

# **Salil Rullavi**

**A Life in Balance**

By Zachary Shiner

Stanford University

EDUC 240: Adolescent Development

Darling-Hammond

December 10, 2010

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## In the Beginning

I first met Salil Rullavi the week before school officially began. In an effort to acclimatize students to the school culture, Bay View Charter High School holds a two day orientation for incoming freshmen and transfer students. Coming in at his junior year, Salil fell into the latter category. Salil arrived at Bay View with a very different experience than the other students in his class. While most students transferred from comprehensive high schools, Salil came from a Waldorf school with only sixteen students in his class. As a conversationalist and a very social person, he was one of the first students I came to know at Bay View. He was eager to talk about his previous school experiences, his summer trip to India, and who he is as a student and a learner. This first encounter with Salil created a solid foundation for a much more in depth study of him as an adolescent and a learner.

### Getting to Know Salil

Born in Hyderabad, India in 1994, Salil was raised in India for the first seven years of his life. When his mother and father divorced in 2001, Salil, his brother, and his mother moved from India to the Bay Area, where his two uncles and grandfather reside. Today his brother is attending college at the University of California-Davis, leaving Salil alone with his mother. While he and his mother are the only ones in his house, it is hardly empty. His two uncles visit often, his brother comes home from college twice a month, and his grandfather spends extended periods of time at the house. He also has a “big brother” from the Big Brothers/Big Sisters program, who comes to visit occasionally.

At school Salil is most recognizable by his blue jeans and white, Adidas hoodie, which he wears up most days. On days that are too hot for sweaters he can be seen wearing a tee-shirt and baseball cap with his favorite bands, skateboarding industries, or popular, name brand clothing lines. His baggy clothes complement his laidback attitude as he slouches in his chair or leans over his desk working on whatever assignments he has for the day. When he gets up to stretch his legs he stands five and a half feet tall, neither towering over his peers or noticeably short. He blends in with a crowd of his peers as they huddle around a conversation or kick a hacky sack back and forth.

Salil has gauged piercings in each ear and wears a thin gold chain around his neck. Most noticeable is his light brown skin tone, which lends itself to occasional questions about his family history and ancestry. However, apart from his skin color, it would be difficult to distinguish him from the quintessential American teenager. He holds a strong interest in reggae music, enjoys sports both organized and casually with his friends, hangs out at home, goes to parties, and is very social. His mother joked with me that the before he attended Bay View for the first time he said that he was going to keep to himself more, but after the first day he told her it was too hard to be antisocial. This is a testament to both his character as well as the culture of his school. When asked what he likes to learn in school he responded: “Interacting with new people every day because having people skills and making connections with people is important.” As I became better acquainted with Salil, I was more and more awestruck in the ways in which he seemed to effortlessly balance his American life with his Indian upbringing.

## Organization

This case study is organized into three main components: identity development, life in school, and life out of school. I will begin by analyzing Salil's personal identity development and describing the balance he has reached between choosing an environment which suits his identity as well as developing an identity which complements his environment. My aim is to answer the questions of who Salil is as a person, what things he identifies with, and how he defines himself. I will examine fixed features of his identity such as his family, community, cultural norms, geographical location, designations of race and ethnicity, language, and religion. I will also describe how he reconciles these aspects of his life, as well as how such internal and external facets of his life relate to his aspirations and interests as an adolescent.

In the second section I will explore Salil's life at school. In order to do this, I will describe Salil's educational history and how he defines himself as a learner. I will use observations of his attitude and behavior within an educational setting to describe the ways in which he acts as a social member of the classroom and examine how his different environments within a school setting contribute to his situation as a learner. I will also use these observations, coupled with interviews and student work, to describe Salil's cognitive development, specifically, what he can do in terms of higher order thinking and reasoning and what areas are still developing.

In the third section I will examine Salil's life outside of an educational setting. I will examine the different worlds Salil lives in by contrasting his life at school to his family and peer group and exploring the ways in which these different worlds complement or oppose each other. I will describe the family members who play significant roles in his life and how they

relate to Salil's development as well as his niche in his peer group and how he builds friendships and identifies with others. I will use his interactions with teachers, family members, and peers to analyze his socio-emotional development, how he relates and empathizes with others, as well as how he understands his own emotions and feelings.

Finally, I will tie these three areas together to develop a holistic understanding of Salil as an adolescent. I will examine how his identity shapes his interactions at home and school. I will describe how the different features of his life both play into and oppose the definition of what it means to be American. I will argue that the balance which he strikes in his association with different identities as well as in his attitudes towards himself and others defies cultural norms and creates a modern American identity unbounded by outdated stereotypes.

### **Methodology**

This case study is a culmination of a variety of data collected over a period of three months. As a math teacher, I had the opportunity to work closely with Salil for an hour every day in his precalculus class. These interactions provided invaluable information about Salil's mathematical development as well as a glimpse into his social world. However, within the artificial setting of a mathematics classroom, I could only develop a very specific view of a single facet of Salil's development as an adolescent. While observing Salil's behavior and work in my class provided me with a rudimentary picture of his cognitive development, in order to understand his social, emotional, and physical development I had to know Salil beyond our limited interactions.

In order to develop a more holistic view of Salil's progress through adolescence, I conducted weekly interviews, each of which focused on different aspects of Salil's development. We had conversations about how he identifies himself personally as well as how he perceives himself in relation to the different contexts he inhabits. We talked at great length about who he is as a learner - including how he learns, what his strengths and weakness are in a high school setting, and how he is developing cognitively. We talked about the different worlds he lives in, from his home life with his family and community, to the different friend groups he has and acquaintances who he interacts with daily, to his life at school. These interviews provided me with a glimpse into Salil's thoughts and feelings. In developing a close relationship with my case study student I managed to see him as much more than one of a hundred students whom I teach, but as an adolescent making sense of the world in which he lives. Through our many conversations, I developed a sense of what goes on in Salil's life, what goes through his mind, and how he perceives himself and the world around him.

Along with weekly interviews, I also provided Salil with an array of cognitive tasks aimed at understanding how Salil perceives the different aspects of his life as well as who he is as a learner and how he is developing cognitively. These tasks included having Salil draw a social map of his school, asking him to describe different aspects of his home life and his identity, and assessing the many features of the cognitive development of adolescents. These cognitive tasks provided me with an image of Salil which was less biased by the lens through which either he or I see him. By asking him to complete various cognitive tasks and having him talk about himself indirectly, I was able to gain new insights and understandings of the way in which he thinks about and perceives himself.



