Special Needs Education: Are They Really Getting All the Help They Need?

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Equal Opportunities for Special Education in India

The point of any well made research paper is to convey a complex idea in lay-mans terms, without loosing focus of what one is trying to say. This paper, similar to others within the field, discusses the different ideas by which the Indian Government can go about changing/reforming policies in order to help 'special needs' students. By helping give these individuals an equal opportunity education, current teaching methods must be the first thing to change. Since Government programs, as well as schools, outnumber private organizations, change must first start at the Politician's level, so they can therefore lead by example. Currently, there are only a handful of private groups that are making sort of headway concerning special education. More specifically, we should in some ways look beyond our borders for the answers pertaining our most relevant questions about education. "General" or "basic" education standards are terrible in India compared to the rest of the world. When someone goes to a government school, and wants to learn, they must hope that the teacher actually shows up in order to teach their class. The majority of students that make it to the 5th grade only have the ability to write their name in Hindi, and do basic math. As compared to our neighbors to the north and east, China has been doing a far better job in a mandatory schooling system, as well as Japan, Korea, (the other Asian Tigers), as well as our friends in Europe, and the US. Much like Yamini Aiyar's UTV interview statements, the government needs to be held accountable in some form on the promises it makes to its people, in speech, as well as on paper (the constitution). The best way to

understand what problems need to be solved in the future is to address, what issues currently exist. Out of the many ways to answer this question, this paper uses the method of comparing and contrasting, Private Schools' views and approaches, to NGO views and approaches, to Government Schools' views and approaches towards solving the issues of equal education opportunities for special education.

Learning Disabilities are found not only in America, as people have now come to realize, but it exists all over the world. "One in every five students...," is the noted statistic by various American media sources, "...have some form of learning disability."

This idea is also shared at home, in India, by a handful of individuals as well. One of these individuals, Mr. Arun Kapoor (ex-Principle, now senior staff member of the Vasant Valley School, as well as founder of The Pallavanjili School), describes his thoughts on "Special Needs" in India, and the innovations that are taking place within VVS, during an interview.

Rustam: Mr. Kapoor, what is your view of Special Education, Special Ed. within India, and what steps has Vasant Valley done to accommodate the needs of students with 'special needs'?

Arun: The way I look at, and present the idea of "special education' to others in the school that either don't know about it, or

have stigmas towards the phrase, is by saying that everyone has 'special needs' to some degree. Some of us are tall, short, skinny, fat, good at math, or at sports, or in English, or another subject. We [at Vasant Valley School,] try to help each of our students realize what they want to do, as well as help them understand their potential, and aim towards helping the student become the best they can be at what they are good at.

The school system here [, in India] usually does not focus on the individual abilities of the student, which to me is not the real meaning of teaching. Teaching, to me is doing/changing the method by which the teacher trains, and therefore teaches the information in their agenda. The majority of schools are set up on the aggregate needs of the children. Meaning, their schooling system is based on administrative needs, not needs of child.

For ex.: 'All 15 year olds are grouped together – therefore everyone is going to understand the given information equally.' The idea that is presented to the teachers at Vasant Valley School, as well as to the students, and their parents, is that everyone is different. Since everyone is different, we all therefore have different needs. This is done by creating, and using, an IEP. Even groups of students that haven't been

[officially] 'labeled' as having a learning disability – rather than say they have 'special needs' – we call it being differently abled. The idea of different needs is sent through [the] teachers, then [the] students, then the parents. We then try to sell this idea to everyone. Every single student, and teacher, is differently abled. Once teachers understand that they are all differently abled (have different strengths and weaknesses...therefore there are some things we are better at, and some things that we are not so good at), they understand that their students are the same.

However, by doing this, each teacher's work load grows to accommodate the specific needs of their students. Creating such ideas, and turning them into policies during board meetings is important, but not the most important thing for its students. By this I mean to state that a school can have a great policy, but that doesn't matter if the teachers don't implement the ideas from it in the class-room. Since they [the teachers] are 'on the battle-field' every day, if you want to call it that...their actions are very important. But then again, some teachers are better at teaching these plans to their students than others. This is one reason why we have [a] mentor[-ing system in school] .

