



***Young Adolescent Minds and Their Search for Individual Identity and Peer Group Affiliation  
in the 21st Century Digital Age***

By Daryl E. Bradshaw, 2013 CTI Fellow

Mallard Creek High School, Charlotte, NC

Recommended for:

Psychology, AP Psychology, Sociology, AP Human Geography, Statistics, and Ethics  
High School courses grades 9 through 12

**Keywords:** Identity development, identity crisis, neuroscience, adolescent development, risk taking, peer pressure, group affiliation, and teenage social networking.

**Teaching Standards:** [Implementing Common Core Standards](#)

**Synopsis:** Students today need to prepare academically and socially for the challenges of the 21<sup>st</sup> century by developing critical thinking, scientific methodology and personal awareness. This unit has students analyze past theories and compare them to current theories on identity development and the role of groups on individual behavior. It also has the students doing field research on their peers which will inform them on the power and pitfalls of scientific research. Students will deal with heroic and tragic uses of their omnipresent digital world so they can better navigate their own future opportunities and labyrinths. Students will be asked to learn to communicate in open dialogue, use intellectual debate, apply intrapersonal reflection, uncover troubling stereotypes, and embrace the power of their adolescent brains. The curriculum unit provides a platform for personal growth and social awareness as the students engage in conducting and analyzing their own research and drawing their own conclusions.

I plan to teach this unit during the coming year to all of my 197 students in AP Psychology and Regular Psychology comprised of an almost equal number of sophomores, juniors and seniors.

I give permission for the Institute to publish my curriculum unit and synopsis in print and online. I understand that I will be credited as the author of my work.

# **Young Adolescent Minds and Their Search for Individual Identity and Peer Group Affiliation in the 21st Century Digital Age**

*Daryl E. Bradshaw*

## **Introduction**

Teenagers face incredible opportunities and disastrous perils which will shape their life stories and they should be trained to recognize the biological, psychological and social group confluences which can trap them or free them.

## Demographics

Mallard Creek High School serves about 2300 students in grades 9-12. MCHS is located in Charlotte, North Carolina, and serves a diverse population that has both affluent neighborhoods and low socioeconomic housing in our zone. Our school is comprised of 61.1% African-American, 24.6% White, 7.6% Hispanic, 4.6% Asian, and 2.2% other. 42.5% of our population receives free or reduced lunch. 81% of our students performed at or above grade level on all composite tests (2012). Our schedule is a combination of 90 day courses with block or alternate day scheduling of 90 minute classes. While we have a relatively active PTSA and SLT, the majority of our parents do not have much direct parent-teacher contact unless teacher initiated. I teach four sections of AP Psychology yearlong on an A-day/B-day schedule. Over the last three years my AP classes have averaged about 34 students in each section. The AP Psychology students have now averaged above the local, state, and national averages on the AP Psychology College Board Exams for three years in a row. The majority of these students are extremely performance goal oriented and self motivated to maintain high grade point averages. I also teach one block of the regular elective Psychology course each day for each semester. The majorities of these students are college bound and have a reasonable sense of self-motivation. The classroom focus for both courses is easily channeled into productive discussion and new ideas. Mallard Creek's diversity offers an excellent opportunity for collecting data and doing research on how today's latest generation will come to terms with an incredibly complex new world of social, personal and biological confluences to inform and guide their decisions. The community and parental support is tepid but my students seem to thrive in their more challenging courses and when asked to develop critical thinking skills.

## Rationale

My passion is to develop a model for teaching my students something which can perhaps inform their decision making, guide their personal journey, and assist their navigation through today's social labyrinths. My students struggle with many of the same prepubescent perils and adolescent anxieties their parents faced as they mature physically, emotionally and socially into adults. Yet our social world is changing so rapidly we are not even sure what this generation will face as the next big social pressure dilemma. In fact they seem to be changing so fast we can't even pin a

new name on their generation with monikers like Gen Z and Gen Tech which are not likely to stick around long enough to become useful because this generation is too fluid to label yet.

Our neuroscience informs us of the previously observed, and now scientifically confirmed, changes in the attitudes and behaviors of teenagers. (1) Their risky behavior worries and confounds us, so we are constantly telling them to change to be more adult, but now we know they truly do not have the equipment to be adult. The new science should not excuse bad behavior but it can explain the incongruities. We must recognize the emotional, social and physical growth of teenagers as confusingly inconsistent yet maturing toward adulthood at the same time. So if we can make changes to how teens deal with their many challenges maybe we can encourage two paradigm shifts and focus on a third important challenge too. First we would hope to see them develop alternate risk taking urges based on the neuroscience of adolescence and the social expectations of teenagers rather than the current paradigm of just risk avoidance without risk replacement. The class will also hopefully recognize and study how teens might develop healthy identities and positive group affiliations with critical analysis of how their current paradigms for each are socially constructed. Finally we would encourage a third focus and second paradigm shift by having students recognize the advantages and dangers of today's technological innovations shifting away from an innocent ambivalence and naïve acquiescence to an healthy skepticism and insightful vigilance as they mature in today's cyber world.

Our emotionally charged teens search for their identities in a world unlike anything sociologists or psychologists, or even science fiction writers, would have dreamed of just a few decades ago. As social institutions, schools are very similar today as to thirty years ago, but the underlying cultural changes and emotional conflicts center around a digital age and internet world we do not yet understand, and this directly affects every student. We clearly know how different the adolescent brain is than both their child's brain, and even more specifically how different it is from their future adult brain, and therein lies the importance of this information: we must find some way to deliver these young teens through the difficult and trying years of adolescents but we cannot carry them through this period as if they are still children for they will rebel defiantly or remain immaturely dependent. We must make sure they have safe passage but we cannot cocoon them from the complex challenges of their own making nor the incredibly difficult choices of their evolving culture, especially in this new digital world.

I fear today's teens may sink more quickly into despair and see their situations as more desperate than their parents because the world holds so many more uncertainties, even presumably static relationships, such as high school clique formation and small group influences on individual behavior, seem to be changing daily. Because of the social networking and online accesses to adult material, many teens are engaging in adult behavior with adult consequences using adolescent sensibilities but immature adolescent emotionality connections with an under developed prefrontal cortex. This can lead to bad decisions by many teens and their peers.

Recently a twelve year old middle school student committed suicide after former classmates used twitter to taunt and bully her to death. (2) The fact is preteens and teens have faced bullying since school doors opened and neighborhoods had streets, but the facelessness anonymity of social networks seems to have raised the phenomenon to new lows. Identity development also seems to be more perilous and demanding in the sometimes vicious atmosphere of middle school and high schools than ever before.

So what are we to do for our young people? Many still have that childhood lightness, bright with the glow of optimism and enthusiastic with the energy of wonder, but will the pressures of peers, the stresses of society and the demons of self doubt burnish the shine down to little more than a glimmer of hope? So we MUST parent and teach for the best possible outcomes for our youth, but we cannot do it for them? I frequently remind my students that the very best parents have the least direct influence on their adult children's behavior sets and personality traits, as evidenced by how the acts and attitudes of siblings can be wildly different in the absolutely best home. Many students and parents curl brow and purse lips when I say this to them for the first time. However, when they stop and think about what it means to raise a child so well that the child will become their own person and not some mindless clone, they realize they will forever cherish the vital individuality and the uniqueness of character in each child. Judith Rich Harris' *The Nurture Assumption: Why Children Turn Out the Way They Do* is an excellent accounting of the current research and supports the need for parents as protectors and providers until the chicks develop their own wings and fly free to their individual heights. (3) The very best parents nourish and nurture but they do not mold and manipulate their daughters and sons growth. So they must be a part of getting them healthy and safely to adulthood but they cannot kidnap their adolescence even if it seems like the best or easiest way to protect them.

This is true for teachers too! The best teachers do not determine how much or little a student learns, that decision is left to the student, and so we can only provide the best opportunities and most appropriate lessons for them to engage in their own learning and decision making. For all the suspicion and confusion the recent adoption of Common Core Standards has caused and the subsequent outcry about the testing they plan to adopt, the common sense and real life application of psychological and sociological research to our students' learning and life choices may never be more relevant. Sarah-Jayne Blakemore recognizes the incongruities between the adolescent brain and biological changes with respect to today's classical pedagogies and suggests education may need to change to reflect new paradigms.