During this case study, I conducted multiple formal and informal observations of Salil. Aside from paying close attention to his behavior and development within the mathematics classroom, I also observed his behavior in two other educational settings and spent an entire day shadowing him as he walked me through a typical day in high school. These observations provided me with concrete data to back up or contradict things he talked about during our weekly interviews, help confirm or deny different hypotheses I had about his development as an adolescent, and gave me a glimpse into how he went about his daily life, who he interacted with, and how he coped with the different situations he found himself in on a daily basis.

Finally, in an effort to learn about Salil's life outside of a school setting, I contacted his mother to schedule a home visit. By visiting Salil and his family at their home, I had an incredible opportunity to speak with Salil's mother, one of his uncles, his brother, and his grandfather. Each of these people provided me with a wealth of information about who Salil is as a brother, a son, a grandson, and a nephew. With so many different views of Salil, I had a unique opportunity to know him far better than I ever could have if our interactions were limited to a school setting. Listening to the ways in which Salil's family interacted allowed me to see an authentic aspect of Salil's life, which is usually sealed off from the view of most teachers. The home visit also provided an opportunity to begin to develop an idea of Salil's world away from school. In seeing his neighborhood, his home, and his room, I could better develop an idea of Salil's life away from an educational setting.

While my role as a teacher makes it impossible to see every aspect of Salil's life, the many ways in which I collected data provided me with a broad understanding of the many

facets of Salil's development. Through my various observations and my home visit I was able to develop an idea of Salil's life both inside of school and out, how he interacted with others, and how he was both coping with and traversing the many boundaries in his daily life. By speaking with Salil regularly, I developed an understanding of how he thought, what he thought about, and how he perceived himself. By giving him various intellectual tasks I was able to assess exactly how he learns best as well as develop a picture of his cognitive development as a learner in school. The culmination of all of these methods of data collection has provided me with an in depth understanding of the many aspects of Salil's adolescent life, both internally and externally, inside of school and out.

## Who I Am & Where I'm From

In my ongoing work with Salil, I have attempted to develop a snapshot of his identity. While identity development is the central life task of an adolescent, it is very difficult to define. James Gee argues that “Identity is not solely about how individuals define themselves, but also how they are positioned and defined by the people around them” (Gee, 2000). Sadowsky also describes the complexity of defining one’s identity: “The answer to the identity question ‘Who am I?’ is inordinately shaped by the contexts, relationships, and activities in which youth are most deeply invested” (Sadowski, 2008). Since identity is both internal and external, in order to understand Salil’s identity, it is necessary to not only probe into the way he envisions himself, but understand the social and cultural context in which he lives.

### Social & Cultural Identity

For such a well-adapted American teenager, it is hard to imagine the non-traditional upbringing Salil experienced. It was not until I began interviewing Salil that I learned of his childhood in India. Salil was quick to note that when he came to America he was only seven years old. As a result, he said he does not remember his life in India very well. He described some memories of his family and the difference between life in India and America, but when I pressed him further on it he said he really could not remember much about it. In talking about his move to America he hypothesized that today, if he were to go through what he did when he was seven, it would have a profound effect on his life. However, he mentioned that since it happened when he was so young it does not play a considerable role in his identity development. When I asked him to talk about his move to the United States he told me: “We were kind of like running away from my home country - like being a refugee. But I was too

young to really know what was going on.” I can only imagine what Salil meant in saying his family were kind of like refugees. One possibility is that his family broke away from Indian cultural practices when his mother left his father and came to America. Depending on how traditional Salil’s family was, this could be seen as his family running away from the societal norms of India. As Arnett points out in describing familial contexts, “One feature that is distinctive to the traditional Indian family is the idea that the parents, especially the father, are to be regarded by their children as a god would be regarded by a devotee” (Arnett, 2007). Regardless of the circumstances behind Salil’s move to America, as a result of his Indian upbringing he is fluent in Telugu which he uses to communicate with his grandfather at home (though he speaks English with the rest of his family members). He also travels to India often to visit his other relatives. He was eager to talk about his experience during the previous summer when he spent a month in India traveling, playing cricket, and sightseeing.

While all of these aspects of Salil’s cultural identity play an important role in his life, they hardly define who he is. In Made in America, Laurie Olsen described features of an American identity. One quality which she attributed to an American identity was clothing: she observed that “discovering the acceptable standard of dress is one of the most immediately obvious requirements of life in America” (Olsen, 1997, p. 48). During my interview with Salil he described the discontinuity between Indian clothing and American clothing. Sitting across from me in baggy jeans and a black hoodie, he told me that he does not feel that he fits in in India because his clothes are so different. He went on to describe the many differences between his peers living in India and himself – how he prefers underground rap and reggae to contemporary Indian music and feels that people his age in India have a very different mindset than he does.

Interestingly, the qualities which Salil said make him stand out in India are the same qualities commonly associated with an American identity. As he wrote in an essay about what it means to be American, "I consider myself American. I have adapted to the customs and consistently learned about the history of America. Although people might not be born here, they can be an American by coming here and living a life of freedom and follow the customs" (appendix A). This indicates that Salil believes that the American identity is not necessarily something people are born into, but rather something which can be developed. As he has adapted to American customs and learning American history, he considers himself American.

While Salil told me he does not conform to the Indian identity, he also described instances in India when he did feel at home. When Salil barter with rickshaw drivers in his native language and when he plays cricket he often feels a connection to his Indian side. He also mentioned that in a way he likes living in India more because of all he has to learn and experience in the world. However, when I pressed him on this, he elaborated that what he really likes is traveling and exploring different cultures. This leads me to believe that not only does Salil not associate with the Indian identity, but that he sees it as something so different from his identity that his trips to India constitute a learning experience.