Mentor positions are given to teachers within the school. Each of whom has a responsibility to 'look after' a specific small group of students. If students mention that they are not getting adequate help in certain classes to their mentor, the mentor in this case becomes an intermediary who can speak to those specific teachers on behalf of the student. A mentor may also suggest different ways for the student to solve their problem to teach an assisted form of self advocacy – and for the student to come back to f their problem persists.

I feel that a school has to constantly be on the lookout, for new ways of thinking and teaching, by using the best method of that time, constantly looking for something new. This is what I am implementing in Vasant Valley School, and it is working great so far. Therefore, when a school says that they have found 'The One and Only,' or, 'The Best' way to teach their students...they have already failed. This is because there is no one right answer in education.

The ideal situation is one that is a work in progress right now. It involves mixing pieces of different plans, in order to find out what works best. In a sense, creating individual 'khicherries' of different teaching plans to best educate each student. In addition,

after these plans are delivered, the teacher must go back over the plans to re-assess their approach to each student. By doing this, they see what portions (of their plan) did work, and figure out what ideas to switch in for the parts that did not work. Teachers must also implement the idea that we all have different abilities – and not expect a 'super-delivery' of the teacher's plan, being implemented 24/7 which is impossible. We are all humans, and we all also have our good and bad days.

This again is only one, out of a handful of brilliant individuals who are currently changing the face of Education within India.

After the 'official' interview with Mr. Kapoor, he discussed the different changes that are taking place within schools in India, what all different 'leaders in education' from around the world have to say about special education, and how their specific ideas defer from one another about their approach to dealing with/solving these questions. Amidst this conversation arose the name, 'The Pallavanjili School' (located in Gurgaon), is one of the few schools with break-through ideas about education. Pallavanjili was originally started in 2007 as an NGO, created by Arun Kapoor (of The Vasant Valley School), but is planning on becoming a self-sustaining 'Private School' within the near future.

Mr. Kapoor gave me the contact information for Ms. Shaloo Sharma, the Head of The Pallavanjili School, and suggested I meet her as well. As requested,

later that day I proceeded to set up an appointment with the Head of a school I had never heard anything about, which was implementing break-through methods within education that were not widely known.

On the day of my meeting with Ms. Sharma, when I heard that 'Pallavanjili' was an NGO – School, located behind a Mall, and was aiming to help all sorts of children with a variety of different needs, I was some-what skeptical of what I was to expect of this institution. Much to my surprise, as the large steel gates, similar to those at any institution in regard to education is assumed to have, slowly opened, a large white building overcasts the view of any passer-by. From a first glance, the school gave the impression of a lavish use of space, a comfortable learning environment, warmth, and an area suited to helping students with a variety of needs.

Executed similarly to Mr. Kapoor's interview, Ms. Shaloo Sharma (Head of the Pallavanjili School) was happy to discuss all the various new ways of teaching, the school has implemented. Ms. Sharma is also trained in the arts, and implements her skills by teaching special needs children through drawing, painting, and the creation of images.

Shaloo Sharma:

The name of this School is called, "The Pallavanjili School." The name was created by the founder of the school, Mr. Arun Kapoor. Similar to any other school

within our field, we at this school are trying to work towards an environment with, equal learning opportunities for all, without bias. To us, **equal learning opportunities** means that, we cater to students with a variety of different needs, as well as students with-out special needs. We have a very 'inclusive environment' within our school walls. We take in children as young as 6 months old, through 8th grade. If we receive children that are younger, then we go through 'intervention' with them as well. In any one class of 15 students, we may have five students with-out disabilities, five students with underprivileged backgrounds, and another five students with learning disabilities. In each class, the ratio is 8 students, to 1 teacher. But for students in special needs classes, we have 3 students, to 1 teacher in order to offer extra support for those students.

Although we currently only support pre-school through class 8 (8th grade), we are growing and will be adding a new class (grade) every year. Students will have the choice to either take their CBSC, ICSC, or NIOS exams. Within our individual classes, we do place children with different abilities in the same room, however they are separated into different groups. These different groups are decided by how they do on their 'competency' exam. Students with Learning Disabilities have an IEP, however, each student here has a unique academic planner which is similar to an IEP.

On a slightly different note, our students from underprivileged backgrounds are treated exactly the same as any other student here. Where as in some schools, teacher attendance drops because the teachers state that these groups of children "aren't paid

for, so why should we teach them…" To make that idea a non-issue, underprivileged students are already "paid for" and supported by a foundation that gives them a grant. As for academic needs, the academic support staff ('extra' teachers) go into classes and give extra support/help to those students who need, and/or ask for extra help.