“The idea that children who have reached sexual maturity should still go to school and be educated is relatively new. And yet the research on brain development during adolescence shows that secondary and tertiary education is vital. The brain is still developing during this period, the brain is adaptable, and needs to be moulded (sic) and shaped. Perhaps the aims of education for adolescents should change to include strengthening of internal control, for example, self-paced learning, critical evaluation of transmitted knowledge and meta-study skills.” *The Learning Brain: Lessons for education.*(4)

Once called the “information highway” today's internet might equally be known as the “misinformation subway”. Deceptive and devious in too many instances, and dangerous and destructive in some other ways, the internet connections are unstoppable, so today's students must make informed, critical and skeptical conclusions about what they see, hear and read in their digital world today. Teens must decide for themselves most of their behavior and come to terms with their own personality but perhaps we can arm them with the better cognitive tools and social skills for the twenty-first century society. Students need desperately to investigate their

world, evaluate their person, and create their own identity as they move forward through the ever changing twenty-first century social storm of change!

## **Objectives**

### Student outcomes

Students generate conclusions and theories, both personally and collaboratively, based on research methodology which can be replicated in other schools and future classes.

Students develop self awareness which will hopefully lead to solid self efficacy rather than inflated self esteem as it pertains to affiliation in groups and identity development.

Students develop critical thinking skills for the twenty-first century which unmask the clear and present dangers of the online world before they get hurt or hurt others.

Students learn how to navigate the digital world for personal growth, and maybe global change, without being duped by imposters and pretenders or harmed by unintended consequences.

Students take informed and rational risks which add to the quality of their life experiences and the fabric of their peer community, without succumbing to peer pressure and risky shifts.

### Common Core and State Standard Objectives

Our objectives should meet some of the new needs our students face in this digital world while addressing the many adolescent neural changes. Fortunately the common core and course of study in psychology are readily married to the objectives of these student outcomes. The Common Core Reading standards for English Language Arts and Literacy in History/Social Studies which will be met in the unit plan are: 11-12 RH 2 for summarizing central ideas from primary and secondary sources; 11-12 RH 6 for evaluating differing points of view by examining the evidence; 11-12 RH 7 for integrating information from diverse formats and media; and 11-12 RH 8 for evaluating an author's theories with relevant or even new research. The Common Core Writing standards for English Language Arts and Literacy in History/Social Studies which will be met in the unit plan are: 11-12 WHST 1.a for writing arguments focused on discipline-specific content by having students establish and support alternative or opposing claims in logical sequences; 11-12 WHST 1.b for writing arguments focused on discipline-specific content by having students focus on anticipating an audience's point of view and defending their claims; 11-12 WHST 2.a for writing an explanatory text with research procedures and technical processes on organizing tiered and diverse evidence; 11-12 WHST 2.b for writing an explanatory text with research procedures and technical processes on using quotations, concrete details and extended informational resources in reference to the audience point of view; 11-12 WHST 6 for using technology and the internet to publish and produce new written arguments; and 11-12 WHST 7 for conducting an inquiry based investigation written to prove or disprove a particular hypothesis. The Common Core offers the opportunity to turn our classrooms into research labs and this should serve the students in their collegiate studies, career pursuits. (See Addendum)

We will also meet many of North Carolina's newly revised State standards for Psychology, which are sort of aligned with the Common Core Standards. The state standards to be met will be in the Research Methods (12.R.1), Biology (12.B.1), Human Development (12.DE.1), and Sociocultural (12.S.1) essential standards. Details for these will be in an addendum too, but in large measure they reflect the common core and will be apparent in the

addendum's explanations as to where they fit in the different approaches for this curriculum unit's design.

### Classroom Objectives

- **First:** Have students and adults shift their attention from just risk avoidance to realistic risk assessment and rational risk replacement based on current adolescent neuroscience. It's easy to say what teens shouldn't do, but it doesn't inform them what they should do with all that adult hormonal energy or new intellectual curiosity. Replacing the reactionary deterrent paradigm with a rationally daring paradigm will serve our youth and our community.
- **Second:** Have students help me shift the discussion of adolescent identity development from the many decades old theories with fresh assessment and culturally relevant models which fit the twenty-first century. Students will devise and implement studies of classmates to categorize the particular groups which shape personal and social identities. In studying their peers the students will also be guided through a review of past theory on adolescent identity developed and some more modern models while they identify the characteristics of today's youthful identity development. The students will evaluate and develop their own evidence to support, refute and/or revise Alexandra Robbins' Quirk Theory for high school "cafeteria fringe" to future "celebrity fame" achievement and alternative identity developments. (5) Finally the students will use their own research, categorizations and models to evaluate their own personal identities.
- **Third:** Have students (and society?) shift from a passive acceptance and shrugged presumption that ALL digital, and technological advances are innovative improvements and inevitable progressions, to an active process of critical analysis and deep questioning of the value and rewards as well as the dangers and pitfalls of technological progress. Today too few adults, much less teens, challenge the convenient and cool advances in digital devices and social networking, but evidence continues to pile up, in the form of creatively stymied students to cyber bullied suicides, that our digital devices can be deadly vices and our social networks can be societal nooses.

By accomplishing these objectives the students will hone their technical savvy and improve their real world perspectives to provide invaluable tools for their generation's challenges. An additional skill set will hopefully be a reminder to use and appreciate how important reading and writing skills will be for their college and career success. Finally it is my sincere hope my students will become more cognizant of the dangers as well as the appropriate uses of their digital devices and they will question the perils in an unrestrained e-world of power and persuasion. Perhaps this will be the generation of heroes without capes and masks just smarts!

### Teaching Strategies

For this unit I will employ several new strategies interwoven into some of my previously successful traditional strategies to provide the students their best opportunities for learning! Team work, field research, adolescent neuroscience, internet resources and personal

introspection will add to the Socratic seminars, lively discourse, informative lectures, reading assignments and writing skills as the fabric for the curriculum unit.

#### I. Strategies for learning neuroscience, risk taking and risk paradigm shift.

##### *Neuroscience and the Teenage Brain: Rebellion and risk taking revised.*

We will learn lessons about the neuroscience of prepubescent and adolescents to inform both my students, and perhaps their parents too, about the risks of, well, risky behavior in a context of replacement rather than deterrence. Textual readings from David Myers course text *Myers' Psychology for AP* will lay the foundation for understanding the basics of human and adolescent neuroscience as students begin to develop a cognitive map of the brain's main structures and functions, as well as a comprehensive understanding of the change in neurotransmitter levels, synaptic gap potentiating, hormonal fluctuations, grey matter pruning and prefrontal lobe cortex development. (6) They should be able to answer fundamental questions about their brain and it's functionality before we move deeper into the unit.

After we have established a good foundation we will use a TED talk by Sarah-Jayne Blakemore: "The mysterious workings of the adolescent brain" to begin to ask questions about what happens during adolescence to make teens more imprudent risk takers at precisely the same time as they are developing remarkably improved rationality. (7) Her talk should captivate and motivate student inquiry into the role of the brain in making good and bad decisions, which paradoxically puts them at greater risk with less recognition of the dangers. Students will be encouraged to ask and answer probing questions about the behavior of their peers and by extension their own behavior. After this discussion we will look at another compelling video.

Ralph Adolphs: "The Social Brain" TED talk will be used to engage students as they will be expected to predict why some teens face much more difficulty in high school than earlier grades. (8) The students will also be asked why the opposite is seldom true as it is a rare exception when the poor performing middle school student becomes the successful over achieving high school student. This assignment will foster independent critical thinking skills and promote writing synthesis of ideas and information to support an argument too. But the most compelling strategy will be to ask students to imagine and examine the possibility of change in their own life and personal behavior.

The students will use a Fishbowl Socratic seminar to closely examine the most current neuroscience for adolescents discussing Laurence Steinberg's journal article "Should the Science of Adolescent Brain Development Inform Public Policy?" Steinberg does an excellent job synthesizing the most current research on teen brain changes, functional differences and how this knowledge informs our use of the new neuroscience on adolescents. The round table discussion of the article should give students an opportunity to explore how teens and parents might appropriately use the revelations. The discussion should revolve around the more dangerous and daring teen risk taking using Steinberg's evaluation on risk-taking too. (9) I hope they will begin to apply the lessons to their own real life situations. A possible quotation for discussion would be:

"The fact that the adolescent brain is still developing, and in this regard is less mature than the adult brain, is normative, not pathological. Adolescence is a developmental stage,

not a disease, not a mental illness, or defect. But it is a time when people are, on average, not as mature as they will be when they become adults.” Steinberg, *Should the Science of Adolescent Brain Development Inform Public Policy?*(10)

This should be a discussion culminating in some debate about what we should do with this new knowledge about the neuroscience of our future leaders and criminals. Students will be assigned to either support severely limiting teen decision making and restricting independence versus allowing unfettered independence and accepting personal responsibility. The class assignment will ask students to really think about the consequences of teen behavior which involves greater risks but also focus on the ramifications of making social policy or parental control changes to protect teens from themselves. The students will present short arguments and then have to defend their views in a brief debate. They will then be challenged to look for and even predict possible research methods which might support their arguments.

