such AncestryDNA research due to politics and potential legal liabilities. Without access to such research subjects, it is virtually impossible, at least in the United States, to conduct and disseminate findings in the educational literature. This article, hopefully, will change that trend and galvanize researchers to contribute to the literature in this area.

## METHODOLOGY

This cultural exploratory study was inductive and evolutionary. There was no theoretical base to begin with, no independent or dependent variables to consider. I simply took samples of participants from three cultural diversity courses and constructed an exploratory inquiry around the AncestryDNA support grant. The exploratory project did, however, incorporate quantitative methods via a pre-project survey. The survey was designed simply to acquire context information such as race, gender, ethnics, confidence in cultural self-identification, level of anxiety about receiving the findings, and other inquiries to be used in another article. The exploratory also used qualitative methods, such as video-capture, picture share narratives presentations, and selected autobiographies. The data collected was not intended to take on a scientific research design, but was assembled and used as data informants to the process. What follows, then, is a description of the process and how the major components of the exploratory unfolded.

### Subjects

Thirty-three participants were selected from three cultural diversity courses. The exploratory included 14 men and 19 women. From a pre-project questionnaire, 67% self-identified themselves as African-American. 24% self-identified as European-American, 6% self-identified as African, and 3% self-identified as Middle-Eastern.

### Sample Collection

Proper legal documents were signed and sent to AncestryDNA and a date for the “Spitting Party” was determined. DNA samples arrived activated and coded by the primary investigator (the author) so that the results could be collected, stored, and saved for further analysis and future articles. The principal investigator also structured the data collection so that the results would be disseminated at the same time as a shared and celebrated experience. DNA samples were taken at a “Spitting Party,” followed by festive music and an “eating session.” The samples were mailed off the next day.

### The Interim

Between the collection of the samples and the dissemination of the results, a number of things occurred:

The principle investigator wrote a “Theme Song” to go along with the “Journey”. The participants went to the recording studio at North Carolina Central University and created a track of the song. The participants also went to the University television studio and recorded a video to the music track, thereby creating an AncestryDNA (amateur, but well edited) music video. We had a blast. The students participated in various lecture-discussions pertaining to the elements of cultures and perceptions of cultural difference. The themes were the same as those pertaining to their final assignment.

The participants created individual pre-result videos, including what they knew about their cultural heritage and what they expected the finding to be, as well as any anxieties they might have. They conducted autobiographical family histories using AncestryDNA-sponsored databases. AncestryDNA provided incredible resources and technical support for enacting the project. The participants also engaged in the “Picture Share”, at which they displayed pictures and talked about their family heritage.

### **Dissemination of AncestryDNA Results**

The DNA results were put in large manila envelopes with the names of each of the participants on them, but kept in the possession of the principal investigator until the dissemination event. A date was determined for the dissemination of the results and the participants were allowed to invite friends, family, and special guest to the dissemination feast. A little program was prepared that included the launch of the “Cultural Legacy Forum” and the debut of the music video. The students only had a “green screen” experience at the television and recording studio, so this was the first time they saw the final project. The “hams” loved seeing themselves on the screen.

A clinical psychologist, who himself was bi-racial, provided expert analysis with a personal touch about the range of emotion that may accompany new cultural identities. He also offered suggestions on how to process this new cultural awareness and identity. The project included an “Opt-out: Always an Option” provision, so that any participant at any time could select an alternative activity. The clinical psychologist was also available before and after the dissemination of the results. This idea was triggered by pre-result videos that featured anxieties around questions such as “what if I am not black?” and “what if I am not all white?”

The room was filled with family, friends, children, cultural music, and a diversity arrangement of cultural food. Individuals were dressed in cultural garb. The last part of the program included the disclosure of individual results. Each envelope was passed out and on the count of three the participants opened them to see their results. The room went silent for about 3 seconds and then erupted in celebratory surprise (all on video).