Although not all the teachers within the school have the same degrees, they do receive 'special teacher training' during the summer, from Pallavanjili's 'teacher training program.' Our biggest criteria for teachers is that they are genuinely enthusiastic about helping children. And if they believe that it is going to work, then we are happy. The reason we go about choosing our teachers this way is because in the past we have had highly qualified teachers come in and do poorly at the job, and we have had others who were not 'as highly qualified,' but could inspire the children to learn and study. Although their paycheck is somewhat defined by the degree they have.

Similarly to any other school, certain groups of students tend to not do as academically well as their peers as well. Here, when students seem to be lagging, or falling behind, we try and help and break down the information as much as possible. And if they are still lagging, then we might give extra, or more heavily weighted homework assignments to make up for what they are not being able to keep up with in class. Or, if they are still having trouble keeping up, we might ask them to drop a class, or repeat a year if needed. Another facility our school offers is a 'Help Center.' This is an area where students meet up with teachers in a 'working environment' that is different than the class room. Here the student and teacher are able to work 1:1 on any

confusion there might be in the class-room, clarify directions, or get help with general class-work as well as any homework that is due.

As far as other forms of education can be held accountable, Government schools do not have qualified teachers, but they do have Government funding which we don't have. Plus, being a Govt. school, they cannot turn any student away. However, we are much more similar to the way private schools run their programs. Although it is pretty much the same plan, we do not have specific special education programs in order to keep children from feeling alienated or different. However, students with Learning Disabilities who do require amenities such as extra time do receive this for exams.

A lot of people don't know of this school. We like to keep the knowledge of it as word-of-mouth, and do not advertize it in the media. Besides, there isn't any clear way to describe the school within an add anyways. We are not a special education school, but we are as well. We are a regular school, but at the same time we do several things in our own way which is different from conventional norms.

Pallavanjili began as an NGO – started by Arun Kapoor – but we are separate from other NGO organizations as well. We are currently working towards becoming a more private organization somewhere down the line so we are self sufficient.

As the interview was drawing to a close, Ms. Sharma introduced me to Ms. Sarabjit Narula (Head of Special Education at Pallavanjili), so I could ask her any questions about the Special Ed program at the school. Ms. Narula was very co-operative

in answering a few of my last minute questions, as well as describing some of the 'inovative' methods the school uses to teach its students.

Ms. Narula:

Students in same classes can receive extra support in class. If the student is totally lagging, then they can stay back, or have less free time during the day and spend part of it working with the teacher.

We receive 'regular' teachers, but we update them through our teacher training program on several things such as desensitization, new methods of teaching, and tell them about the 'buddy system'. The Buddy-system is a system where two students help each other keep on track during the school day. They are in the same classes, and same groups within those classes. Help and support received by students from their own peer group, and friends group, helps a child learn and grow far more effectively than putting the onus onto just the teacher.

This school helps out students past the regular school environment as well. Pallavanjili has, "The Young Adults Program" in which, 3 days out of the week, students who do not feel that they can, or want to continue with school, go to training. There they learn to work in a non-school, but work environment. Nothing works better than a peer group. Positive peer groups help individuals know, or realize their own boundries.

 Example of a student with severe special needs:

"Gunjan is 14 years old and was bornwith the Sterge Webers Syndrome. To put it simply, her brain is 'bruised'. She is also hemiplegic, which means the right side of her body is weak. In technical terms she is referred to as Intellectually Disabled.

But her art speaks for Itself. Her colours are instinctive, lines bold and unpretentious, her subjects pure. Where in Gods' plan do such children fit.. is for all of us to wonder, hope and pray. In dedication to all such flowers.." (Asthana, 1).

For such a student, whose future might seem so grim in our eyes...the gift of art is given. With the help of Ms. Shaloo Sharma (head of The Pallavanjali School), these two individuals have created a book with a simple, yet powerful story line, in which an individual similar to Gunjan, makes their mother happy. The story was scripted by Girija Rani Asthana (children's story book writer), and illustrated by Gunjan. The final product was an amazing story meant for children, but can be enjoyed by all. The pages come to life with supporting images, bursting with detail, color, emotion, and vibrance.