*Shifting the risky shift of teens from harmful or hurtful behavior to heroic or helpful behavior.*

Changing paradigms will require the students to actually engage in new ways of thinking based on the very lessons of how their thinking has been altered by puberty and society. Encouraging students to become rebels with a cause to assuage teenage risk taking needs and to curb their impulsive curiosity might not fit neatly into the Heroic Imagination Project (11) founded by Philip Zimbardo, some 30 years after his infamous Stanford Prison experiment, but then again teenagers don't fit neatly in most molds. Zimbardo's project could provide a guide to how we might see young people find outlets for their energy and enthusiasm for novel and even risky behavior as they challenge conventional wisdom and fight for a better world. Learning to turn curiosity for risky destructive behavior toward risky social change will require the students to read and assess Zimbardo's theories with a critical mind and reach conclusions about the veracity and validity of such programs. The class will have already looked earlier in another unit at why the drug program DARE failed to prevent drug use among teenagers and will be asked to predict the success of the Heroic Imagination Project. They will also be asked to write up a brief proposal for how to empirically measure the success of the Heroic Imagination Project program using research methodology.

Tina Rosenberg's *Join the Club: How peer pressure can transform the world* might also inform students on how they might use group influence and individual leadership to join peers in revolutionary positive pursuits. Her review of how some groups have achieved remarkable achievements gives us case studies the students could read and use to construct similar models in their own communities or neighborhoods. The focus will be on her chapter "The Calculus Club" in which she gives the example of a very successful (at least based on the thin empirical methods and performance analysis so far available) program for bridging a wide gap in the performance of white and Asian students compared to black and Hispanic students in college calculus. (12) After introducing the club, students will examine the possible changes suggested by Rosenberg as the reason the student's grades became so much better in such a short period of time. They will be asked to explain why it would or would not work in our own classes by exploring the similarities and differences between college studies and high school courses both for group and peer pressure dynamics. The students should be encouraged to defend their propositions and predictions using the information and research from Rosenberg and their



textbook too. Creative and unsupported suppositions could be the basis for future research by the students but should be dismissed during the debates.

II. Strategies for learning about identity development, group dynamics and how to critically review social psychology theory.

*Doing field research on adolescent identity development and group affiliation using scientific method.*

Students will conduct a social psychology study on students using field work on campus. Students will conduct the study as individual observers as they label individual identities and group affiliations. Before we study the theories of social dynamics for in-group development and developmental psychological theories for individual identity we will have students watch class mates and create their own categories and hypothesis. Rather than ask them to look for certain behaviors, characteristics or affiliations, the students will simply be asked to identify the different types of groups they see or the different types of individuals they see and choose their own criteria for assigning the groups or individuals labels. This is done to hopefully avoid having the students pigeon hole students into preexisting stereotypes but also forces the students to assume the role of an open minded investigator who has to report what is seen rather than fulfill a contractual mandate for certain information.

The students will literally watch and record the “identity” groups they observe at school in the cafeteria during lunch. This will be done with little guidance in order to get a broad and unfiltered view of how teens see their peers, but it might also offer an interesting view of how their personal social schemas work as they make judgments about peers. The results will then be gathered by the students and they will try to come to some kind of model for assigning labels that can be duplicated later by having each class come up with operational definitions.

After their research we will then look at the old theories of identity development by Erickson and Marcia to see if they still apply to modern teens. Marcia’s identity foreclosure comes to mind – today’s adolescent may attend college and pursue careers but lack the emotional maturity and personal awareness to fully develop their own identity especially if their peer groups also conform to social expectations of the presumed path forward. Equally informing may be a look at his identity moratorium where teens have a strong sense of self and are confident in their future but are unable to pursue them because of immature behaviors and delayed acceptance of responsibility. (13)

After their initial field work is done and they look at some of the old theories of identity development, we will look at some current research on high school identity development. In order to help identify how we might view and use behavioral, emotional or social characteristics to identify teen groups we will discuss Alexandra Robbins’ book *The Geeks Shall Inherit the Earth* about her version of “Quirk Theory” as it applies to modern high school students (and teachers). (14) Students will be asked to form small groups and then assigned to critique Robbins’ Quirk Theory from a student’s perspective. Hopefully without too much prodding they will become aware of the fact that almost all of Robbins’ theory is anecdotal and could be applied to any student who felt they didn’t fit in while in high school, hence to some measure we all have

enough self identified 'quirkiness' to fit into her broad definition. Robbins brilliant use of teen angst to get readers to identify with her characters is hopefully inspiring to my students, but I worry she may have duped us for the pursuit of professional goals rather than good science. After all, who among us did not at some point in our adolescence feel accused, out of place, alone, persecuted, awkward, outcast, left out, searching, strange, anxious, odd ball, nervous, misfit and like an 'outsider' in one way or another at school, in the neighborhood, at church or even in our own family? This does not completely diminish nor discount all of her work, but it hopefully will make students much more aware of how theories using anecdotal rather than scientific research may be unintentionally misleading.

The students will create questions for a diagnostic identity assessment and use themselves as participants. They will be encouraged to try to use online and digital use to the traits and characteristics by giving themselves the test and performing factor analysis of the results. Using statistical methodology and factor analysis we would create a questionnaire for determining the group affiliations or individual identities of students based on the formulas developed by the students themselves. These tests would then be given to classes other than the AP classes and we would try to compile data for enough students to insure some statistical significance. Understand that I am a natural skeptic and do not hold personality trait inventories in high regard, but if students actually see how the trait theorists can manipulate their questions to get the desired results it will inform them about how they should be weary of such tests and by extension much of the pseudoscience many of them (and adults) fall prey to online!

Eventually students will look specifically at how teens adopt identities and become aware of the types of influences which shape our cognitive and social schemas, which by extension will include them as well. Students will write about their own search for identity, their own sense of quirkiness and their own personal goals. My hope is this will allow their journey forward is a little more well informed and safer themselves and their peers as they prepare to enter the most rapidly changing generation in history!

### III. Strategies for learning how teens can survive and thrive in this generation's new technology.

Students will become more cognizant of the dangers as well as the appropriate uses of their digital devices and they will question the perils of an unrestrained e-world of power and persuasion. Students will be asked to keep a journal of their digital device use for a week and given class time to track specific habitual patterns of use, especially where they may be unaware of the industry tracking their personal preferences for targeted advertising. These journals will also assist in the development of an identity questionnaire too.

The class would also look at the enormous power and promise of the internet too. We would begin with Jack Andraka's TED talk. Jack is the teenager who won the most prestigious science award in the world for possibly revolutionizing pancreatic cancer screening and maybe all cancer screening. In the talk he enthusiastically embraces the incredible power of the internet to inform and teach ourselves great lessons which might change the world. (15) Students will evaluate the story by asking what could have gone wrong and why Jack's amazing breakthrough might NOT have happened either without the internet or in spite of the internet. They will have to defend their estimates of just how much luck was involved and how often an Andraka type

break through has not occurred because the fickle world of fate. This fate would be associated with the usefulness of the internet as a tool for advancement but also a deterrent to those who do not find the additional access and opportunity to pursue their science, invention or innovation.

Students will then share personal and online accounts of social media incidents of both positive and negative outcomes (and some will be determined to be non-consequential too) using their digital use journal. The students will be asked to examine these anecdotes for how they expose both our society's passive indifferences and personal patronage of digital devices and social networks in ways which may be regretful at best and deadly at worst. They will hear the story of 12 year old Rebecca Sedwick who killed herself after students bullied her online even after her mother had tried to remove her daughter's online social network contacts by taking down her Facebook and twitter accounts. The story also involves girls 12 and 14 who are facing felony charges in the case for the death of a minor through cyber bullying. (16) Students will also view a student produced montage of recent teen bullying and sexual assaults, in part caused by and, in some cases, shown on social network sites. Mallard Creek Movement students are producing a video to use to teach awareness and introduce a support group for student victims of bullying and sexual assault. The students will compare their personal accounts and experiences with the video to see where they think the social networking influences spiraled out of control.