### **Post-dissemination**

The participants shared their results with one another and ate as they enjoyed their findings. In an adjacent room, participants videotaped their finding and how they felt about the results. Subsequence classes were filled with discussions regarding reactions the participants got from family members who could not attend and the reactions they received from individuals on Facebook and other forms of social media.

### **Final Assignments**

The participants completed two final assignments. The first was the “Continental/Country Connection.” Using the regions or countries disclosed in their DNA result, the participants were asked to make a Continental/Country Connection through a short cultural study. The study was to include the following: a) country name, b) brief history, c) geographical location/physical topography/weather, d) physical/natural resources, e) demographics, f) education and educational systems, g) religion(s)/world views, h) government/social political realities, i) economic and socio-economic classes, j) family structure and gender distinctions, k) language(s), l) dress, arts: music, dance, drama, m) cuisine and diet, n) traditions/customs, and o) other.

The second assignment was the “Service Learning Initiative.” The participants were asked to create a service learning project that they would carry out in a country disclosed in the AncestryDNA results. It was the hope of the principle investigator to secure a large grant in order to sponsor a few students to return to the primary country disclosed and conduct a service learning project (all would have been videotaped). The large grant funding could not be secured in time; however, the principal investigation did complete the

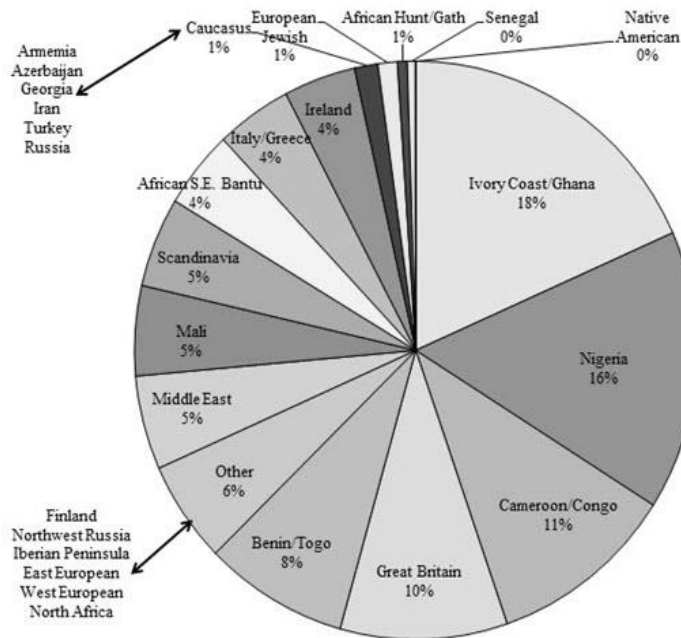
cycle by returning to Togo, West Africa (his ancestral origin) to teach over eight hundred children in two schools.

### THE ANCESTRYDNA RESULTS/FINDINGS

The results of the study affirm the initial “exploratory” hypothesis that beneath the racial classifications of Black” “Brown” “White” “Yellow” “Tan” and “Red” there is a range of ethno-cultures to be found, both within and among races. Beneath “White” skin, a predominance of Anglo, Irish, Italian, and Scandinavian ethnicities was identified. There were other European ethnicities identified under “other” which included Polish, Russians, and Czechs. There were no “Brown” ethnicities, and none expected in that there were no self-identified Hispanics that participated in the exploratory. Under “Black” the diversity spread across the continent of Africa.