One common misconception found in India (more so) than in the US, is on the lack of information there is about individuals with Learning Disabilities, and the confusion between LD students, and those who are characterized as "special needs," M.R.(mental retardation), autism, or something else.

In the U.S. there is a Federal Special Education Law, which is called the Individuals with Disabilities Education Act, or IDEA for short. This Act includes a clear definition of learning disabilities. It states that "Children with specific learning disabilities exhibit a disorder in one or more of the basic psychological processes involved in understanding or using spoken or written language. These may be manifested in writing, spelling, or arithmetic. They include conditions that have been referred to as...dyslexia..." This law demands that every school, in every city, in every state, within the US, must provide a "free and appropriate" special education program(s) for all children with special needs.

Some individuals, despite having an average or above average intelligence, have real difficulty acquiring basic academic skills. These skills include those needed for successful reading, writing, listening, speaking and/or math. These difficulties might be the result of a learning disability. Learning disabilities do not include problems that are primarily the result of intellectual disabilities, emotional disturbance, or visual, hearing, emotional or physical disabilities.

Many children with LD struggle with reading. The difficulties often begin with individual sounds, or phonemes. Students may have problems with rhyming, and pulling words apart into their individual sounds and putting these individual sounds together to form words . This makes it difficult to decode words accurately, which can lead to trouble with fluency and comprehension. As students move through the grades, more

and more of the information they need to learn is presented in through textbooks, or through lectures. This exacerbates the difficulties they have succeeding in school.

There are three main types of learning disabilities. The most commonly found is dyslexia. Dyslexia is the academic word that describes reading disabilities. The second most commonly found disability is dysgraphia. Dysgraphia is found when an individual has 'written language' or writing (spelling, confusing b's and d's, etc) disabilities. The last most commonly found disability is dyscalculia. Dyscalculia is found when an individual has math disabilities.

Most commonly, a person with dyslexia is characterized by difficulties with accurate and/or fluent word recognition, poor spelling, and decoding abilities. The ability to read successfully includes several processes; first, focused attention on the printed symbols, then the ability to recognize the sounds associated with letters, then the ability to understand words and grammar, after which one builds ideas and images, then comparing new ideas to what you already know, and finally, storing ideas in one's memory.

A person with dyslexia can have problems in any of the tasks involved in reading. However, scientists found that a significant number of people with dyslexia share an inability to distinguish or separate the sounds in spoken words. Some children have problems sounding out words, while others have trouble with rhyming games, such as rhyming "cat" with "bat." Yet, scientists have found these skills fundamental to learning

to read. Fortunately, remedial reading specialists have developed techniques that can help many children with dyslexia acquire these skills. However, there is more to reading than recognizing words. If the brain is unable to form images or relate new ideas to those stored in memory, the reader cannot understand or remember the new concepts. Other types of reading disabilities can appear in the upper grades when the focus of reading shifts from word identification to comprehension.

Writing too, involves several brain areas and functions. The brain networks for vocabulary, grammar, hand movement, and memory have to all work well. A developmental writing disorder may result from problems in any of these areas. For example, a child with a writing disability, particularly an expressive language disorder, might be unable to compose complete and grammatically correct sentences.

Arithmetic involves recognizing numbers and symbols, memorizing facts, aligning numbers, and understanding abstract concepts like place value and fractions. Any of these may be difficult for children with developmental arithmetic disorders, also called dyscalculia. Problems with number or basic concepts are likely to show up early. Disabilities that appear in the later grades are more often tied to problems in reasoning.

Many aspects of speaking, listening, reading, writing, and arithmetic overlap and build on the same brain capabilities. It is not surprising that people can be diagnosed with more than one learning disability. For example, the ability to understand language underlies learning to speak. Therefore, any disorder that hinders the ability to

understand language will also interfere with the development of speech, which in turn hinders learning to read and write.

Sometimes in the media, the public, and even educators confuse autism with learning disabilities. These are two separate disorders. According to the Autism Society of America, autism is a developmental disability that typically appears during the first three years of life and affects a person's ability to communicate and interact with others. Autism is defined by a specific set of behaviors affecting individuals differently and to varying degrees.