The students will then use small round table discussions to process how they think this kind of thing could happen at their school and to their friends. They will be prompted to explore the possible links between the "good" and the "bad" of online social networks with an understanding that often they are so intertwined it would be nearly impossible to separate the two. Once they have delineated their good, bad and gray areas of online and social network use their groups will be prompted to establish parental control guidelines, personal use rules and social policy regulations they think might be effective in providing greater personal and social safety.

Finally the students will get a short lesson in how to detect and be more aware of misinformation and false advertising. The lessons will borrow from Loren Collins' Bullspotting: Finding Facts in the Age of Misinformation, a historical account of some of the most important but often missed lessons about how we are unfortunately duped not only out of our money but our health and common sense too. (17) Hopefully this will encourage students to see clearly the fact that while technology has many wonderful powers it is full of perils and pitfalls too!

### **Classroom Activities – these have been divided into three sections and could stand alone.**

#### **I. Activities for learning neuroscience, risk taking and risk paradigm shift.**

Day One: Students will review the key concepts of teen brain development with references to the David Myers' text we use for the AP Psychology class and they will be asked to predict the problems and advantages of these changes. Students will then watch the TED talk by Sarah-Jayne Blakemore: "The mysterious workings of the adolescent brain". They will answer the attached questions individually after watching this on Edmodo as an assignment with the understanding they will be prepared to discuss the physical nature of the adolescent brain in class.

Day Two: Students will watch the TED talk by Ralph Adolphs: "The Social Brain" in class because it will introduce a new topic about how the brain functions as our social barometer,

compass and detector. The students will be asked to focus on his explanation of the interplay between social perception then social inference with the brains vast ability for parallel processing. Following a brief lecture on the how this informs us as to how humans make very quick and persuasive impressions about other people and to evaluate our social relationships, students will be asked to write two short essays about how the brains feature detectors function in social settings using the following prompts:

- What do you think about when you see someone looking at you who appears to be angry? Imagine you have met a classmate casually and had a neutral response to them, but later in the week you see them glance your way in the cafeteria with what is obviously an angry expression, how would you interpret their facial expression?
- Given that humans are particularly astute at determining someone else's emotional state of being, is it possible we also learn to avoid letting others see how we feel by changing or avoiding social interaction? Imagine if it is your first day at a new school and you have to go to the cafeteria alone, what kind of expression would you wear and why?

These prompts would be totally open ended and no particular right or wrong answers would be assigned, yet they will serve two purposes. One, they will allow the students some intellectual freedom to think about difficult scientific inferences. Two, they get the students primed for thinking about how to observe and watch students in the cafeteria.

Day Three: Students will be assigned to a 'fishbowl' discussion on Steinberg's article, *Should the Science of Adolescent Brain Development Inform Public Policy?* pp. 67-78, for a forty-five minute session using a standard Socratic Seminar method of student lead dialogue and inquiry while students outside use a rubric to monitor their participation (attached). The teacher should only provide open ended questions to prompt the discussion. They will do the reading as an out of class assignment with only three questions to answer on Edmodo or in writing to be completed before the assignment (any student who fails to complete the assignment should be excluded from the center fishbowl and only be an observer).

The three questions to prompt discussion are: Remember NOT to lead them to your answers.

- What are the four structural changes in the brain during adolescence, two early on and two a little later, and what are three ways this changes the brain's functionality?
- Examine and explain the quotation "The fact that the adolescent brain is still developing, and in this regard is less mature than the adult brain, is normative, not pathological. Adolescence is a developmental stage, not a disease, not a mental illness, or defect. But it is a time when people are, on average, not as mature as they will be when they become adults."
- What are two pros and two cons of using current neuroscience in the case of Anthony? Should he be exonerated, why or why not?

The fishbowl should be tasked with either supporting severely limiting teen independence and giving teens a free pass for bad behavior OR allowed adult independence but with adult responsibility including financial self support; in other words they must argue to replace the existing system with an either or choice based on the current social and scientific knowledge. The fishbowl discussions should require the students to use evidence and references to the readings as well as the TED talks as they make their assessments and arguments.

Day Four: The students will once again refer to their text and be given a short lecture about risky shift. They will be encouraged to use the latest scientific analysis as to how and why we make bad decisions which are exacerbated by peer and group influences. Finally the students will view a short clip about Phillip Zimbardo's Heroic Imagination Project and read a brief excerpt from Rosenberg's Join the Club to kick off a teacher led discussion about the possibility of not replacing our current social structure as suggested in the fishbowl but making a healthy paradigm shift when faced with risky choices.

II. Activities for learning about identity development, group dynamics and how to critically review social psychology theory.

Out of Class Assignment: To be completed beginning this section of the Unit. Students will be divided as classes to conduct a field study on what they see as student group affiliation and personal identity for peers. Students will work independently and will later switch from groups to individuals if it becomes advantageous to do so for more data. Because we are trying to ascertain the most current and relevant teenage influences, the students will be given minimal guidance on what to record, but will be given cards with study criteria and ethical operational standards to give to any students concerned about being "observed".

Day one: When the students return with their observations they will complete a follow up rubric to synthesize their findings. Two areas of focus should be first to list and record their characteristic terms, labels and nicknames for individuals or groups. These will be collated and compiled into categories by the students in each class. The students will then make judgments about the prevalence and authenticity of their categories as they might or might not represent the population of Mallard Creek High School. As a classroom discussion we would further address how the students choose their group and individual identity criteria so we can establish operational definitions and predict if their criteria can or will be duplicated by the other classes when each switches over to group or individual assessment. We would call this the debriefing and I would challenge students to either use the four areas of determining what we think about others, which I use in my social psychology course, or to come up with their own theories. Most traditional psychology assumes we look at the following four areas to determine our impressions about others: how we decide people behave; how we interpret their appearance; how we judge their character; and who we think they affiliate with. All of these are interwoven, and never truly separate categories, but it makes it easier to discuss the possible influences and impacts of prejudgments and stereotypes, something important later when we ask students to critically analyze their own behaviors, appearances, affiliations and character traits. After reaching the categories, either using these four or adopting different ones based on class debate and advocacy for change, the class should write up their research using operational definitions so it can be published on the school website and the other classes can duplicate their process too.

Day Two: After they have completed their analysis and established legitimate conclusions we will look into the traditional theories of “Identity Crisis”. Eventually the students should be able to use Erikson’s stages of psychosocial development theory and Marcia’s identity development theory to compare the students they witnessed to these traditional assumptions. Even if these theories are outdated or undermined by today’s neuroscience, they still appear on the AP exams and in almost all introductory Psychology courses, so this will be an excellent opportunity for students to either find support for or against their theories with their own research analysis. After briefly lecturing on the basic premises of identity crisis and the four categories of Marcia’s model, students would be asked to complete the following assignment in groups of three or four.

- From the field work observations, identify two students who you think match each one of the four types of adolescent identity statuses in Marcia’s model:  
Identity achievement; identity foreclosure; identity moratorium, and identity diffusion.
- Explain the reason each has or has not gone through identity crisis and formation, and explain why they have or have not made a commitment to the roles and values of that identity.
- Finally, after and only after the group has answered the first two parts, the group should reach a consensus on the veracity of Marcia’s arguments for today’s generation. They do not have to come up with an alternative but must establish why they agree or disagree with his model.

Day Three: Students will look at a modern interpretation of identity crisis and an alternative model using Alexandra Robbins’ *The Greeks Shall Inherit the Earth: Popularity, Quirk Theory, and Why Outsiders Thrive after High School*, 2011. An emphasis will be on her “Quirk Theory” and the identities she gives each the seven case studies she follows in her book. (19)

‘Quirk Theory’ analysis and personality test development will start with case studies from the book with the students asked to give each character a new or similar identity based on those developed by our class. In a brief classroom discussion we will compare our selections to Robbins as a way to engage the students in open thought about these categories of ‘outsiders’ and their respective characteristics. Students will be asked if they could associate with some of these traits, with the eventual goal of having students either fit themselves into one of the groups or at least adopt one for the sake of the classroom activities. The students will be instructed to come together and give themselves a nickname, either new or previously used, and identify at least 12 measurable similarities they share more often than not, with an emphasis of trying to come up with traits they think are less likely to be frequent in other groups. These traits should include some mention of digital device use, internet use, social networking, or other technological similarities in their group. Also refer to appearances, affiliations, attitudes and cultural traits, such as music habits, diet choices, and lunch time behaviors.

