

*TESOL in Action*

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Dear GATESOL-ers,

Bringing out two issues of the journal in the space of three months is challenging. I recognize that writing for publication towards the end of the school year is not the easiest. Though this volume is slimmer than some previous ones, the content is no less intriguing. The four articles cover a wide spectrum of issues, concerns and interests.

Responding to Tom Friedman's book, Sethna explains why we must care about the wider world. This is an argument we use in our lives every day, that justifies our very existence as ESOL teachers. It is heartening to see an administrator echo us. If you haven't had time to get around to reading *The World is Flat*, this article will provide you an excellent lead into it.

Briggs's argument on the political and academic fallout of the dominance of English in the U.S. is powerful and thought-provoking. This is especially so in the light of two bills that have been introduced in the Georgia legislature. Contact Tonna Harris-Bosselmann, of the GATESOL Socio-Political Concerns Standing Committee for more information.

The ELL Coordinators from Premiere DeKalb describe a model that addresses issues of collaboration and expertise. This is only the beginning of a conversation that should be carried through for a long time. Perhaps this calls for a themed issue in the near future!

Metaphors are powerful for the images they convey. Finding ones that describe the complexity of our context and the responsibilities we undertake as ESOL teachers is complicated. Webbert offers us one that is persuasive and yet whimsical.

Finally, I hope to meet you all at the annual GATESOL conference this November. More about a session related to this publication in the next issue.

Happy summer reading – beginning with *TESOL in Action* (and ending with Friedman, perhaps?)!

## Messages Sent from a “Flattening” World to P-12 Education and Society

Beheruz N. Sethna

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In September of 2004, a group of higher education leaders<sup>2</sup> gathered at the University of Oxford in England to debate the issues of global ethics and the role of higher education. “The Oxford Conclave” developed a Statement of Beliefs and Responsibilities, of which the first one was:

“We believe that higher education has the responsibility to

- Increase access to quality education for all citizens of the world; ...”

Even before the proverbial ink was dry on this statement, however, it became increasingly probable that a major item on the legislative agendas of several state legislatures across the country and also a ballot issue in November of 2006 was going to be the cessation of educational benefits to undocumented immigrants to the U.S. and their children. I mention this not in any evaluative or political sense – I do not judge or even comment on the arguments in favor or against of such a move -- I simply raise the point that there are serious challenges along education’s path in the creation of ethical leadership; starting, interestingly, with the *very first bullet* on the Oxford Conclave’s Statement of Beliefs and Responsibilities: Increase access to quality education for *all citizens of the world*; (emphasis added).

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<sup>1</sup> The author is a Professor at the University of West Georgia, and President of the University. This piece is written in the author’s private capacity and does not represent the views of any institution to which he belongs. The approach of this paper is similar to, and draws heavily upon, another work of the same author: Beheruz N. Sethna, (2006) Ethical leadership in a global society -- (how) can universities lead? In John C. Knapp (Ed.), For the Common Good: The Ethics of Leadership in the 21st Century. Westport, CT: Praeger Publishers, 2006.

*All citizens of the world? How about some within sight of our own institutions?*

Friedman (2005; 173-200) talks of ten factors and events that made our world increasingly “flat” – and by that he means factors that are leveling the playing field for many countries that had until recently been essentially left out of the economic opportunities that America and parts of the Western world had enjoyed. These include: 1) the Berlin Wall coming down and so too the walls of intense governmental regulation in countries such as India, closely followed by Microsoft 3.0 which created a global computer interface; 2) the advent of Netscape which gave us all the ability to “browse” the World Wide Web; 3) the ability of one computer application to “talk” with another (which had hitherto been almost impossible); 4) “Open-sourcing” which consisted of “thousands of people around the world coming together on line to collaborate on writing everything from their own software and operating systems to a dictionary, to a recipe for cola;” 5) Outsourcing – moving some part of a company’s operations to another company (many times in another country – most often associated with India); 6) Offshoring – moving an entire production operation to another country – most often associated with China; 7) Supply-chaining – a continuous information and production operation which allows for the production of one more widget in, say, China, the moment you buy a widget at the local Wal\*Mart store; 8) In-sourcing – companies like UPS – after they pick up your computer to be repaired, instead of shipping it to the manufacturer, will repair it themselves (with the manufacturer’s permission, of course) and then return it to you; 9) In-forming – search engines such as Google, Yahoo!, MSN Web Search, etc.; and 10) “Steroids” – Voice over IP, Wireless, iPaks, PDAs, etc. – what Friedman says is “engines talking to computers, talking to people, talking back to the engines, followed by

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<sup>2</sup> Including the author.

people talking to people – all done from anywhere to anywhere. That is what happens when all the flatteners start to get turbocharged by all the steroids.” (Obviously, since I have just condensed several pages into one paragraph, I have left out many important parts of his analysis of these ten flatteners.)