Although Salil seems to associate with an American identity much more than an Indian identity, he also described times that exemplified his status as an immigrant. Olsen describes what is perceived to be the quintessence of being American. "For some immigrants, the barriers to becoming American feel particularly insurmountable because of skin color; for others, it is religion or language or the 'open' behavior of American teens. But there is

surprising clarity and agreement that to be American is to be English speaking, white skinned, and Christian" (Olsen, 1997, p. 55). Coming from a Hindu family, Salil mentioned that during holidays he often feels somewhat out of place in America. Salil does not feel particularly religious, but he does come from a religious family and associates more with Hinduism than any other religion. Christian ideals are especially overrepresented during the holiday seasons in America, which often serves to alienate Salil.

Salil also noted that he feels his family values pose a sharp contrast to the traditional American family. He told me that incense was the most prominent scent in his house, a smell I immediately recognized when visiting his home. He also does not eat meat, as his mother refuses to keep it in the house for religious reasons. When I visited him in his home I could not help but notice the contrast between American and Indian decorations. A large Veena (a South Indian guitar-like instrument) stood upright in the corner of the room. On the TV the Giants were playing a baseball game against the Rangers, and above was an amazing collection of exotic masks. The balance of American and Indian symbols which adorned Salil's home seemed to be a theme throughout my time working with him.

### **Self-Identity**

In an initial effort to develop an understanding of how Salil defines his identity, I had him fill out an identity map (appendix B) which asked him to list and categorize the different features of his identity by personal importance. During one of our interviews I also asked him directly how he perceived himself as a student in school and an adolescent outside of school. I find that as a teacher I tend to define my students based entirely on the setting in which I interact with them, namely school. What was revealed to me during these interviews was the

vast disconnect between my perception of Salil and his perception of himself. As my interactions with Salil at the time of the interview were limited to an educational setting, I consequently saw him primarily as a student; on the other hand, through our conversations he indicated to me that school plays a very minor part in his personal identity. "I don't ever think like, oh – I'm a student. I think of like, sports and outdoorsy stuff, or like music and concerts." As someone whose main focus is on education, I found Salil's ideas of himself in relation to school quite surprising. Given the quantity of time he spends in school and frequency with which he talked about it during our interviews, I would have anticipated that it played a much more significant role in his life.

In trying to understand why school plays such a minor role in Salil's identity, I have come to believe that his mindset towards learning promotes his association with extracurricular activities. When I asked whether he believes that intelligence and skills are fixed traits or malleable, he told me that he believes that academic intelligence is relatively fixed, but outside of school he can successfully learn new skills and abilities with relative ease. "You're kind of stuck with how good you are school-wise, but outside of school I can pick new things up fast. It's like with algebra I have to work really hard and I'm always a little behind, so I can't get good at it fast, but when I hacky sack a lot can pick up quickly and learn new tricks. But it's not the same with school." When I looked at his grades in high school they seemed to complement his fixed mindset towards education; he has consistently received C's in most of his classes with little variation. This would support his belief that his grades in school remain the same regardless of how much work he puts into learning. On the other hand, when he plays sports and participates in other activities he can see real improvement from practicing. This

academically fixed mindset, coupled with an extracurricular growth mindset, makes Salil's decision to focus on his identity outside of school quite reasonable. Nonetheless, I am curious how one might harness the growth mindset which some students hold within an academic setting.

Carol Dweck argues in Mindset that, "People who believe in fixed traits feel an urgency to succeed, and when they do, they may feel more than pride. They may feel a sense of superiority, since success means their fixed traits are better than other people's" (Dweck, 2007). Salil alluded to this fixed mindset when talking about what motivates him in his academics. He used the example of analyzing graphs in precalculus using concepts of domain and range, and said he enjoys the feeling of understanding not because of the accomplishment or pride associated with growth, but the "feeling of being in the group of kids who are in the know." I believe that this pseudo-competitive nature of the task shifts the focus from understanding in general to merely having an understanding above the curve. Such an attitude serves to devalue the content of his learning by focusing on the result rather than the learning process.

Although Salil seems to adopt an academically fixed mindset, he does indicate that it is still a motivating force in his life. While he does not do exceedingly well in his classes, he claims to enjoy math and science and says that he feels most accomplished and motivated immediately after school. This is advantageous at Bay View, as its structure is such that after school there are office hours as well as a space for the students to do independent work. Salil says he often uses this time to work on his homework and receive one-on-one tutoring from teachers – an aspect of school which he highly values. When school lets out he says he is still in



the mindset of school and academics, but by the time he gets home he does not ever feel like working anymore.

It is clear that Salil is very driven by a sense of accomplishment. This was evident in his statements about what made him most excited about school: quizzes and big projects. Although I initially found this rather surprising (after all, who in their right mind likes to take quizzes), Salil clarified that he enjoys the feeling of actually doing something at school. He claims that on days where he does not have homework or big activities in his classes, he feels that going to school is a waste. On the other hand, when he is working on a large project or taking a test he feels that he is doing something productive and that he feels a sense of accomplishment at the end of the day. I find it interesting that he sees some school days as valuable while he considers others a waste. As a teacher, I believe it is my job to make every day valuable to the students and am curious what parts of school students do not regard as having value. Nonetheless, I believe that Salil's mentality of "I'm here, so I might as well do something with my time" is very admirable for high school students, and helps explain the high levels of productivity which I observed during group work tasks and assignments in my class. One challenge which I face as a teacher is to find a way to help spread Salil's view of making the best of situations to students who are content with the idea of doing nothing in school.

Although Salil does not seem to see his identity as being shaped by his education, and he tends to adopt a fixed mindset about his learning, he has still found a way to adopt an attitude which successfully integrates his school life with his personal life. From using school as an outlet for his personal ambitions to developing a sense of accomplishment from being in

school, Salil seems to have intertwined his educational and personal identities. While he does not identify as a high school student, he seems to accept his current place in life. I believe that it will be a challenge to change his views about his own ability to learn, but his growth mindset outside of school could provide a launching pad for such development.

## Life in School

Salil has had quite a unique history as a student in the American school system. Since he came to the United States in second grade he has been to six different schools, ranging in size from under a hundred students to over a thousand. While most students enter Bay View Charter High School from much larger schools, Salil came from a school one tenth the size. Before arriving at Bay View, he attended a Waldorf school where there were only fifteen students in his entire grade. In order to understand Salil's needs as a learner, it is useful to contrast his experiences at his previous school to his current experiences.