NOTE: I am very confident most students will quickly identify with one or two of the student profiles and be able to easily grasp her theory. I am equally confident they will miss the fact that

almost all of them, and by extension almost all of her readers, will also make identity associations with some of the characters, which of course makes no one truly an outsider if the majority of us feel like we are outsiders in high school. I caution that this fact should be slowly and carefully uncovered for the students if at all possible lest you undermine the fact that personal evaluations of our own behavior, affiliations, attitudes and character traits are important in establishing goals and relationships. Nor do we want young teens to see their identities as somehow diminished by this major flaw in her theory, in fact it is a major flaw in all personality theories, and is an important lesson to learn, especially as we will next weave our way through the deceptive and sometimes destructive cyber world.

Day Four: Next the 'teams' will write 20 easy "yes or no" trait questions they think would elicit the same answers as they would give. This will be an attempt at creating a questionnaire using their questions on my other classes, and maybe a few more too, to start a factor analysis of test results for the purpose of creating our very own identity trait test. Students will have to create brief biographical snapshots of their identities so on the final questionnaires students can self-report which they belong to so the class can do factor analysis and see if indeed we can create such a test. This will provide the students some truly unique perspectives on how personality inventories and even mental health evaluations have been developed so they can gain even deeper critical thinking skills. The 'Barnum effect' will also have to be accounted for as we finish the test and do field tests on random students in our school. I would emphasize it is the nature of all researchers to try to prove their points, but it is the nature of all good research to find the truth. (18) There is in fact a fine line between scientifically healthy skepticism and opinionated dismissive cynicism. Remind the students that no matter what the results of our search for an identity questionnaire, the fact remains we all develop our own identity which will shape and guide our future so the introspective nature of this type of analysis is still with some merit.

Day five and six: Have the students give the tests to the other student in the class. Before you have them tally the results, have them predict how the other classes will score. When they tally the results they should do factor analysis to see which questions showed the highest predictive value. Remember the questions do NOT have to have validity just predictive reliability to create an identity inventory. Have each group come up with the ten questions which best distinguish them from the rest of the groups and your class with have developed an inventory. Now they can give the tests to other classes, score them on the questions that match their group, and have those students read the ten sentence group identity synopsis to see if they fit in that group.

III. Activities for learning how adolescents can survive and thrive technologically into the next generation.

Day One: Students will view the last TED talk of the unit as they watch the extraordinary story of the kid genius Jack Andraka when he wins the world's recognition for formulating an inexpensive and reliable cancer detection method despite the hundreds of doubters. Jack's central point, besides youthful resilience, is the fact the internet made his discovery and research possible through simple tools like Google to finding a sponsor through mass emailing. Students will be asked a bit of an odd question afterward however, not about the amazing saga of someone their own age writing a life story so young or the heroic number of hours this teen poured into

his search rather than his personal life or even about the fantastic future of cancer diagnosis. No, the question I will pose to the class, first to ponder alone and make some predictions, but then as a class is “What do you think the chances were for Jack to have failed? Or do you believe the internet makes this story inevitable?” Obviously there are no right or wrong answers, but my goal is to have the students wonder quietly and aloud about the role of fate and personal choice in determining outcomes, especially long term and intense goals.

This should be entertaining for the students to play a little “What if” with life’s big question of ‘fate’. Unlike Voltaire’s ill-fated *Candide*, today’s students can travel the world and ponder the meaning of destiny with the click of a mouse and the speed of magic, without risking life and limb, or can they? The students will have to answer the question as to how likely it is that Jack’s story is once in a life time or sure to occur again? What are the specific aspects and overall nature of the digital world you live in which informs you of your answers?

Day two: Students will write about their own personal and firsthand accounts of online use and social networking, and any other digital stories about successes and failures. They will be assigned to come up with three specific incidents, with at least one being a negative outcome. The students should be encouraged to be honest and willing to divulge what works and what fails in their digital world, so creating some form of anonymity will be very useful. My plan is to have students write or email me directly with their accounts of some form of intended or unintended consequences which were a direct result of using modern digital technology. These stories will then be presented to the class as anonymous and an open forum discussion will follow and hopefully we can classify them as potentially occurring again or being isolated instances. Obviously I will not discuss them all, but we will try to categorize them as to the form of internet, digital or social network incident they experienced. Once again the students will be encouraged to write about what comes to mind for them and not be influenced by my desire to disclose the truly dark nature of much of the internet and social media confluences.

Journal Assignment Instructions for Evaluating the Good and Bad Consequences of Technology  
This out of class assignment should be given with at least one weekend to assure some opportunity for the students to use and think about technology outside of school.

“Please email me or write in journal style about your personal experiences with technology. You should write about at least three incidents which occurred to you or you have firsthand experience with over the last two years. This should be written informally and in the first person, including at least one good and at least one bad outcome. Estimate what you believe the likelihood of these outcomes happening to other teens or people will be in the future. These accounts will be presented in class anonymously by the teacher for discussion, so provide as many details as possible for each incident. Due in 7 days.”

Day three: Students will now turn from the magical success of Jack to the macabre tragedy of Rebecca. Students will write a brief response to the following prompt:

- After a mother went to great lengths to shield her daughter from cyber bullying, after law enforcement and school officials became directly involved in the case, after she changed schools to avoid her bullies, and even after the bullies and their parents were investigated



and informed about the potential dangers of continued bullying, the bullies found her online again, and using messaging and texts, convinced her to take her own life at the age of just twelve years old. After her death, detectives found numerous searches online for ways to kill herself, social media probes about being ugly and overweight, and personal accounts with suicidal ideation, one profile titled “That Dead Girl”. Recently a twelve and fourteen year old were arrested as adults for felonies related to the death of a minor after the older girl posted on Facebook “Yes ik [I know] I bullied REBECCA nd(sic) she killed her self but IDGAF [I don't give a f---].” And as if this isn't the most disturbing possible kind of digital nightmare, the post got 30 likes in less than 48 hours, mostly from other students and friends of the two girls arrested. At one point in the two years of cyber bullying Rebecca did start her own page Facebook account as a way to fight back, Rebecca SedwickAgainst Bullying, but it didn't work.(20) Today the question you must ask yourself is “Will this happen again or is this just an isolated incident? Why or why not?”; “What are the specific aspects and overall nature of the digital world you live in which informs you of your answers?”; and “How would you compare some other areas we as a society have made great personal sacrifices for the technological advantages, such as traffic fatalities and car ownership, to the current digital developments?”

The follow up discussion will be somber and sad but informative and necessary. Our future depends on our teenagers and adults banding together to create medical marvels as Jack did but also to form alliances and make paradigm shifts to avoid the tragedies like Rebecca's. However once again it will be imperative not to decide for the students but let the students decide for themselves how this change will take place in their generation and for our twenty-first century.

**Additional Group Activity:** Identifying and applying Tuckman's Model of Small Group Development to the groups formed through the students' field work. See in Appendix.

**Extended Learning:** An optional piece, which we will do in our school, is to partner with a student group formed to raise awareness and offer victims support in the face of a the lack of student concern and awareness about cyber bullying, sexual harassment and suicidal ideation on our campus. The group will develop programs for student on student presentations using much of the information and case studies in this section, so my students may be able to inform their programs and perhaps even be an opportunity for recruiting new student mentors. The group Mallard Creek Movement will soon have social network and digital outreach programs you can find on our school website.