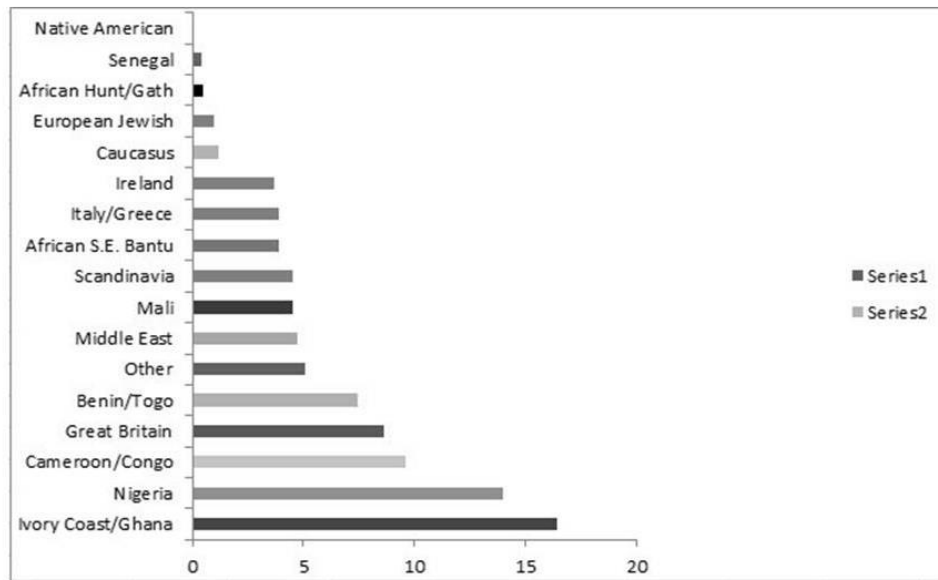
Also, as expected, there was only a small representation of “Tan” from the Middle East. One of the most surprising findings pertained to Native Americans. In the pre-project survey, a number of participants were “confident” and very “confident” that they were of Native American descent. As a group, however, this was not the case. The diagrams below support the “exploratory” hypothesis regarding the range of diversity beneath the skin. Unfortunately, there were no Native Americans, Hispanics, or Southeast Asian participants. Their absence in the exploratory, however, was representative of their presence in the School of Education at the time of the study.

### Diversity beneath the Skin



CLP-Chart A-01

## Diversity beneath the Skin



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### IMPLICATIONS FOR DISCUSSION AROUND PERCEPTIONS OF RACE AND CULTURE

What became clear from the exploratory was the reality that there was a rich ethno-cultural heritage beneath the skin pigmentations of “Black”, “Brown”, “White”, “Yellow”, and “Tan” individuals. These cultural heritages, however, remain hidden until cultural interchanges occur, which is usually after men and women of color are largely judged as “outsiders” by the color of their skin, unless the first glance is pre-empted by sub-culture indicators such as attire or language. Cross-cultural exchanges are required to get beyond perceptions and attitudes associated with race. The participants themselves, for the first time, went beyond first-glance race presumptions and engaged each other in totally different conversations. The simultaneous dissemination of participant results produced immediate conversations around ethnicities beneath the skin, rather than conversations around race.

Some European-American participants were surprised as well, but most of them experienced a confirmation of family narratives. British, Scandinavia, Italian/Greek, Irish, Polish, and Jewish were the predominate ethno-cultures of the White participants. It was my hope that the European-American participants, whose ethnic group dominates the education profession both as teachers and administrators, would experience a sensitization, rooted in a reconnection and empathy with the historical narrative of their own ancestry—one replete with racial discrimination during historical periods when white skin did not always equal “white privilege.” An exploratory such as this one could serve to nurture values for the ethno-cultural identities beneath “white” skin, as well as values for skins of

color in a way that may prove to be culturally redemptive, particularly in the school environment when the cultural deconstruction and reconstruction is expressed in equitable action.

The Whites who participated in the exploratory began to see themselves as more than white—as whites connected to a sub-cultural ethnicity. Almost all of the whites, particularly those who did additional research, committed themselves to visit the country of their primary ethno-cultural origin. The exploratory nature of the project, therefore, is likely to have implications for “white identity theory,” particularly as influenced by DNA tracing. “Whites” can choose, based on scientific data, to refer to themselves as “European-Americans” as a part of white identity re-construction.