A few notes on these flatteners: Note the date on the first flattener – this happened at the end of 1989. All of the others followed incredibly rapidly in a span of approximately 12 years – about one-tenth of the 21<sup>st</sup> Century! Essentially, all of these flatteners occurred in a blink of an eye. Furthermore, Friedman says, “the convergence of the ten flatteners begat the convergence of a set of business practices and skills that would get the most out of the flat world” – also of professions with different skill sets. Finally, with the advent of China, India, and other countries into this new world, almost 3,000,000,000 people who had been left out of the business climate were now in. So, it is a “triple convergence” that we in America have to deal with – a convergence of 10 flatteners in the blink of an eye, of many diverse skill sets and professions, and of three billion new people in the global market.

These global changes are essentially unstoppable. So, how do Americans fit best into this new world? How do we prepare our children and young adults to survive and succeed in the new flat world?

Education is the key – if we do it right.

Let me shift to another important part of Friedman’s (ibid, 256-75) book – he calls these the “Dirty Little Secrets” of which we need to be cognizant:

1. *The Numbers Gap*. Since the time we won the race to the moon, the number of scientists and engineers has steadily declined in America. Most of our scientists

and engineers are 40 years old or older, and the inflow is not keeping pace with retirement. Friedman refers to a study at Boston College that showed that 44 percent of eighth graders in Singapore and 38 percent in Taiwan scored at the most advanced level in math tests, but only seven percent in America did so. He estimates that it takes about 15 years to create an engineer (from interest to graduation); so, we had best get started now.

2. *The Ambition Gap*. Friedman (2005) writes, “Here is the dirty little secret that no C.E.O. wants to tell you: they are not just outsourcing to save on salary. They are doing it because they can often get better-skilled and more productive people than their American workers.” He adds, “When they send jobs abroad, they not only save 75 percent on wages, they get a 100 percent increase in productivity.” People in China and India are hungry for American jobs and business opportunities.
3. *The Education Gap*. It shouldn’t be the call centers going abroad that worry us – today, many of the high-end research jobs are going abroad. As Friedman says, they are not racing us to the bottom; they are racing us to the top. In 2003, Leslie Stahl of *60 Minutes* did a story on the Indian Institutes of Technology (IITs). In that story, she said, “IIT may be the most important university you've never heard of ... This is IIT Bombay. Put Harvard, MIT and Princeton together, and you begin to get an idea of the status of this school in India.” In Lesley Stahl's *Notebook* (Jan. 9, 2003), she said her story was “about a university that may be the hardest school in the world to get into. It's called IIT- Indian Institute of Technology. A stunning percentage of CEOs and innovators in the American high tech industry were graduated from IIT.” As Friedman claims, “Remember, in

China when you are one in a million, there are 1,300 other people just like you.

The brainpower that rises to the Microsoft research center in Beijing is already one in a million.”

People in India and China are hungry for the great jobs. The youth are motivated to work, and they do indeed work much harder.

The implications of the changing world for America are many and varied. First, we need to have adequate preparation -- in curriculum, attitudes, work habits, etc. -- at the middle school, high school, and college levels, to prepare America for the intense competition which results from a flatter world. We need to step up our advocacy for education at all levels. India and China have realized that education and higher education are the keys to success. They are rapidly increasing their emphasis and budgets as a percentage of public expenditures, as we, as a nation, may be decreasing ours.

Let us also briefly examine some implications of a flatter world for industry and society and general. A significant result of a flatter world is with regard to the awareness of what is going around in the world outside us. Partly tongue-in-cheek, it almost seems that Americans never got over the European “flat world” theory of the sixteenth century when the prevailing opinion was that the world was flat and that Columbus would fall off the surface of the earth.. For most of the 20<sup>th</sup> century and even continuing in the 21<sup>st</sup>, it’s almost as if many Americans (obviously not all) believed that *they* would fall off the surface of the earth if they ventured (mentally or physically) outside our shores. Kids in China, India, and the rest of the world know a great deal about America – when I was a kid in India, I studied American history and government (and movies and comic books

taught me about American culture). How much do American kids know about other countries? How much do American adults know about other countries?

We cannot ignore other countries and cultures any more – we are already way behind the game. We cannot maintain global leadership without a global-looking culture. How global is our culture? Even more importantly, what are we doing about it? As an exercise, if one were to examine the legislative agendas of the 50 states and the federal government, would we find a high percentage of legislatures debating actions and bills to help us be more globally aware and competitive? Or, is more legislation being proposed that is making us more insular and less welcoming to others? Are more legislatures looking forward and planning for the complex and diverse world of 20 years from now? Or, are more of them looking backward and doing their best to preserve old ways and old habits -- because they are afraid of the impact of more diversity, or perhaps because they blame diversity for all the ills of modern America? As one of Friedman's oft-quoted sources, Jerry Rao, says, "Cultures that are open and willing to change have a huge advantage in this world."