Similar to India, there are laws put in place to help individuals with 'disabilities' in the US, as well as a variety of nations around the world. The forms of 'help' that are put in place for students with needs in education are called accommodations. Accommodations are alterations in the way tasks are presented that allow children with learning disabilities to complete the same assignments as other students. Accommodations do not alter the content of assignments, give students an unfair advantage, or in the case of assessments, change what a test measures. However, they do make it possible for students with LD to show what they know without being impeded by their disability.

Once a child has been formally identified with a learning disability, the child or parent may request accommodations for that child's specific needs. The Individuals with Disabilities Education Act states that a child's IEP (Individualized Education Program)

team which both parent and child are a part of – must decide which accommodations are appropriate for him or her. Any appropriate accommodations should be written into a student's IEP.

School assignments and tests completed with accommodations should be graded the same way as those completed without accommodations. After all, accommodations are meant to "level the playing field" by providing equal and ready access to the task at hand, not an advantage to the user.

It is a challenge to arrange a good fit in school for children with LD. They must have an appropriate level of intellectual challenge with supports and interventions to address their social and emotional immaturity. Placement in a gifted program may or may not be appropriate, depending on the nature of the program, the social environment of the classroom, and the coping ability of the child, but a coherent plan for addressing the student's intellectual, social, and behavioral needs are nevertheless imperative.

Such laws, rules, and policies are not currently in place at home in India. Realizing this flaw, the Indian Government should go ahead and incorporate a few of these ideas into their current policies on helping individuals with disabilities. As till now, bright and gifted children are being cast aside unknowingly by our government and the majority of our education system because they are unable to cope with the rigid system that is currently in place. Among many within the

'celebrity community' at home as well as abroad, there are clear signs, as well as documents stating that they too have learning disabilities. To every disability, the brain compensates by being superior within another aspect of itself. Famous American actor, Billy Bob Thornton has stated that he is still unable to read well, however his fabulous memory has made up for his difficulty. Mahatma Gandhi was another world famous individual who mentioned having mild learning disabilities as well.

Let us not cast such individuals aside because they seem different, or unable to learn in a conventional (British) manner, instead let us create a situation where all children have a right to education, and accommodations set in place for when they are needed. Our biggest issue within education is the severe contrast between low Government standards for schooling, high Private school standards and fees, and the vast array of standards one may find when looking at an NGO school. Instead, we should band together the best qualities of all three systems, include a voucher system for individuals from under-privilaged backgrounds, and create a Public-Private School system by which the Government owns the buildings, and continues on with their current schemes, and allow knowledgeable private bodies to 'run the show' for a while, until school policies are implemented, and proper teacher training, including special education training, is part of the requirements before one is able to receive a teaching certificate.

The "Directorate of Education released excess grants of Rs 1 crore to an aided school Gadodia Girls Sr. Secondary, Chandni Chowk during 1997-98 to 2003-04, even though student enrolment came down from 409 to just 10 in March 2003. In view of the minuscule number of students and staff as of November 2004, it is evident that the grant could have been utilized elsewhere in support of educational activities and the students/staff of this school could have been shifted to another school" (Delhi Handbook 2006, 85).

As stated by the 'Perspectives in Special Needs' website: Dr. Neelam Sinha, NIOS, New Delhi spoke on "Inclusive Education Through Open Learning." He noted that the widening gap of inequality in education is related to the problem of access. The lack of education is also due to the rigidity of our formal current system: education in terms of fixed time, fixed curricula, evaluation system and learning pace. In order to meet the challenges, it is necessary to look for alternative strategies and approaches, particularly to ensure not only access, but freedom, relevance, and quality.

Innovative educational leaders are now talking about more flexible and learner friendly educational methods, which automatically respond to individual learner needs. Open learning has emerged with a promise to make education a

really effective tool for the process of democratization and social justice. It is particularly characterized by removal of restrictions, exclusions, and privileges by the accreditation of students' previous experiences, and by substantial changes in the traditional relationship between teacher and students. It offers unique educational opportunities free from the constraints of time and space as well as from a rigid curriculum.

In a changing environment of rapid technological advancement, open learning has to play a significant role not only to provide access, but to retain people with disabilities in the learning process to achieve success. Such issues pertaining to relevant programs and curricula are important, but initiatives in these directions, especially for catering to the needs of learners with disabilities need to be addressed with seriousness.