## Endnotes

1. Steinberg, Laurence. "Should the Science of Adolescent Brain Development Inform Public Policy?" *Issues in Science and Technology Online* (Spring 2012): 67-74.
2. DeMarche, Edmund. "Girls, 12 and 14, Arrested in Death of Bullied Florida Girl Who Killed Herself." Fox News. October 15, 2013. Accessed November 11, 2013.  
<http://www.foxnews.com/us/2013/10/15/girls-12-and-14-arrested-in-death-bullied-florida-girl-police-say/print>.
3. Harris, Judith Rich. *The Nurture Assumption: Why Children Turn Out the Way They Do*. (New York: Free Press, 2009)
4. Blakemore, Sarah-Jayne, and UtaFrith. "The Learning Brain: Lessons for Education: A Precis." *Developmental Science* 8, no. 6 (2005): 459-63.
5. Robbins, Alexandra. *The Geeks Shall Inherit the Earth: Popularity, Quirk Theory, and Why the Outsiders Thrive after High School*. New York: Hyperion, 2011.
6. Myers, David. Myers' *Psychology for AP*. (New York: Worth, 2011), 51-91.
7. Blakemore, Sarah-Jayne: "The mysterious workings of the adolescent brain" 2012 TED Talk: <http://www.youtube.com/watch?v=6zVS8HIPUng>
8. Adolphs, Ralph: "The Social Brain" 2013 TED Talk: <http://www.youtube.com/watch?v=nPj01uzRHY0>
9. Steinberg, Laurence. "A social neuroscience perspective on adolescent risk-taking." *Developmental Review* (March 2008): 81-86.
10. Steinberg, Laurence. "Should the Science of Adolescent Brain Development Inform Public Policy?" *Issues in Science and Technology Online* (Spring 2012): 67-78
11. Zimbardo, Phillip. "Heroic Imagination Project" 2010 TED talk:  
<http://blog.ted.com/2011/02/03/phil-zimbardo-and-the-heroic-imagination-project-ted-blog-exclusive-video/>
12. Rosenberg, Tina. *Join the Club: How peer pressure can transform the world*. (New York: W.W. Norton, 2011)
13. Myers, David. Myers' *Psychology for AP*. (New York: Worth, 2011), 450-452.
14. Robbins, Alexandra. *The Geeks Shall Inherit the Earth: Popularity, Quirk Theory, and Why the Outsiders Thrive after High School*.(New York: Hyperion, 2011)
15. "Jack Andraka: A Promising Test for Pancreatic Cancer ... from a Teenager." TED: Ideas worth Spreading. February 2013. Accessed November 24, 2013.  
[http://www.ted.com/talks/jack\\_andraka\\_a\\_promising\\_test\\_for\\_pancreatic\\_cancer\\_from\\_a\\_teenager.html](http://www.ted.com/talks/jack_andraka_a_promising_test_for_pancreatic_cancer_from_a_teenager.html).
16. DeMarche, Edmund. "Girls, 12 and 14, Arrested in Death of Bullied Florida Girl Who Killed Herself." Fox News. October 15, 2013. Accessed November 11, 2013.  
<http://www.foxnews.com/us/2013/10/15/girls-12-and-14-arrested-in-death-bullied-florida-girl-police-say/print>.
17. Collins, Loren. *Bullspotting: Finding Facts in the Age of Misinformation*.(Amherst, NY: Prometheus Books, 2012)
18. Myers, David. Myers' *Psychology for AP*. (New York: Worth, 2011), 498-499.
19. Robbins, Alexandra. *The Geeks Shall Inherit the Earth: Popularity, Quirk Theory, and Why the Outsiders Thrive after High School*.(New York: Hyperion, 2011)
20. DeMarche, Edmund. "Girls, 12 and 14, Arrested in Death of Bullied Florida Girl Who Killed Herself." Fox News. October 15, 2013. Accessed November 11,

2013. <http://www.foxnews.com/us/2013/10/15/girls-12-and-14-arrested-in-death-bullied-florida-girl-police-say/print>.

### Common Core Standards

Common Core Reading standards for English Language Arts and Literacy in History/Social Studies which will be met in the unit plan are:

- 11-12 RH 2 for summarizing central ideas from primary and secondary sources will be implemented by having students synthesize text and quotations from the Myers text, National Geographic's *Teen Brain* article and Steinberg *Public Policy* piece.
- 11-12 RH 6 for evaluating differing points of view by examining the evidence will be implemented by having students debate and reach consensus on Marcia's identity crisis model and Erikson's psychosocial stages of development.
- 11-12 RH 7 for integrating information from diverse formats and media will be implemented by having students do fishbowl Socratic seminars and class room discussions about the TED talks by Andraka and Blakemore.
- 11-12 RH 8 for evaluating an author's theories with relevant or even new research will be implemented by having students compare their own field research on individual identities and group affiliations with Robbins' *Quirk Theory*.

The Common Core Writing standards for English Language Arts and Literacy in History/Social Studies which will be met in the unit plan are:

- 11-12 WHST 1.a for writing arguments focused on discipline-specific content by having students establish and support alternative or opposing claims in logical sequences will be implemented by having students debate public policy and criminal defenses for teen behavior based on new neuroscience.
- 11-12 WHST 1.b for writing arguments focused on discipline-specific content by having students focus on anticipating an audience's point of view and defending their claims will be implemented by having students determine the likelihood of Jack Andraka's success and failure as a "What if..." critical thinking exercise.
- 11- 12 WHST 2.a for writing an explanatory text with research procedures and technical processes on organizing tiered and diverse evidence will be implemented by having students compile and write up the operational definitions for their own field work.
- 11-12 WHST 2.b for writing an explanatory text with research procedures and technical processes on using quotations, concrete details and extended informational resources in reference to the audience point of view will be implemented by having students compare their research on identities and groups with Robbins' *Quirk Theory*.
- 11-12 WHST 6 for using technology and the internet to publish and produce new written arguments will be implemented by having students use a personal internet use journal and a review of the consequences in particular of social networking.
- 11-12 WHST 7 for conducting an inquiry based investigation written to prove or disprove a particular hypothesis will be implemented by having students use both the field research and their internet use review for developing scientific method models.

North Carolina State Standards to be met will be using the correlated Common Core Standards.

- Research Methods (12.R.1) with RH 8; WHST 2.b, 6 and 7.
- Biology (12.B.1) with RH 2 and 6; WHST 1.a and 2.a.

- Human Development (12.DE.1) with RH 2 and 8; WHST 1.b, 2.b and 7.
- Sociocultural (12.S.1)with RH 7 and 8; WHST 1.b, 2.b., 6 and 7.

### **Bibliography for teachers**

Adolphs, Ralph: “The Social Brain” 2013 TED Talk:

<http://www.youtube.com/watch?v=nPj01uzRHY0> Another excellent visual and informational review of how we are neural sponges for social and peer influences.

Adolphs, Ralph. “The Social Brain: Neural Basis of Social Knowledge.” *Annual Review of Psychology* (February 2009): 693-716. A good if somewhat technical article to support Adolphs TED talk.

Blakemore, Sarah-Jayne: “The mysterious workings of the adolescent brain” 2012 TED Talk: <http://www.youtube.com/watch?v=6zVS8HIPUng> Visual eye catching use of the brain as the most powerful and wondrous tool for our teens to use and yet very informative of why and how it might also be misused.

Blakemore, Sarah-Jayne, and Uta Frith. "The Learning Brain: Lessons for Education: A Precis." *Developmental Science* 8, no. 6 (2005): 459-65. Excellent argument for changing the way we educate and try to train our adolescents and their under developed frontal lobes.

Boyd, Danah. “Why Youth (Heart) Social Network Sites: The Role of Networked Publics in Teenage Social Life.” *MacArthur Foundation Series on Digital Learning – Youth, Identity, and Digital Media Volume* (ed. David Buckingham). Cambridge, MA: MIT Press, 2007. Really good look at how teens are using their digital connections.

Collins, Loren. *Bullspotting: Finding Facts in the Age of Misinformation*. Amherst, NY: Prometheus Books, 2012. Loved this book; from the exposure of some stupid urban legends to the outright criminal use of online fraud and corruption. It should provide invaluable guidance for informing and warning your students.

DeMarche, Edmund. "Girls, 12 and 14, Arrested in Death of Bullied Florida Girl Who Killed Herself." Fox News. October 15, 2013. Accessed November 11, 2013. <http://www.foxnews.com/us/2013/10/15/girls-12-and-14-arrested-in-death-bullied-florida-girl-police-say/print> Disturbing but important discussion to have with teens.

Dobbs, David. “Beautiful Brains: Moody. Impulsive. Maddening. Why do teenagers act the way they do? Viewed through the eyes of evolution, their most exasperating traits may be the key to success as adults.” *National Geographic Magazine* (October 2011): 41-59  
Another great National Geographic article that elegantly surveys the rough landscapes of the adolescent mind from an evolutionary perspective.