### **In Search of a Proper Learning Environment**

One of the first things Salil told me about himself was how he learned best. He has told me numerous times that the two instructional styles which serve his learning needs are experiential and hands-on learning. In that regard, the Waldorf school he attended was a good fit for him as a learner. He spoke fondly of the outdoor activities which were so common at his old school. However, while the academics served his needs well, he was not satisfied with the size of his class. As someone who prides himself on being social and making connections with others, the class size of just fifteen students and small school size made him feel antisocial. He told me that when he would go home he would not want to do anything, and the few friends he did keep in touch with were not enrolled at his school. His mother said that of all the transitions between schools, the move to the Waldorf school was the most difficult for Salil to adapt to. At Bay View, Salil still enjoys the luxuries of hands-on learning and a small class size, but claims that he no longer feels socially suffocated by the lack of people his age.

It is far too rare for students to find equilibrium in their school size. Linda Darling Hammond argues for close relationships between teachers and students in the educational system. "We need to create schools where kids and teachers can have relationships. Relationships have to be used to get good academics" (Darling-Hammond et al. 2002). The Waldorf school Salil attended definitely fostered strong relationships between teachers and students. However, according to his mother, "The teachers [at the Waldorf school] are like parents, which is good, but also bad because kids don't listen to their parents." While student to teacher relationships are essential for students to maximize their learning experiences, those relationships must tend to the student's specific needs.

Bay View also fosters relationships between teachers and students, but to a lesser extent than the Waldorf school, as it enrolls over five times as many students. Nonetheless, through the mentoring system each teacher works closely with groups of fifteen to twenty students over the four years they attend high school. With the close knit faculty, constant communication between the staff, and open channels of dialog between teachers and students, the teachers are able to know students beyond the students' role as learners without sacrificing their duties as teachers. The structure of Bay View seems to be a perfect balance for Salil's educational and social needs. During all of our interactions he never said a negative word about Bay View, and in a questionnaire which asked (among other things) about the difficulties in transferring to Bay View and the negative characteristics of the school, he left both the answer boxes blank.

One thing which Salil enjoys at Bay View are the freedoms and responsibilities afforded to the students. Eccles claims that, "Although adolescents desire more freedom from adult

control than children do, they do not want total freedom and they do not want to be emotionally detached from their parents. Instead, they desire a gradual increase in the opportunity for self-determination and participation in decision making and rule making" (Eccles et Al., 2005, p. 99). Salil's family described a change in passion which assisted his move to Bay View. While he used to fight with his mother about completing his homework, he now works on his own, and has become much more independent this year. His mother told me that he even packs his bags and chooses an outfit for the next day before going to bed each night. I believe that this is a byproduct of the better stage-environment fit which Salil described that accompanied his transition to Bay View.

One place where Bay View fails Salil as a student is in the area of sports. As a natural athlete, Salil plays cricket and tennis on a team, as well as numerous other sports on his own. However, Bay View does not have a P.E. department and only allows for classes in physical activity during intersession in January. Salil jokes that his friends at Bay View do not believe that he plays sports. While Salil describes Bay View as a good fit for his needs in general, its size and location make it challenging to tailor to the many facets of individual students' needs. As a result, Salil is forced to find a way to incorporate the different sports he enjoys into his life outside of school.

From my understanding of Salil's attitude and behavior towards his education, he does not seem to be 'doing school' (Pope, 2001). While other students often resort to less than admirable behaviors in an effort to boost their standing, from my observations and discussions with Salil it seems that he cares more about learning than grades. However, unlike some students who would do anything in their power to actively seek out learning opportunities, Salil

seems to merely take the opportunities given to him. Perhaps his abundance of B's and C's are indicative of his authentic learning experiences rather than grade grubbing.

### **A Day in the Life**

In an effort to develop a sense of Salil's experiences at school I spent one entire day shadowing him from class to class. As a teacher of one subject, it is easy to become caught up in the idea of school as a place where a single subject (precalculus) is repetitively taught day after day; however, it is imperative to remember that students (and most others) see school in a very different light. While I am considered an expert in a single field on which I focus all of my energy, the entire purpose is for the students to receive a balanced education in all of the core subjects.

The day in which I shadowed my case study student happened to be the first day he attended school after being sick for the majority of the week. As a result, rather than witness a standard day of education, I watched as Salil worked without breaks to catch up on a school week which had left him behind. When I asked him how he planned on doing all the work he missed, he told me it would be tough but he was used to it as he is often sick. After hearing this, I learned from the attendance office that he had missed eight days of school since the quarter began. While I did not have the opportunity to observe Salil's ordinary attitude in classes, I am curious whether what I observed is more revealing of his standard experiences in high school.

Before describing his day of school it would be useful to learn about the structure of classes at Bay View, as the schedule varies greatly from a comprehensive high school. The day

consists of six fifty-five minute periods for English, Spanish, Mathematics, Science, History, and Independent learning (a period in which the students have the opportunity to work independently on their homework). Unlike most schools, in which each student has a different schedule, the groups of students at Bay View move as a unit throughout their day. This means that Salil is with the same twenty-five students all day, every day. A second difference is that periods rotate on a weekly basis. Because of this, Salil's classes oscillate so that he does not always have the same class first thing in the morning.

While no two teachers are the same, and no two classes can be taught in the same style, I did notice a surprising degree of consistency from one class to another at Bay View. I believe that this is partially a result of the affordances granted by the small school setting of Bay View. Unlike other schools, the entire faculty makes changes to the school structure by a consensus vote. Each department meets semi-weekly, and all the teachers of the grade level (of which there are only five) meet every Friday to discuss the students. While Salil experienced a multitude of teaching styles throughout the day, his attitude remained fairly constant from one class to the next. While the teacher spoke, he sat in each class with his hood up and his head facing downward towards his work. Occasionally he would glance up towards me with a look of confusion followed by a smile before returning to his work. Given his recent string of absences, his confusion in classes was hardly unexpected. Nonetheless, I am curious as to the regularity of his diligence in work. His attitude in all of his classes was not significantly different than what I have observed in math, but I am unsure if his constant work ethic throughout the day is normal or merely his attempt to regain a solid footing in his classes.