Friedman (ibid, 382-84) tells the story of the last national election in India when the ruling party which had presided over good economic growth was swept from power largely because of the discontent of rural voters. Here's the point: Rural India was not saying, 'Stop the globalization train, we want to get off.' They were saying, 'Stop the globalization train, we want to get on, but someone needs to help us by building a better stepstool.' Rural India, living in poverty and with low levels of education, 'gets it' – they *want* to embrace the rapid changes going on the world. Does rural America get it? Do



they want to embrace the rapid changes going on the world? Do our leaders – at all levels and of all types – get it? Are we willing to change?

Or, are we too afraid of the new world that comes from change?

Let's briefly look at the performance of Asian kids who live in America to search for clues about cultures in other countries. A review of winners of the Annual Scripps National Spelling Bee competition reveals that four Spelling Bee winners over the past seven years have been of Asian Indian descent (2007 Scripps National Spelling Bee, 2006). In the 2005 Spelling Bee, the top four winners were of Indian origin (Scripps National Spelling Bee, n.d.)). Nor are these occurrences restricted to spelling bees – as recently as May 24, 2006, at the National Geographic Bee finals in Washington, D.C., the winner, the second and third place winners, and six out of the top 10 finalists were of Indian origin (Harder, 2006). People of Indian origin constitute a small, perhaps miniscule, percentage of the U.S. population – some estimates state that, in the year 2000, there were approximately one million such individuals (Infoplease, 2007) out of a U.S. population of 281 million ( U. S. Census Bureau, 2007), which works out to about one third of one percent! So, the question might be asked as to what factors might be responsible for such success, so disproportionate to the number of Indian Americans in the U.S. population. One school of thought is that these skills are indicative of intellectual development and training. Another school of thought is that these successes are a result of a belief in rote learning, which is not the typical form of instruction in the United States, but is not unusual in the Indian system in which their parents grew up.

As another example, the National Foundation for American Policy, which focuses on immigration, trade and education issues, analyzed the 2004 student finalists in the

Intel Science Talent Search, the U.S. Physics Team, and the U.S. Team for the International Mathematical Olympiad. They found that 60 percent of the science competitors and 65 percent of the mathematics competitors were from immigrant families. "There's a very strong emphasis on education as a way to get ahead among [immigrant] families ... (to focus on math and science) as a guarantee of strong job prospects in the future," said Anderson, the foundation's executive director (National Alliance of State Science and Mathematics Coalitions, 2004). Tom Friedman also reports similar results (ibid, p.270) about the culture of immigrants in the United States. It's up to us to examine how much of that we wish to emulate.

In conclusion, I don't believe that the sky is falling. I do believe that the dangers are an incremental, but constant, erosion of our relative strengths. I do believe that America's world leadership position could be severely impacted if we don't get serious. Here's the bottom line -- Friedman asks: Are we preparing our children for the race ahead? And he answers: No.

*The Messages We Send: What's Cool and What's Not*

If we believe that education is a critical need for the future, I would venture to say that the ethical thing to do is to send this message. Conversely, *not* to send such a message for reasons of "going with the flow" with our children, our students, our neighbors, our communities, and our funding partners, is not indicative of true ethical leadership in our society.

I would respectfully suggest that "we" (used in the broadest sense) do not consistently send the right messages to our constituencies. If this is so, it is doubly problematic. For an entity to have the ability to send the right messages and yet not do so

does not represent true ethical leadership. If we (P-12 or P-16) have access to tens of millions of students every day, and yet we miss the opportunity to convey the important messages to them, I would suggest that we are not being true leaders.

We are sending the wrong messages to our kids. Think of it this way, how many messages each week from all personal and mass communication sources do they hear saying “Life is real, life is earnest, and you better work hard – really hard – to succeed. Go to College; Graduate from College.” Contrast this with the number of messages they hear saying, “Life is a ball. How can we make it more enjoyable for you, with more alcohol, more and faster cars, more expensive stuff (which means more odd jobs to pay for them and, therefore, fewer hours in class and studying)?” Then, why are we surprised that American kids don’t pay more attention to academics and intellectual activities?

As Friedman (ibid) says: “Here is the dirty little secret that no C.E.O. wants to tell you: they are not just outsourcing to save on salary. They are doing it because they can often get better-skilled and more productive people than their American workers. ... In China today, Bill Gates is Britney Spears. In America today, Britney Spears is Britney Spears -and that is our problem.” Friedman is right; I grew up in India and spent 25 years there before I came to America; I know that Bill Gates has star quality there – kids want to be like him. Not just as rich as he is, but smart and successful as he is.