Ms. Ruma Banerjee, Director, Seva-in-Action, Bangalore, presented a paper on Teacher Training Strategies in IED. The paper describes the inefficiencies within current teacher training programs, as well as suggestions with which to improve upon them.

As mentioned within the 2006 copy of 'The Delhi Handbook:'

> Schools managed by the authorities in Delhi are
> not only very poor in terms of basic quality of education
> but also with respect to infrastructure and teachers. In

several MCD schools there are around 70 students in one class, and half of them sit on the floor. Buildings are incomplete and have unfinished roofs, and some are even unsafe. A good MCD primary school has one toilet (cost common to boys and girls), otherwise in general there are no toilets. The teacher-pupil ratio is too low, leading to further deterioration in the standard of education.

Remuneration paid to workers for implementation of the schemes is very poor, leading to shortage of manpower. In case of mid-day meals, a worker gets 30 paisa per student to prepare food. The sole reason for inefficient disbursal of functions is lack of coordination between the Directorate, schools, and principals.

Delhi's education system is fraught with many institutional and regulatory problems as well. The Delhi School Education Act, 1973 features stifling regulations and opportunities for needy children in the Capital. The licensing process and restrictions on opening and running schools are just a few examples of these regulations. The decision process is also very centralized and creates inevitable delays, as often schools are located in far-flung

areas without basic infrastructure. The non-profit motive as a prerequisite in the education sector, either in school or college education, often creates corruption and illegality in the system. The regulated system of the sector is also one of the major problems. (Delhi Handbook, 2006)

Education in Delhi needs a complete turn-over in terms of its framework, decision-making, and political control. Education Institutions, as well as individuals with special needs have a much tougher time here in India, than they do in most democratic countries abroad. A radical suggestion, among the many, mentioned earlier would be for Govt. and private organizations to band together to create a school that has the best qualities of each side. Or if not begin by change across the board, then at least one such institution should be created to see if it is able to have some change, and a future chance for possibility.

Introduction of choice, competition, and entrepreneurship to this sector will do nothing but benefit anyone who is interested in seeing a brighter, more intellectual India in the future. Education vouchers can be given to underprivileged families to cover the cost of their children's education. Therefore the parents of

each child has the ability to choose the school that best suits the needs of their child(ren).

Reference Page

Arun Kapoor. Interview by Rustam A. Aiyar. 2009

(2008-9). United States Department of Labor. Retrieved June 17, 2009, from Occupational Outlook Handbook Web site: http://www.bls.gov/oco/ocos070.htm#training

(9/15/2009). National Guidine Clearinghouse. Retrieved June 17, 2009, from Complete Summary: Attention Defecit Hyperactivity Disorder Web site: http://www.guideline.gov/summary/summary.aspx?ss=15&doc_id=8225&nbr=4590

Directorate of Ecucation. Retrieved June 17, 2009, from Govt. of NTC of Delhi Web site: http://edudel.nic.in/welcome_folder/olink.htm

Disability India Network. Retrieved June 17, 2009, from THE PERSONS WITH DISABILITIES (Equal Opportunities, protection Of Rights And Full Participation) ACT, 1995 Web site: http://www.disabilityindia.org/pwdacts.cfm#ch1

Kumar, A. Mobility International USA. Retrieved June 16, 2009, from India's Jawaharlal Nehru University Web site: http://www.miusa.org/ncde/intlopportunities/indias-jawaharlal-nehru-university

Miller, S. (2006). LDW: Learning Disabilities Worldwide. Retrieved June 17, 2009, from Educational Options for Students with Learning Disabilities: Maximizing Potential Web site: http://www.ldworldwide.org/ldinformation/parents/education_options_miller.html

Pallavanjali. Retrieved June 17, 2009, from About Us Web site: http://www.pallavan.com/aboutus_pea.htm

Shaloo Sharma. Interview by Rustam A. Aiyar. 2009

Smith, S. L. *Readings for diversity and social justice* . Found on:http://books.google.com/books?id=_7oq23wsASgC&pg=PA352&dq=%22Sally+L.+Smith%22&as_brr=3#PPA355,M1

Vasquez, V. (2007). American University: College of Arts & Sciences. Retrieved June 17, 2009, from Special Education | Tribute To Sally L. Smith Web site: http://www.american.edu/cas/seth/special/smith.cfm