Working with peers is an integral part of the culture at Bay View, and this was evident in each of his classes. In Spanish and Precalculus the students are arranged in pairs. In history, science and English they are situated in groups of four. Every one of his classes integrated groupwork into the curriculum. In Spanish the entire class played a game before taking a quiz. In math the students spent half the class working in pairs on a task graphing parabolas. In English they used the vocab words to write tributes to their group members and in science they worked on a lab about balancing equations. During his history class they periodically broke off into their groups to discuss questions which the teacher posed throughout the lesson. This focus on groupwork and a community of students seems to create a consistency between classes which is not present at many other high schools which I have visited.

In Translating Motivation into Thoughtfulness, Blumenfeld and Mergendoller talk about the issue of ensuring students are continuously engaged in cognitively challenging tasks. “Unless teachers act in ways that promote cognitive engagement, student motivation to learn will not necessarily translate into thoughtfulness or greater understanding of subject matter” (Blumenfeld et al., 1992). From my limited observation, it seemed as though Salil was motivated to learn (as evidenced by his focus in all of his classes) but lacked the cognitive engagement necessary to understand the material deeply. While he usually followed directions from his teachers and never acted disruptively in class, from my observations I could not identify a single moment in which Salil demonstrated a deep interest in any of his tasks or engaged with his work beyond a surface level. In every one of his classes he seemed to float by, doing what was required of him, but nothing more. While this may be a result of his extended absence, it also may be an indication of the abundance of B’s and C’s in his classes.



## Cognitive Development

In the precalculus class I teach, I am given ample opportunities to witness my students' cognitive development. Since the subject of mathematics is so deeply rooted in logic, reasoning, and abstraction, as a teacher of such skills I constantly work to push my students' cognitive capacities. I am reminded of one assignment which we gave very early in the year that served a dual function of testing our students' prior mathematical knowledge as well as their developmental abilities and formal operational thinking. The problem, titled "The Spider and the Fly," asked the students to find the shortest distance between two points on a three dimensional rectangular prism (appendix A). In working on this problem my students were forced to think both abstractly and beyond conventional limits.

Along with the task card for the assignment, we gave the students a drawing of the rectangular prism with the locations of the spider and the fly marked off. In order to understand this diagram, students need to abstract the drawing into a three dimensional object. In looking at Salil's work, he seemed to have little trouble seeing the drawing as a three-dimensional shape, as evidenced by the way he traced various routes the spider could take to get to the fly. Furthermore, next to the diagram of the box we provided, Salil drew his own diagrams of a deconstructed version of the box with the spider and the fly marked on the two dimensional models. This indicates an ability to look at the same problem from multiple perspectives as well as easily move between different forms of representation.

The problem we gave to the students was purposefully open-ended. While there was a clear need for a specific answer, we provided minimal instruction on how to obtain the answer. In doing this we created a need for the students to make conjectures, develop a plan of attack,

decide on the necessary mathematics, and solve their own problems. Salil demonstrated a strong ability to perform these tasks in the different methods and answers he came up with. In looking for the shortest path, he broke up a specific route into different measurable parts, solved for those parts individually by measurement or by applying the Pythagorean Theorem, and added the parts together to obtain a final answer. His ability to develop a unique plan in solving a problem indicates that he can think beyond simple rules and algorithms to solve more open-ended problems.

In trying to develop an understanding of Salil's cognitive development, I found it necessary to examine the conditions which led him to Bay View. Having just transferred from a Waldorf School, Salil seems to be very experienced in non-traditional approaches to learning. This could be one explanation for why he excelled at the spider and the fly problem we gave the students. While he often struggles in the computational side of the mathematics in Precalculus, I find that he has a unique ability to understand the bigger picture of the subject and develop a conceptual understanding of what exactly is going on behind the mathematics in my class. In *Theories of Learning and Their Roles in Teaching*, Bransford argues that such an ability is essential for students to develop a strong understanding of a subject. "Teaching specific topics or Skills without making clear their context in the broader fundamental Structure of a field of knowledge is uneconomical. An understanding of fundamental principles and ideas appears to be the main road to adequate transfer of training" (Bransford et al., 2005) While Salil sometimes has trouble grasping the subtle nuances and mechanics of precalculus, his deeper understanding of the subject matter allows him to transfer his knowledge between different domains and solve problems which were not taught formally.

I believe that Salil has given considerable thought to his own learning process. In talking to him he was more than willing to tell me his strengths and weakness in how he learns; how he has a lot of trouble learning during periods of direct instruction and needs a much more hands-on approach so he can grapple with new ideas and concepts. This complements Piaget's theory that students construct knowledge for themselves rather than have their heads filled by the teacher. Salil's metacognitive ability to understand the different settings in which he learns indicates to me that he is becoming both self-aware and self-reflective about his own learning.

Interestingly enough, Salil's cumulative folder tells a somewhat different story than what I observed of his work and his performance in class. Salil's grades have one of the most uniform distributions I have ever seen. In his high school career to date, he has received only a single A (in physical education), a single F (in chemistry) and the rest are B's and C's across the board. While it is clear to me that Salil is making strong progress in his cognitive development, it is interesting that his grades do not reflect this ability. In my time working with Salil I have conjectured that the distribution of B's and C's in his high school career are not as indicative of his understanding of the subject matter, but more likely his inability or lack of desire to play the game of school. He does not seem to perform lower than other students in his classes; instead, his lower grades seem to be a result of his lack of interest in revising his work or improving his grade. It seems that rather than focusing on his grades, he is more interested in doing the work that is required of him in order to learn the material he needs to know for his classes.

## Life Out of School

While Salil spends a very significant amount of time at school, it by no means defines his existence. His extended family, as well as the friends he associates with, each have a deep impact in his development as an adolescent. He is devoted to taking care of his family and helping out wherever possible. On the weekends he participates in numerous sports including baseball, cricket, and tennis. He is the team captain of his cricket team and even made the USA under fifteen team. In order to develop a holistic picture of Salil it is necessary to create a picture of the forces in his life outside of school. In working with him I have tried to learn about his home life as well as the relationships he holds with his friends. These two facets of his life have provided me with an understanding of his socio-emotional development.