I sometimes speak to groups of elementary and middle school students and ask them what they want to be. A large proportion of them want to be star athletes. This should surprise no one. The vast preponderance of images they see and stories they hear glorify athletes; they do not give equal emphasis to the valedictorians, the science stars or the math whizzes. There is the occasional blurb about these students, but if each news

medium in the country did a rigorous and honest count of the number and length of academic and athletics stories for emphasis, I would bet on the way the scale would tilt.

Almost every newspaper and television news program has a sports segment. How many have an equally regular academic section or segment? There are at least two major differences between sports sections and the few academic sections that can be found. The first is that the number and length of athletics stories are an order of magnitude higher than those of academic ones. The second difference is that the athletics stories are generally brag stories, while those academic stories that do appear typically are about how bad things are.

Most stories in sports sections are not about scandals or serious issues confronting the future of athletics. Instead, most of them are about college or high school sports – they are about wins and losses, and one school doing better than another

Perhaps a few times a year, U.S. print and television media report how poorly American children fare on standardized or comparative tests relative to children from other developed countries. About as often, stories appear about poor SAT scores in one state or another. On a few other occasions, the news media publicizes survey results demonstrating that many Americans, usually adults, cannot identify their home states or answer the most rudimentary questions about national or world affairs.

*The Times of India* (by some accounts, the largest English language newspaper in the world), has a weekly supplement or insert of four to eight full-size pages, called *The Education Times*, devoted to stories about education, higher education, math problems, hints on college application and readiness, and so on. How many American newspapers do the same?

If news media covered academic accomplishments with equal fervor as sports stories, they would send more balanced messages to our young people. Is the coverage of the local debate competition or the science bowl the same as that of the local football game and the detailed description of the touchdowns?

There is no claim that the *entertainment* value of a science competition or debate is the same as that of a football game. The claim is that the news should go a little beyond pure entertainment value – and give approximately equal time (or some reasonable fraction thereof) to coverage of positive occurrences in academics. Nor is there a claim that stories about academic successes will, by themselves, improve classroom teachers and test performance.

Just as it would be naïve to imply that a significant increase in media reporting will make up for shortcomings in the educational system, it is also naïve to imply that images in the media have absolutely no effect on the minds and priorities of our children and those who influence them. Nor is the media entirely responsible for sending the right or wrong messages. The adults in the child's life parents, teachers, counselors, coaches, professors, family members, and the public - play an even greater role.

Let me share my own personal example. I grew up in India and spent 25 years there before I came to America in 1973. The family income of \$ 14 (admittedly unadjusted for inflation, exchange rates and cost of living) would be well below the poverty line in the U.S. I have no recollection of any 'cool stuff' in my childhood. I went to a school which had very simple school uniforms and in my early period there, used hand-me-downs even for those. But, here's the kicker: Even at that level of income, in all the years I lived at home, *there was never even one conversation, never one question as*

to whether I would go to college and graduate from college. It was not a topic up for discussion. No matter what untold sacrifice it took on my parents' part or on mine, no matter how much hard work it entailed, and no matter how many 'cool' things I would do without, I was going to college and was going to graduate from college.

My mother and father and teachers sent the right messages. Today, I am in my 14<sup>th</sup> year as president of an excellent American university and I owe it to my parents, their values, and their messages of hard work and perseverance.

Of course, there was parental pressure and years of hard work. Let me address each of these.

Is parental pressure a bad thing? I would suggest not. I did not want to go to IIT – I did it because of parental pressure. Today, I thank my parents – again and again – for that pressure and that decision. When I decided to go to IIT, I was about 18. My parents were in their 50s. Is it unreasonable to expect that 'Father and Mother (with a combined experience base in excess of 100 years) know Best?' Why do we, in America, assume that the quality of decision-making at 18 (or younger) is superior to the knowledge base and rationality of parents in their 40s or 50s? Shouldn't decisions that determine the course of one's life be advised by the experience base that exists in the family and the (older) adult environment? Junior executives in industry defer to senior ones with more experience. Yet, for some reason, we believe that junior family members do not need to defer to senior ones with more experience!

Is hard work a bad thing? I would suggest not. There were periods during my years at IIT that I have no recollection of going to sleep – I simply fell asleep out of sheer exhaustion. Red and bleary eyes are not the end of the world. Those work habits serve me

in good stead even today. Besides, we need to understand that people in China and India, and in other parts of the world, are used to hard work. They are hungry and eager – for American jobs and American business. If we are to compete, we need to be well used to hard work, too.