The findings of the project may also have implication for “black identity theory,” by challenging and substituting notions of a “plantation self- a Toby.” By the term, I am referring to a construction of self rooted in the 200 years of the Negro past (Herskovits, 1941) rather than a more pan-African continental “self- a Kunta Kente” (Haley, 1976). Are you Kunta or Toby? The former represents a pride with one’s ancestral self. That latter is replete with shame built atop the slave-master dichotomy. The “Clark studies” speak to that internalized negativism.

The use of DNA tracing may have a deconstructive impact on black identity theory. The psycho-social paradigms and pathologies of the negative “self” in the Clark Studies, (Clark, 1947) may have to yield to the scientific base evidence of an identity rooted in DNA tracing. African-Americans no longer have to identify, consciously or unconsciously, with the “black doll” – the bad doll. DNA cultural tracing offers the person of color an option to scientifically call oneself a “Cablinasian” or something else. African-American students can be less concerned with “acting white (Ogbu, 1986). They can have a scientific base to “act Nigerian or Malian”, whatever that means. The exploratory nature of the project, therefore, has implications for “black identity theory.” The DNA results of one African-American participant identified her to be 98% African, which made her more African, perhaps, than African-American.

Throughout the civil right movement and again in the 1980s, there were particular conversations around whether dark people of color should refer to themselves as “Black” or “African-American.” The AncestryDNA exploratory provided the participants a context to conclude, “I am British because there is a Brittany” or “I am Irish because there is an Ireland”. Some participants of the darker hue articulated that they are conclusively African-American and connected to Africa, just as Jews are connected to Israel or Germans are to Germany. For them, they do not originate from the country of “black.” The results of the exploratory thus have implications for identity theorizing. Indeed, the term “African-American Identity Theory” may prove to be the forthcoming and more politically correct language.

The findings of the exploratory also have implication for family cultural identity reconstruction. The participants of African descent were surprised by the apparent “family-told” mythologies that did not match the DNA evidence. An overwhelming number of African-American participants were told that they were of Native American descent; some could even name a tribe. For even the most “confident”, however, the DNA evidence very clearly showed no traces of being Native American.

Foster and adopted children without family roots may be able to find them in an extended cultural family through DNA discoveries. Ancestral communities in the United



States and abroad could very well provide an extended family culture venue for biologically displaced individuals, particularly for those who cannot rely on deduction of bloodline or oral family histories. Foster and adopted children who may never know their parents, grandparents, or great-grand parents can use DNA tracing, get some sense of their cultural heritage by connecting to their culture and place of likely origin.

## CONCLUSION/SYNTHESIS

In conclusion, I would like to opine another implication of the AncestryDNA exploratory that should be affirmed in schools and elsewhere. The exploratory has implications for what I would refer to as “character beneath the skin.” It seems to me that while advocating for multi-cultural relevance and appreciation, the notion of “character beneath the skin” must be a part of any cultural analysis, lest we blindly admonish cultural pathologies in the name of being culturally equitable. The affirmation and celebration of culture is important inside and outside the school community. It is difficult to respect anyone from any culture whose character is deemed deplorable.

I am fully aware of the fact that there are behavioral expressions and norms that are valued as “character” in one culture but deplorable to another. These cultural clashes, conflicts, and incongruences, however, must not be used as excuses for avoiding continual cultural deliberative exchanges. Let’s work out our cultural differences, rather than run from them, and avoid perpetuating pedagogies of oppression (Freire, 1990) because they provide an easy escape from cultural confrontations. Cultural riches are assets that should be celebrated. Overcoming the challenges that mitigate our enjoyment of them should be a fight worth undertaking. Perhaps, more importantly, expecting some trans-cultural notion of “character” is reasonable. It is my hope that we, the international community to which we all belong, will not be judged by the color of our skins, or the diversity beneath our skins, but the content of some construct of character.

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