### Meet the Family

In order to develop a deeper understanding of Salil's home life I contacted his mother to schedule a visit to his home. She was more than welcoming, telling me in an email, "I would certainly love to talk to you about my favorite person in the world – Salil, and certainly the favorite topic in the world, my children!" She even went so far as to invite her brother and father (Salil's uncle and grandfather), who represent the male forces in his family. Furthermore, at the time of my visit, his brother happened to be home from Davis. As a result, I was able to not only meet Salil's immediate family, but most of the family members he interacts with on a daily basis. Not only were they happy to answer all of my questions about Salil's life in school and at home, but they were extremely unfazed by my presence and took the

opportunity to catch up on each other's lives, providing me with an authentic glimpse into Salil's home life.

While Salil has lived in the United States since he was seven, he moved to his current house only a few months ago. His home is part of a large apartment complex overlooking the San Francisco Bay. He passes numerous high tech office complexes before entering his neighborhood and his home is cut off from the rest of the community. As he had established close friends long before moving, he is not involved in his immediate neighborhood, but prefers to drive lengthier distances to see his long term friends.

While I was initially hesitant to travel to Salil's home, his family was eager to talk about him and provided a wealth of information about his life at home. All of his family members described him as the "official helper" and his older brother added that he doesn't know how Salil became so helpful, "he even yells at me for being lazy and not picking up stuff around the house." As he was serving hors d' oeuvres to his family and me, his uncle talked about Salil's eagerness to give rides to his family members or run errands, and his mother told me that he has been doing his own laundry for years. This coincides with what I observed of Salil's attitude during the day I shadowed him. As he had missed a number of days of class, he spent all of his free time hunting down teachers to pick up all of the work he had missed. This provides a stark contrast to many students in my class who do everything in their power to avoid having to catch up on work.

From my conversations with Salil's mother, it is clear to me that she has a strong presence in his life and has put a lot of effort into providing her son with a supportive

environment. She is constantly seeking the best education for Salil, and even told me that she moved in August for the sole purpose of being closer to his new high school. She also mentioned that when she came to America she immediately enrolled Salil in Big Brothers/Big Sisters to supplement the lack of a father figure in his life. When I casually mentioned the amount of work involved in teaching precalculus she said that she would love any opportunity to volunteer at school and could even arrange to work a few hours every week. I believe that all of these actions are a testament to her caring nature and commitment to her children.

Arnett, in *Adolescence and Emerging Adulthood* describes four parenting styles: disengaged, authoritarian, permissive, and authoritative. He says of a permissive parenting style: "[Permissive parents] have few clear expectations for their children's behavior, and they rarely discipline them. Instead, their emphasis is on responsiveness" (Arnett, p. 202). In my brief interactions with Salil's family I could not discern significant expectations his mother held. However, as his mother seemed to be very happy with her son's responsible behavior and helpfulness around the house, it is difficult to tell whether there are minimal clear expectations, or that the expectations are implicit in their relationship. I am also unsure how much the different cultural norms infiltrate the familial expectations at home. Salil did tell me that they celebrate some Hindu holidays and his mother refuses to cook meat in the house, but he also mentioned that he is not particularly religious and associates with Hinduism more than he actually practices the religion. While Arnett implied that permissive parenting styles tend to lead to irresponsibility among adolescents, it seems that in this case the opposite is true--Salil's acceptance of responsibility has led to a permissive parenting style.

Salil seems to traverse between his home life and school life with some ease. While there are relatively significant difference between facets of Salil's life at home and the norms, values, and beliefs established by the school and the greater community, these difference seem to be either handled with ease or be ancillary aspects of Salil's world. For example, Salil talked at great length about the structural borders in his life. He told me, "When I do work things need to be put perfectly in place. The environment has to be perfect. Like, if it's super quiet I can't do anything." He also talked about the many different educational structures which he has experienced growing up and how they supported or contradicted the ways in which he learns best. However, he described Bay View as a perfect fit for his learning needs. There is also a linguistic border present in Salil's life. While he speaks Telugu fluently and uses it to communicate with his grandfather, his mother insisted that he learn English as a first language while he grew up in India, so he does not give much thought to his second language. Similarly, the cultural borders which he faces are minimized by the auxiliary role they seem to play in his life at home.

While Salil's home life is far from the traditional American family, it seems to coincide well with the life he leads outside of school. The minimal strife in his extended family allows him to be close with his family members without losing his individualism. His mother's parenting style seems to allow Salil his freedom, but still provides a vast web of support and helps him develop as an adolescent. Although his family's traditions, values, and beliefs differ somewhat from the societal norms, it seems that his mother's openness to such differences allows for Salil to traverse these borders with relative ease.

## Meet the Friends

As previously described, Salil is a very social adolescent. One of the major reasons I decided to focus on him was due to the ease in which he adapted to the culture of his new school. From the first day of classes he flourished socially and seemed to immediately associate with groups of friends at the school. After learning about his academic history it seemed plausible that he has had ample practice at making friends, given how well versed he is in transferring schools. His experiences, coupled with his social nature and the close knit culture at Bay View, seems to create a perfect environment for Salil to easily make transitions between schools. Even his mother indicated that it seemed that his shift from the Waldorf school to Bay View was the easiest she has seen since they moved to America.

While I have seen Salil be very friendly with numerous other students at school, I was surprised to learn that he does not consider any of them his friends. Instead, he described everyone at Bay View as acquaintances, telling me “When we talk we say things like ‘what’s up’ and ‘how are you’ but it’s never like, ‘want to hang out this weekend?’ I guess I know everyone at the school, but I don’t know them that well.” I am curious about how his role as a transfer student plays into this social dynamic, either in that the students at school already have friend groups, or that he already has a friend group outside of school. Instead of describing the depth of his friendships at school he focused on the breadth. He talked about how he can walk up to any group of students and hold a conversation with them, but such a friendship only lasts in school. It appears that his social life at Bay View is completely different from his social life outside of school.



One question Salil struggled with was that of what he looks for in a friendship. Initially, he told me that “friendships just sort of happen.” This makes sense given his social competency. I believe there is a large possibility that he has never truly considered how he makes friends, as he just does it naturally. Arnett described a set of characteristics which often promote friendship. “Adolescent friends tend to like the same kinds of music, wear the same styles of dress, and prefer to do the same things with their leisure time. These similarities make relations between friends smoother and help them avoid conflict” (Arnett, 2007). When further prompted to think about what he searched for in a close friend, Salil decided that commonalities are a big indicator of friendship. He told me that he looks for some way he can make a connection with others and used the example of reggae music as one bond for friendship.