In addition to hard work, there is an attitudinal difference. Recollect the Friedman quote, “In China today, Bill Gates is Britney Spears. In America today, Britney Spears is Britney Spears -- and that is our problem.” In my opinion, we are sending the wrong messages to our kids. We should be working full time on an alternative definition of ‘cool.’ What’s cool is not the cars they drive and the clothes they wear and the stereos they have. What’s cool is having choices later in life, the ability to learn, and the ability to have an ‘untouchable’ career in today’s changing world.

Many readers, when they read of my recommendations in favor of much more hard work, in favor of the benefits respecting the experience of parents, parental pressure, and the “Father and Mother know Best” phenomenon, in favor of postponed rather than instant gratification, and other such values and strengths (which might be labeled as ‘Chinese’ or ‘Indian’ or ‘outdated’) will believe that I am entirely out of touch with mainstream America. If so, consider this: if you have an 85-year old or a 90-year old person in your family, talk with him or her, and ask what life was like in America of the 1930s and 1940s. I suspect that they will claim – legitimately – that these were all ‘American’ values and strengths. So, why look back at that time period, when this entire article has been devoted to looking forward? One reason is that those were the days when America built the nation that rose to a leadership position in the world. Another reason is that those values are what the competition is using!

Let us understand that there is a battle for the hearts and minds of young people. Images and stories do help determine what's cool and what's not. If we choose status quo and refuse to glorify academic accomplishments with the fervor we promote athletics, then at least let us have the honesty not to wail and moan on the few days of the year when the academic stories appear about our poor performance.

Children learn what they see. So do adults.

#### References

- 2007 Scripps National Spelling Bee. *Champions and Their Winning Words, 1925 through 2005*. Retrieved April, 2006, from <http://www.spellingbee.com/bwg/statschamp.shtml>
- American Council on Education. (2006, March). *Poll reveals eight in ten voters believe vitality of America's colleges and universities critical to future economic success*. Retrieved April, 2006, from [http://www.acenet.edu/solutions/media/Microsoft\\_Word\\_-\\_Poll\\_results\\_Narrative\\_Graphs.pdf](http://www.acenet.edu/solutions/media/Microsoft_Word_-_Poll_results_Narrative_Graphs.pdf)
- Atlanta Regional Council for Higher Education. (2005). *What does Georgia gain by investing in its colleges and universities?* Retrieved April, 2006, from <http://www.atlantahighered.org/archereports/cpsreport.asp>
- Friedman, T. (2005). *The world is flat - A brief history of the twenty-first century*. New York: Farrar, Straus & Giroux. (Original work published 2005)



- Harder, B. (2006). Illinois eighth grader wins National Geographic bee. *National Geographic News*, May 24, 2006. Retrieved October 2007 from <http://news.nationalgeographic.com/news/2006/05/060524-geographic-bee.html>
- Infoplease. *Countries of birth of the foreign-born population, 1850–2000*. Retrieved April, 2006, from <http://www.infoplease.com/ipa/A0900547.html>
- National Alliance of State Science and Mathematics Coalitions. (2004). *News Brief # 2652. Immigrants' Children Inhabit the Top Ranks Of Math, Science Meets*. Retrieved April 2006 from <http://notes.nassmc.org/NBSfile04.nsf/aca9ba8d753f684685256b3f00684989/72ca053f1c05be3585256ee0006bad3e?OpenDocument>
- Scripps National Spelling Bee. (n.d.) *2005 final rankings*. Retrieved April, 2006, from <http://www.spellingbee.com/05bee/2005FinalRankings.htm>
- The Oxford Conclave. (2005, September). *Ethical global leadership: Preamble and responsibilities*. Symposium conducted at the meeting of the The Oxford Conclave, The University of Oxford, Oxford, England.
- U. S. Census Bureau. (2007). *The population finder*. Retrieved October 2007 from [http://factfinder.census.gov/servlet/SAFFPopulation?\\_submenuId=population\\_0&\\_sse=on](http://factfinder.census.gov/servlet/SAFFPopulation?_submenuId=population_0&_sse=on)

Language Education in the United States: A Genealogical Perspective

Anne Briggs

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Why has the bilingual debate become so heated in the United States? In other countries, bilingual education is a matter of course. Educating our English Language Learners is not just related to education. The education of English Language Learners is an issue that is run through with social and political threads that at first glance may not be obvious. The current debate in the United States is a result of beliefs about what it means to be an American, and concerns about power. The use of the term American is ironic, as the majority of the immigrants at the center of this debate are American, as they come from the Americas, just not the United States.

Sink or Swim

During the 1920s until the 1960s, students in the United States who were English Language Learners (ELLs) were not given any support services in school. This philosophy was called the “sink or swim” method. Today, many children of these immigrants decry ESOL (English for Speakers of Other Languages) holding up as an example the fact that their parents did not receive that type of support, and they were still successful. The case of today’s immigrants not learning English is one of the myths promulgated by the English Only Movement, as well as other linguistic assimilationist movements.