Dunham, Yarrow, Andrew Baron, and Susan Carey. “Consequences or “Minimal” Group Affiliations in Children.” *Child Development* 82, no. 3 (May/June 2011): 793-811.  
Just another scientific look at the difficulties in determining our students behavior.

Ernst, M., EE Nelson, S. Jazbec, EB McClure, et al., “Amygdala and nucleus accumbens in

response to receipt and omission of gains in adults and adolescents. "Neuroimage (May 2005): 1279-91. Technical article to articulate the brain differences between adults and teens.

"Jack Andraka: A Promising Test for Pancreatic Cancer ... from a Teenager." TED: Ideas worth Spreading. February 2013. Accessed November 24, 2013. [http://www.ted.com/talks/jack\\_andraka\\_a\\_promising\\_test\\_for\\_pancreatic\\_cancer\\_from\\_a\\_teenager.html](http://www.ted.com/talks/jack_andraka_a_promising_test_for_pancreatic_cancer_from_a_teenager.html) Jack rocks as in nerd rock star! His incredible story about resilience and determined use of his creative thinking and internet access should inspire all of us!

McLeod, S. A. (2008). *Social Identity Theory - Simply Psychology*. Retrieved from <http://www.simplypsychology.org/social-identity-theory.html> Good review of identity crisis.

Myers, David. *Myers' Psychology for AP*. New York: Worth, 2011. Our AP textbook.

Robbins, Alexandra. *The Geeks Shall Inherit the Earth: Popularity, Quirk Theory, and Why the Outsiders Thrive after High School*. New York: Hyperion, 2011. What a cool book for my students! I hope to find a way to require it as an out of class book assignment in the future; it should be cautioned that her methods are not very scientific but will make the students think about themselves critically.

Rosenberg, Tina. *Join the Club: How peer pressure can transform the world*. New York: W.W. Norton, 2011. Pay particular attention to the Calculus Club chapter. This book again might fall short for some scientific scrutiny but provides enough credible evidence to make a good case for why peer groups can and should provide positive role expectations for our students.

Rosenberg, Tina. "Harnessing Positive Peer Pressure to Create Altruism." *Social Research*, Vol. 80, no. 2 (Summer 2013): 491 – 510. Good support for her book and easy to read.

Steinberg, Laurence. "Should the Science of Adolescent Brain Development Inform Public Policy?" *Issues in Science and Technology Online* (Spring 2012): 67-78 This was as good a summary and easy to understand discussion of the complicated teen brain debate as I could find! I think all adults and teens should know his research and applications.

Steinberg, Laurence. "A social neuroscience perspective on adolescent risk-taking." *Developmental Review* (March 2008): 78-106 Great follow up to his other article.

Sweeting, H., P. West, R. Young, S. Kelly. "Dimensions of adolescent subjective social status within the school community: description and correlates." *Journal of Adolescence* (June 2011): 493-504. Scientific review.

Zimbardo, Phillip. "Heroic Imagination Project" 2010 TED talk: <http://blog.ted.com/2011/02/03/phil-zimbardo-and-the-heroic-imagination-project-ted-blog-exclusive-video/> Ok – Maybe this won't work but what if it can! An excellent use of psychological concepts for applying to real life application.

## Reading List for Students

Blakemore, Sarah-Jayne, and UtaFrith. "The Learning Brain: Lessons for Education: A Precis." *Developmental Science* 8, no. 6 (2005): 459-65. Excellent argument for changing the way we educate and try to train our adolescents and their under developed frontal lobes.

Dobbs, David. "Beautiful Brains: Moody. Impulsive.Maddening. Why do teenagers act the way they do?Viewed through the eyes of evolution, their most exasperating traits may be the key to success as adults."

*National Geographic Magazine* (October 2011): 41-59

Another great National Geographic article that elegantly surveys the rough landscapes of the adolescent mind from an evolutionary perspective.

Robbins, Alexandra. *The Geeks Shall Inherit the Earth: Popularity, Quirk Theory, and Why the Outsiders Thrive after High School*. New York: Hyperion, 2011. What a cool book for my students! I hope to find a way to require it as an out of class book assignment in the future; it should be cautioned that her methods are not very scientific but will make the students think about themselves critically.

Rosenberg, Tina. *Join the Club: How peer pressure can transform the world*. New York: W.W. Norton, 2011. Pay particular attention to the Calculus Club chapter. This book again might fall short for some scientific scrutiny but provides enough credible evidence to make a good case for why peer groups can and should provide positive role expectations for our students.

Steinberg, Laurence. "Should the Science of Adolescent Brain Development Inform Public Policy?" *Issues in Science and Technology Online* (Spring 2012): 67-78This was as good a summary and easy to understand discussion of the complicated teen brain debate as I could find! I think all adults and teens should know his research and applications.

Sarah-Jayne Blakemore TED talk “The mysterious workings of the adolescent brain” 2012

Name \_\_\_\_\_ Date \_\_\_\_\_ Period \_\_\_\_\_

Why is it good to actually experience a decline in grey matter during adolescence?

---

---

Can you give an example of what might be some perceptual or cognitive advantages to synaptic pruning and hard wiring of the of the neural networks; i.e. What can adolescents do better than children?

---

---

What can they do better than adults?

---

---

Why does she use the soccer picture to describe how our “social brain” works?

---

---

What were the results of her lab’s study of objects hidden on shelves?

---

---

What do you think she means that adults have a significantly more socially aware brain?

---

---

How is it different to be embarrassed socially and taking someone else’s perspective socially? Why?

---

---

What brain structures are most responsible for teen risk taking? Why?

---

---

At the end she says the changes in the brains of teens should not be stigmatized but celebrated as an “excellent opportunity for education and social development”. What do you think this means?

---

---

What is at least one risk taking behavior of adolescents you think could be turned into an opportunity for learning or social growth rather than potentially dangerous risk taking?

---

---

Finally – how do you predict the American public will or should use this information?

---

---

Note: Instructions on one side of the assignment and rubric for taking notes on the other.

- **Quietly take a seat somewhere unfamiliar to you.** If friends ask what you are doing, give them the “I’m having to do some psychology observation crap and can’t really talk about it yet” story along with the handout that says you are unfortunately being forced to do research. The point here is to make everyone is relaxed and oblivious to you, the observer, so they will act normal. Each student should have copies of a slip which reads: “My psychology class is conducting an informal survey of what students are wearing. We cannot show students, or staff, our records for reasons of confidentiality, but our results will be published and posted on the school website. If you have any other questions, please contact Mr. Bradshaw in B-307 or email him at [daryl.bradshaw@cms.k12.nc.us](mailto:daryl.bradshaw@cms.k12.nc.us)”.
- **Choose individuals one at a time and record their characteristics.** It must NOT be a friend! Make sure you record more about some single individuals than you do about many different people. Remember this is field work, not a worksheet, so it is critical you record more detail than you might think is necessary. Your observations should be characteristics you recognize as identifying the person in some way. In other words, you get to make the call as to what identifies this individual and how you explain it is up to you, just be thorough!!!
- **Finally, give each individual you observe a nickname.** This will allow you to maintain psychological ethics and anonymously report your findings to the class while maintaining confidentiality. The nicknames should in some way be part of their identity as you see them and could be something you have heard before or something you create for them!

NOTE: The instructions will be changed for “group” observations. My hope is the students will be able to figure out each other’s identity categories by using popular monikers, even if they have to explain their meaning to me in more traditional terms. This will then form the basis for establishing categories we can compare to Robbins’ seven stereotypes.