While Salil struggled to come up with how friendships develop in his life, when I asked him about the friends he had, he provided a wealth of information. It seems that for him, time is one of the best indicators of close friendships; he described all of his friendships as having lasted five or more years. It is interesting that he has maintained the same friend group even as he transferred between schools. He described his friends as being positive influences in his life and wanting to motivate him to do well. To him, friends are people who he can have intellectual conversations with and talk about deep things, but also people who he can just hang out with listening to music or playing sports. According to him, all of his friends share in his interests and have similar personalities. He told me that he can go over to his friends’ houses any time and feel like he is at home, or he can call his friends up at random hours to go out to the movies or to parties.

Friendships play a significant role in most adolescent's lives, and Salil is no exception. Each group of people seems to fill a role in his social life. In school he has a large body of acquaintances which serve as part-time friends out of convenience. His social competence has gained him acceptance outside of school where he fosters much more intimate friendships, which he has maintained for most of his life in the United States. From my conversations with Salil it sounds as though a key feature of what he looks for in friends is a good influence. When I asked him what he looks for in a friend, he told me, "I want to be friends with people that will motivate me to do well." At school he rarely seems to hang out with students who consistently violate school policy and he describes his friends at home as people who push him to be the best person he can be. I believe that this overarching influence from both his family and the peers he associates with have had a profoundly positive impact on Salil's life and account for a large portion of his identity.

### **The Role of Technology**

Salil, like most other adolescents his age, is very reliant on technology for both communication and fun. He has a desktop computer in his room which he uses to complete his school assignments, communicate with friends, and explore his interests. From my interviews with him it sounds as though his computer serves as both a motivator and a distraction. It helps him get his work done in a timely manner, but also allows him to goof off when he is uninterested in completing his assignments. When I visited him in his home he told me that if he is focused he can get his homework done in one to two hours, but often it takes him three or four because he becomes distracted.

One defining characteristic of this generation of adolescents is the ease of communication via texting and social networking sites such as facebook, myspace, and twitter. In a recent study,

Subrahmanyam and Greenfield found that “Teens now conduct a higher proportion of their communication through writing in an electronic medium rather than face-to-face or voice-to-voice—in effect, relatively depersonalizing the process of interpersonal communication” (Subrahmanyam & Greenfield, 2008). Salil told me during an interview that texting was his main form of communication with his friends and that he usually sends at least fifty texts a day. However, he also told me in the same interview that his texts are more often than not casual conversation and he much prefers to meet face to face if he needs to have a serious talk. This leads me to believe that the process of interpersonal communication, though less common, is by no means absent in Salil’s life. He seems to use technology to hang out, but very clearly maintains his friendships outside of the virtual world.

Aside from using social networking sites to communicate with friends, Salil also uses the internet to expand his musical interests. He identified his musical interests as both an integral aspect of his identity and one quality he looks for in his friendships [appendix B]. When I asked him about his favorite pastimes he told me that he loved finding new music from friends or just by surfing the internet. In this way, he seems to be using technology to mess around and become an expert in his specific field.

While Salil uses constantly uses technology in his day to day life, it does not seem to define who he is. Instead, it complements different features of his identity as well provide a source of information which would not be available to him otherwise. Salil seems to have struck a balance between technology as a distractor from social interactions and academic pursuits and technology as a way to enhance such activities.

### **Socio-Emotional development**

Salil Rullavi, like many adolescents, is in the midst of developing in the way he understands emotions both in himself and in others. His surplus of interactions with peers and

adults inside and outside of school has provided him with significant practice at reading and reacting to emotions in others. In my conversations with him he gave the impression that he is very focused on ensuring that other's socio-emotional needs are met, even at the expense of his own needs. In one sense, he has mastered the art of becoming a social chameleon, ensuring that those around him are comfortable. In another sense, he has defined his identity as that of a helper and remains true to himself in his ability to put others at ease.

In talking to Salil about his role among his friends, he told me, "When I hang out with friends I make sure that everyone's having a good time. I try to make sure no one feels like they're awkwardly left out and that everyone feels like they're having a good time and happy." Goleman described such characteristics as that of a social chameleon. They are the kind of people others like to be with because they are emotionally nourishing—they leave other people in a good mood, and evoke the comment, "What a pleasure to be around someone like that."" (Goleman, 1995). However, Goleman also described such people as compromising their own emotional needs for those of others. Salil described an opposite characteristic when talking about his identity. He valued the idea of doing what pleases him as one of the most important facets of his personal identity and the idea of trying to impress others as least important (appendix B). While he strives to put others at ease and ensure they are enjoying themselves, he does not sacrifice his own identity to do so. Instead, he affirms his identity by working to establish environments which support the socio-emotional needs of others.

In my interviews with Salil, he often seemed unusually nonchalant about the events in his life. One instance when this was especially noticeable was when he talked about his former

girlfriend. He told me about how they first started dating their freshman year of high school. They stayed together for two years, a surprisingly long relationship for an adolescent. However, the combination of spending a month in India, as well as moving houses and schools, created a rift in their relationship. He told me that they were still friends and he was trying to get back together with her. Interestingly, for the entirety of the story he never mentioned what he liked about her or how he felt about recently ending a two year relationship. In our entire conversation he did not show any signs of emotion and rather relayed the story as though it could have been happening to someone else. One possible explanation for his lack of emotion could be the student-teacher dynamic inherent in our interactions. Another possible reason might relate to an underdeveloped ability to recognize or manage his emotions.

## Breaking Away from the Cliché

Salil has had anything but a standard upbringing. From his roots in India to his unique family structure, everything about his childhood and adolescence is different from the norm. The schools he has attended run the gamut of traditional comprehensive schools of over a thousand to modern close-knit learning environments of small groups of students. The friends he keeps and his acquaintances at school seem to defy many of the trends of adolescent friendships. Yet somehow Salil could stand as a poster child for an American teenager.

In Why are all the Black Kids Sitting Together in the Cafeteria, Beverly Tatum describes a raceless identity in which “individuals assimilate into the dominant group by de-emphasizing characteristics that might identify them as members of the subordinate group” (Tatum, 2003). Salil has definitely assimilated into the American culture, but he has hardly deemphasized the characteristics which identify him as Indian. Instead he seems to have developed a multifaceted identity in which he has incorporated both cultures into how he defines himself.