According to Cartagena (1991) the acquisition of English did not come easily to the first waves of ELLs who arrived in the 1900s and the “attempt to paint divisions

between older and newer immigrants is disingenuous” (p. 18). Immigrants of today are acquiring English at the “same rate, if not faster, than previous immigrant communities” (p. 18). Unlike today’s immigrants, immigrants who came to the US at the beginning of the 20<sup>th</sup> Century were usually kept in the same grade level until they learned enough English to move up, or until they dropped out of school. Guadalupe Valdés (2001), a professor of Education at Stanford University, writes that her mother “still vividly remembers the shame and humiliation she felt when she first arrived in the United States. Placed in a first grade classroom at the age of 13, she sat among 6-year-old children at a desk that was too small and struggled to maintain her dignity” (p. 5). The image of the immigrant who quickly and easily became an English speaker, and therefore an American, is a myth created to disparage the help that our English Language Learners currently receive.

### A Time for Change

The “sink or swim” immersion attitude began to change in the 1960s. The US had its first bilingual educational program, which began in Florida in at the Coral Way Elementary School in 1963 (Baker, 2001). Due to the Cuban Revolution there was an influx of wealthy Cubans, most of whom had American sympathies. These immigrants did not worry the monolingual, white, middle-class Americans much, for many reasons. The Cubans appreciated and emulated American culture in many ways. They were white and upper middle class, but most importantly, the Cubans were only staying in the United States until Castro fell from power (which would happen soon!). Ironically, the English Only movement, an enemy of bilingual education, would also be born in Florida, the first state that seemed to support bilingual education; though this would not be until the 1980s.

One cannot look at the influx of the Cuban refugees, and not look at the US involvement in the internal affairs of that country, which led these Cuban nationals to come to the United States. According to Schmidt (2000), “Many American ethnic communities - including American Indians, several Latino groups, and several Asian/Pacific Islander groups - derive their original memberships from acts of force and violence in which the boundaries of the United States were extended to ‘incorporate’ their forbearers” (p.191). Other immigrants, such as those from Vietnam or the Hmong from Laos are refugees as a result of US military involvement in Southeast Asia, particularly the Vietnam War.

In 1968 the US passed *The Bilingual Education Act, Title VII of the Elementary and Secondary Education Act of 1968*. This act established a federal policy for bilingual education. It was a result of the “renewal of the ethnic sensitivity in the 1970s, following on the heels of the civil rights movement of the 1960s.” (Porter, 1996, p. 159). The act recognized that US students who have a home language other than English might be at a disadvantage when receiving an education. Title VII was up for renewal in 2002, but was not renewed. On January 8<sup>th</sup>, 2002, the 34-year law came to an end. According to James Crawford (2002), one of the leading proponents of bilingual education in the US, “[t]his marks a 180-degree reversal in language policy.” In fact, the Office of Bilingual Education and Minority Languages Affairs has now become the Office of English Language Acquisition, Language Enhancement, and Academic Achievement for Limited-English-Proficient Students (Crawford, 2002). This name change is further evidence of the federal government’s movement away from the concept of bilingual education.

#### Civil Rights and the Chicano Movement

One aspect of the civil rights movement that greatly affected the creation of bilingual education in the United States was the Chicano Movement. The movement began in the 1960s. It consisted of, among other things, an effort to improve educational opportunities for Hispanic students. This Chicano movement pushed Congress to pass *The Bilingual Education Act, Title VII of the Elementary and Secondary Education Act of 1968*. By seizing and flexing political muscle, the government listened to the wants and needs of Chicanos in the United States. The Chicanos of the United States are descendents of immigrants, and are full-fledged Americans. Many came on permanent work visas in the early 1900s, which differentiates them from the current wave of immigrants, who are perceived by many as unwanted guests. This view of the present immigrants colors how the United States chooses to educate them.

As an outcome of the civil rights movement, the United States began to look at ways to provide students with an equal education. It was in 1974 that the Supreme Court ruled that equal does not mean identical. For English Language Learners to get an “equal” education, they must receive support from schools. During this time, the ESOL program began to take on many of the characteristics that are evident today. Title VII was amended to include students who have limited English proficiency, instead of only students who spoke no English.