Observation Place \_\_\_\_\_ Time \_\_\_\_\_

Date \_\_\_\_\_

Subject One: Make as many observations about their characteristics as possible. -

---

---

---

---

---

---

---

---

Subject one's nickname: \_\_\_\_\_

Subject Two: Make as many observations about their characteristics as possible. -

---

---

---

---

---

---

---

---

Subject two's nickname: \_\_\_\_\_

Subject Three: Make as many observations about their characteristics as possible. -

---

---

---

---

---

---

---

---

Subject three's nickname: \_\_\_\_\_

Subject Four: Make as many observations about their characteristics as possible. -

---

---

---

---

---

---

---

---

Subject four's nickname: \_\_\_\_\_

Subject Five: Make as many observations about their characteristics as possible. -

---

---

---

---

---

---

---

---



7. Another trait we share is \_\_\_\_\_  
We recognize this as a shared trait because \_\_\_\_\_

The group feels this similarity's shared rate is: always (10) usually (8) moderately (6) = share strength  
The number of members who share this trait are \_\_\_\_\_ x \_\_\_\_\_ (shared strength) = \_\_\_\_\_

8. Another trait we share is \_\_\_\_\_  
We recognize this as a shared trait because \_\_\_\_\_

The group feels this similarity's shared rate is: always (10) usually (8) moderately (6) = share strength  
The number of members who share this trait are \_\_\_\_\_ x \_\_\_\_\_ (shared strength) = \_\_\_\_\_

9. Another trait we share is \_\_\_\_\_  
We recognize this as a shared trait because \_\_\_\_\_

The group feels this similarity's shared rate is: always (10) usually (8) moderately (6) = share strength  
The number of members who share this trait are \_\_\_\_\_ x \_\_\_\_\_ (shared strength) = \_\_\_\_\_

10. Another trait we share is \_\_\_\_\_  
We recognize this as a shared trait because \_\_\_\_\_

The group feels this similarity's shared rate is: always (10) usually (8) moderately (6) = share strength  
The number of members who share this trait are \_\_\_\_\_ x \_\_\_\_\_ (shared strength) = \_\_\_\_\_

11. Another trait we share is \_\_\_\_\_  
We recognize this as a shared trait because \_\_\_\_\_

The group feels this similarity's shared rate is: always (10) usually (8) moderately (6) = share strength  
The number of members who share this trait are \_\_\_\_\_ x \_\_\_\_\_ (shared strength) = \_\_\_\_\_

12. Another trait we share is \_\_\_\_\_  
We recognize this as a shared trait because \_\_\_\_\_

The group feels this similarity's shared rate is: always (10) usually (8) moderately (6) = share strength  
The number of members who share this trait are \_\_\_\_\_ x \_\_\_\_\_ (shared strength) = \_\_\_\_\_

13. Another trait we share is \_\_\_\_\_  
We recognize this as a shared trait because \_\_\_\_\_

The group feels this similarity's shared rate is: always (10) usually (8) moderately (6) = share strength  
The number of members who share this trait are \_\_\_\_\_ x \_\_\_\_\_ (shared strength) = \_\_\_\_\_

14. Another trait we share is \_\_\_\_\_  
We recognize this as a shared trait because \_\_\_\_\_

The group feels this similarity's shared rate is: always (10) usually (8) moderately (6) = share strength  
The number of members who share this trait are \_\_\_\_\_ x \_\_\_\_\_ (shared strength) = \_\_\_\_\_

Now the group must write a ten sentence descriptive synopsis of your groups overall characteristics.

Identity Inventory Questionnaire Development Group Nickname \_\_\_\_\_

As you refer to your group's similarities activity you should come up with 20 "yes" or "no" questions (or true – false, but they all must be an either-or type question and all the same two possible responses.)

Example: Your group is the "Goths" and a similarity is an affinity for black hair or nail polish. Your question could be "Do you wear black nail polish or dye your hair black on a regular basis? Y or N"

Keep the questions slightly vague, i.e. "regular" rather than "80% of the time".

Example Two: Your group is the "Jocks" and a similarity is an affinity for watching sports. Your questions could be "Do you a favorite team you follow closely in three or more sports? Y or N"

Keep the question relevant but not too precise, "three or more" versus "at least five".

1. Similarity \_\_\_\_\_  
Question \_\_\_\_\_
2. Similarity \_\_\_\_\_  
Question \_\_\_\_\_
3. Similarity \_\_\_\_\_  
Question \_\_\_\_\_
4. Similarity \_\_\_\_\_  
Question \_\_\_\_\_
5. Similarity \_\_\_\_\_  
Question \_\_\_\_\_
6. Similarity \_\_\_\_\_  
Question \_\_\_\_\_
7. Similarity \_\_\_\_\_  
Question \_\_\_\_\_
8. Similarity \_\_\_\_\_  
Question \_\_\_\_\_
9. Similarity \_\_\_\_\_  
Question \_\_\_\_\_
10. Similarity \_\_\_\_\_  
Question \_\_\_\_\_
11. Similarity \_\_\_\_\_  
Question \_\_\_\_\_
12. Similarity \_\_\_\_\_  
Question \_\_\_\_\_
13. Similarity \_\_\_\_\_  
Question \_\_\_\_\_
14. Similarity \_\_\_\_\_  
Question \_\_\_\_\_
15. Similarity \_\_\_\_\_  
Question \_\_\_\_\_
16. Similarity \_\_\_\_\_  
Question \_\_\_\_\_
17. Similarity \_\_\_\_\_  
Question \_\_\_\_\_
18. Similarity \_\_\_\_\_  
Question \_\_\_\_\_
19. Similarity \_\_\_\_\_  
Question \_\_\_\_\_
20. Similarity \_\_\_\_\_  
Question \_\_\_\_\_

## Tuckman's Model of Small Group Development for use with groups in Psychology

**Objective:** Having students identify and apply the five stage theory to their own identity groups (and this could also be used with other groups as well) would give meet three clear objectives:

- Students will conduct an analysis of historic theories which continue to shape discourse and guide research fifty years later which will encourage them to look objectively at the relevance and sustainability of psychological and social theory.
- Students will have to evaluate the processes by which they themselves go through the five stages so they can use this to predict how future group relationships may be impacted by these processes.
- Students will have to agree or disagree with Tuckman's theory and give examples of why he is right or wrong to apply these stages to almost all group relationships.

**Strategy:** Students will be introduced to Bruce Tuckman's Small Group Development Model using some of the information found in Denise Bonebright's brief but thorough review of his theory "40 years of storming: a historical review of Tuckman's model of small group development" 2010. They will be asked collectively then to apply the model to some small group relationships like dating, classroom assignments, and lunch time cliques in order to understand his concepts and how they can be applied to many situations. The class should struggle a little more with the cliques than the other two, which would open the door for some insightful critiques of his model. Finally the students would be asked to evaluate their own identity group development in light of the model and to determine where they think they are at the present and will have to explain why.

**Activities:** Students will get a brief overview of Bonebright's article in class and then will be asked to get into groups of 3 or 4. In order to evaluate why they "form" the way they do, I will allow them to "form" their own groups. Next they will have to evaluate the dating and break up of Rihanna and Chris Brown using the model. Then they will have to do the same with the very group they are now in for this assignment, which should be an interesting way of defining the stages in particular terms while applying them as well. For homework the students will be asked to do the same for the group or clique they eat lunch with most days as a final review and then extend it to the identity group they joined earlier in the lesson.

Suggestions for some of the questions and discussions for each group development model:

*Forming:* What task or behavior is central to the group's existence? What are the basic ground rules both informal and formal? How are roles of leadership determined? Why did people join?

*Storming:* What are some individual goals, both formal and informal, which clash with the groups goals? Are there any signs members are in conflict over group membership or opposed to being task oriented?

Can you identify any personal resistance or resentment toward the group?

*Norming:* What brings the group together to focus on the task or behavior central to the group? How are the resistance and/or resentment modified to allow the group to coalesce? How is harmony reached?

*Performing:* How is the task or behavior accomplished? What problem solving techniques are used by the group to be successful (or to reach the conclusion they cannot succeed even with effort)? How well did most of the members complete their role expectations?

*Adjourning:* Does the group disband- why or why not? What are the ground rules for the disbanding, both formal and informal? Is there any grief (think cycle) or disappointment in the groups ending?

Bonebright, Denise A. "40 years of storming: a historical review of Tuckman's model of small group development." Human Resource Development International 13, no. 1 (2010) 111-120. Brief but very useful review of the five stages and their historical significance.

How will this 21st Century childhood affect their future? "Children and adolescents are increasingly pushed to do more by "helicopter parents," overprotective parents who hover over their children to protect them from potential harm. Children are reporting higher levels of stress, and less sleep." says the study. Source: Tim Gouw/ Unsplash. Identity development is a stage in the adolescent life cycle. For most, the search for identity begins in the adolescent years. During these years, adolescents are more open to "trying on" different behaviors and appearances to discover who they are. A new trend in the 21st century is a decrease in party affiliation among adults. Many adults do not align themselves with either the democratic or republican party and their teenage children reflect their parents' lack of party affiliation. Not all transgender individuals choose to alter their bodies; many will maintain their original anatomy but may present themselves to society as another gender.