Arnett calls upon statistics regarding children of divorced parents: “Studies consistently find that young people whose parents have divorced are at higher risk for a wide variety of negative outcomes compared with young people in nondivorced families, in areas including behavior problems, psychological distress, and academic achievement” (Arnett, 2007). While Salil comes from a single parent home and was raised by his mother, uncles, and grandfather, he shows no signs of any of the destructive behaviors common in children from separated families. I believe that his success at home is a result of the caring nature of his extended family and the vast support system of family members that supplements the lack of a father

figure in his life. Salil seems to have overcome many of the struggles which most adolescents face growing up in similar environments.

In working closely with Salil I have come to know him much better than I ever could have if I merely had the sole purpose of teaching him precalculus. However, in compiling this case study I am still surprised at how much I do not know about him. It is difficult to understand the subtle intricacies which define an adolescent. To comprehend how they think, behave, and interact with the world is nearly impossible. While I believe I have come to know Salil very well over the course of this study, there is no doubt in my mind that I still have much to learn.

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## Appendix

### Appendix A: Work Samples

1<sup>st</sup> October 2010

#### Are you American?

What does it mean to be American? To be born there? To live a better life? To be one of the original native peoples? An American is someone who wants freedom. Also, a person who is born in the United States is an American and should know about the history and customs of the country.

An understanding of the history and culture of a country develops appreciation for the people who live there. Knowledge of American history provides recognition of sacrifices made by ordinary people and great leaders who fought courageously for freedom. This information can be gained in the education system. In the past, "Schools brought children from different immigrant backgrounds into contact with natives and helped to form a common American culture" (Text 4 pg.465 Hornberger). This is still true today - as an immigrant from India at the age of seven, I have learnt in school that we Americans are determined to fight for freedom. The study of the American Revolution, the Civil War, and World War II has thought me that freedom should not be taken for granted.

The customs of America as well as other countries are based on concepts of etiquette. While spending the summer in India, I violated some of the customs of that country. In India, the left hand is never used to shake hands, to eat with, nor for handing money to merchants in bazaars. In the eight years of being in America I had forgotten about this custom and consequently insulted several people by extending my left hand to them. Some customs in India show a much higher regard in that country than in America for teachers. While teaching English this summer to a tenth grade class in India, I remembered being in first grade – the students all stand and extend a greeting as the teacher enters the room. In America, however, students are sometimes disrespectful towards their teachers, an attitude that would not be seen in India. The polarities between America and India in spatial boundaries in public places are significant. In India, people push and shove to get onto a public bus,

but in America people take turns and wait for one another. Knowing the customs makes a person a functional member of the culture.

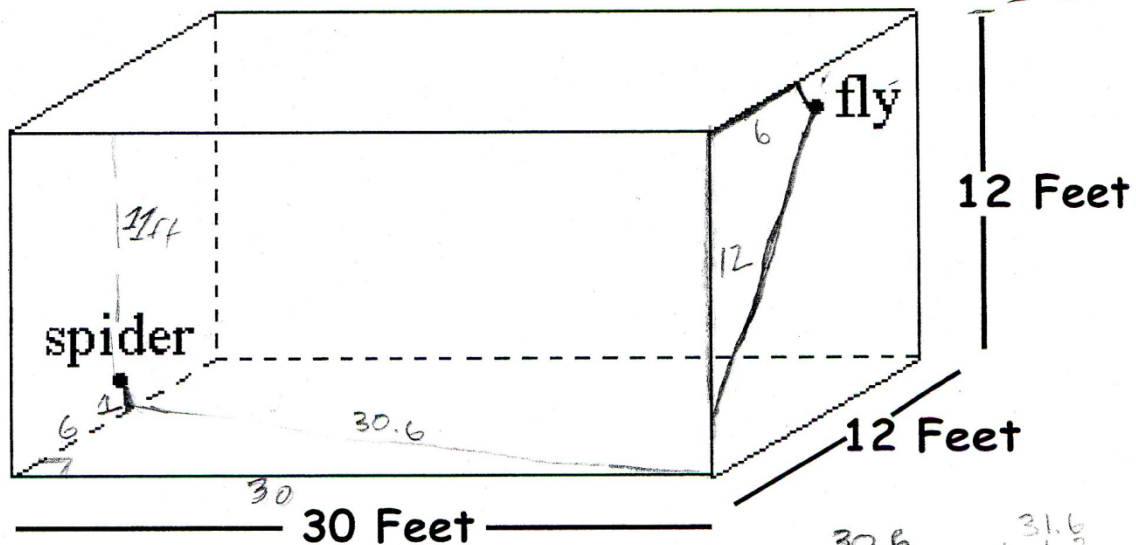
Tecumseh would argue that neither knowledge of customs nor history makes a person an American. He believes that only those born into the original native tribes are American; he sees immigrants as “the common foe”(2). He sees them as enemies to be fought and driven away. This attitude divides people who are living in a common land because immigrant threaten to take over the land and “to enslave us” (Text 2 pg.1 Tecumseh) . Knowledge of history and prevailing customs promotes assimilation, this unites people and creates a shared identity that is as strong as that of native--born people

As a person born in a foreign country and coming to America as an immigrant, and being here for 8 years, I consider myself an American. I have adapted to the customs and consistently learned about the history of America. Although people might not be born here, they can be an American by coming here and living a life of freedom and follow the customs. It is possible to be an American by learning the customs and adhering to them.

# The Spider and the Fly



A spider and a fly are in a 12 foot high room having a 12 foot by 30 foot floor. The spider is on one 12x12 wall halfway between the adjacent walls and 1 foot from the floor. The fly is on the opposite 12x12 wall halfway between the adjacent walls and 1 foot from the ceiling. The spider wishes to crawl to where the fly is via the shortest possible route. How far will the spider travel?



$$\begin{array}{r} 900 \\ 36 \\ \hline 540 \\ 32400 \end{array}$$

$$6^2 \times 30^2 = C^2$$

$$36 \times 900 = C^2$$

$$\sqrt{32400}$$

$$+ 30.6 \quad + 31.6$$

$$6^2 + 12^2 = C^2$$

$$36 + 121 = 157$$

### Appendix B: Identity Map