The 1970s were a time when more bilingual education programs began to operate more regularly in the United States. In *Lau vs. Nichols*, 414 U.S. 563, 94 S. Ct. 786 (1974), which was a case brought against the San Francisco Unified School District on behalf of students whose home language was Chinese, it was stated that “...there is no equality of treatment merely by providing students with the same facilities, textbooks,

teachers, and curriculum for students who do not understand English are effectively foreclosed from any meaningful education” (414 U.S. at 568). The 1974 amendment to Bilingual Education Act required that schools receiving grants include “teaching in a student’s home language and culture, so as to allow the child to progress effectively through the educational system” (Baker, 2001, p.186). Later in the 1970s, *Cintrón v. Brentwood* (1978) the US District Court of New York ruled in a class action suit brought about on the behalf of Latino students, that competent bilingual teachers should teach ELLs in the subject matter of the curriculum while at the same time the students should be taught the English language. This came to an end with the aforementioned end of the Bilingual Education Act.

#### How We Came to be Here

The Reagan administration would end what some might call the honeymoon period for bilingual education. According to Schmidt (2000), “It did not take the Reagan administration very long to make it clear that it would side with those who argued against a maintenance approach [to English Language education] and that it would favor loosening the requirements for the bilingual education of LEP students” (p.15). Reagan was from California. Often, many with the most vehement anti-immigration sentiments spring from those places where there is a large percentage of immigrants, such as California and Arizona. Schatz et al. (2000) have found that there is a backlash and there are higher levels of [English Language Legislation] support among European Americans in regions with the highest proportion of immigrants. Anti-immigration sentiments, in turn, affect attitudes

Today, the anti-immigration position in areas with a high number of immigrants is evident in Arizona with the creation of the Minutemen volunteers. The choice of that name, by the way, is not accidental. It is just a statement as to the “American-ness” of the group. The original Minutemen were the men who fought the British in the Revolutionary War, which was another period of American nationalism. Many United States citizens once again feel that they are at war, defending their culture from the current wave of immigrants, even more so after the terrorist attacks of September 11<sup>th</sup>, 2001.

Anti-immigrants sentiments have been linked to American nationalism, and laws restricting immigration have come about when Americans begin to feel threatened by those they perceive as not being American (Schatz et. al., 2000). In many communities with a large immigrant population, “Whites” have become the minority population. They feel threatened by a loss of jobs, or loss of political power. The language debate is tied to anti-immigration sentiments. Currently, the US is trying to incorporate “between 1.0 and 1.3 million immigrants each year; this number includes between eight hundred thousand and one million immigrants to permanent residents who arrive each year and the estimated 300,000 undocumented immigrants who migrate to the United States and stay each year” (Desipio & Garza, n.d. p. 3).

According to Baron (2001), Official English movements are tied to, among other things, “increasing immigration” (p.5). Language is power, and when the majority of a community speaks another language, one who does not speak the majority language might feel a loss of power, and may attempt to legislate against the immigrant language in order to maintain power. Bilingual education would not be seen as helpful in this situation as it may lead to the maintenance of the students’ home languages. Instead,

other types of language instruction become favored, such as English to Speakers of Other Languages (ESOL). In fact, according to Galindo (1997), “[a]cross the United States, school districts and states [were] reconsidering their support for bilingual education programs, and some areas are even making efforts to eliminate bilingual education programs” (p. 104).

Baker (2001) refers to ESOL as a “submersion program with pull-out classes” (p.197). The societal aim of this type of program, he writes, is for assimilation of the English Language Learner. The aim in the language outcome is for monolingual English speakers. For most of the day the students are taught in the target language. The students received pullout instruction from forty-five minutes up to an hour and forty minutes, depending on the grade level and level of English proficiency. During the pullout class, the students receive support in their learning of English in the areas of listening, speaking, reading and writing, which are taught in English. Often, this form of Language Learning is similar to the “sink or swim” method seen at the early part of the 1900s, as the students are in the regular education classroom, without support, for most of the day. The goal of the ESOL method of Language Education is not to create a pluralistic society, but is to socialize language minority students to be members of the dominant societal group, making it what some in the United States would currently consider the ideal form of language education.

The language ideology in the United States is a way for the dominant English-speaking culture to maintain control. Galindo (1997) states “ideologies also function to maintain the status quo by legitimating current power structures” (p.105). The current debates over language in this country are primarily the result of competition for status



between groups and consist of the valuing and devaluing of language. ESOL, a subtractive form of language education, is an effect of this language ideology, while at the same time, perpetuating the power structure that created it.

As an ESOL teacher myself, I struggle with the genealogy of ESOL, as it calls into question the intent behind the type of instruction that these students receive. It causes me to question and trouble the issues that our ELLs face, as well as the issues faced by the ESOL teachers. A subject should not be ignored just because it is troubling. As ESOL teachers, we need to be conscious of the larger issues that are affecting language education in the United States. To forget that schooling in general, and language education in particular are tied to deeper social issues would be unwise. We, as educators, need to remember that schools are agents of socialization. We need to be cognizant of the underlying ideologies that shape the methods by which our students are taught, even if to do so is disturbing.

### References

- Baker, C. (1993). *Foundations of bilingual education and bilingualism*. Clevedon, England: Multilingual Matters.
- Baron, Ds. (2001). Language legislation and language abuse: American language policy. (5-29) In R. Duenas Gonzalez & I. Melis (Eds.), *Language ideologies: Critical perspectives on the official English movement*. Urbana, Illinois: NCTE.
- Cartagena, J. (2000). English only in the 1980's: A product of myths, phobias, and bias. *In ESL in America: Myths and Possibilities*. (pp. 11-26). Portsmouth, NH: Boynton/Cook.

Crawford, J. (2002). *The Bilingual Education Act 1968 – 2002*. Retrieved November 30th, 2005 from

<http://ourworld.compuserve.com/homepages/JWCRAWFORD/T7obit.htm>

Desipio, L. and Garza, R. *Immigrants, immigrant policy, and foundation of the next century's Latino politics: The declining salience of the civil rights agenda in an era of high immigration*. Retrieved October 24th, 2005, from

<http://www.civilrightsproject.harvard.edu/research/latino97/DeSipio.pdf>

Galindo, R. (1997). Language Wars: The ideological dimensions of the debates on bilingual education. *Bilingual Research Journal*, 21:2 & 3, 103-141.

*Lau vs. Nichols*, 414 U.S. 563, 94 S. Ct. 786 (1974) retrieved December 14, 2005, from

<http://caselaw.lp.findlaw.com/cgi-bin/getcase.pl?court=US&vol=414&invol=563>

Porter, R.P. (1996). *Forked tongues: The politics of bilingual education*. New Jersey: Transaction Publishers.

Schatz, R., Sullivan, N., Flanigan, B., and Black, A. (2000). Attitudes toward English Language Legislation: Predictors and Rationales. *Intercultural Communication Studies X*: 2, 181-201.

Schmidt, R, Jr. (2000). *Language policy and identity politics in the United States*.

Philadelphia: Temple University Press.

Valdés, G. (2001). *Learning and not learning in English: Latino students in American schools*. New York: Teachers College Press.

# Coaching: A New Avenue for Providing Teachers (and Administrators) Support for English Language Learners

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Professional sports team coaches spend hours watching and observing players on their team. Coaches learn their players' strengths and weaknesses. They learn how their players react in certain situations. Coaches' assess so they can learn how to best help their team and individuals succeed. They present their team with plays, scenarios, and even footage of opposing teams so that they can learn plays to win the game. The same strategies apply to instructional coaches in educational settings.

## Definition of Coaching

Merriam-Webster's online dictionary (Merriam-Webster Online, 2007) defines a coach as one who instructs, one who trains. Coaching is not about "fixing" a person. Coaching is about giving support and committing ones time to the achievement of others. Barkley (2005) states a coaching relationship provides the opportunity for reciprocity of gifts of knowledge and skill, caring and support, feedback and celebration. The primary focus of a coach's relationship is to focus on achieving the desired results of the coached. Instructional coaches watch, observe, and learn their teachers' strengths and weaknesses. They present their teachers with various teaching scenarios so that they can "win" in an even bigger situation – student achievement in the classroom. Research shows that coached teachers experience significant positive changes in their behaviors, when they are provided with an appropriate program that insures accountability,

support, companionship, and specific feedback over an extended period of time (Galbraith & Anstrom, 1995).

### Coaching vs. Mentoring

School administrators are in desperate need of personnel who can tackle the task of improving student performance by improving teaching. Faced with this dilemma, they must decide whether to hire coaches, mentors, school improvement specialist, or consultants to provide this kind of professional development.

The word “mentor” is synonymous with adviser, counselor, guide, and teacher. Mentors may be charged with a different task from a “coach”. Some of the duties of a mentor maybe assisting a person with classroom or district level responsibilities. A coach could be charged with some of the same duties. Barkley (2005) states mentoring focuses on the knowledge of the mentor, coaching focuses on the one being coached.

Kram (1985) describes mentoring as developing relationships that enhance both individuals’ growth and advancement. Mentors focus primarily on providing guidance, direction, and career advice. Mentoring, who is usually in expert or master teacher or administrator, has the responsibility of transferring this professional information to a novice or new teacher. During this “expert-to-novice” transfer, mentors usually give their opinions, make suggestions, or advise. (Murphy, et al., 2005).

Although the two titles are often used interchangeably, coaches and mentors both develop relationships with teachers, and use similar skill sets, the two differ in many ways. Whether one is identified as a coach or a mentor, building a relationship is critical in the success of supporting teachers.

Coaching can be empowering for the coach and the coached. Coaching is reflective and builds upon one's strengths. The coach asks questions and the person being coached thinks about their answers with the goal of becoming a more reflective practitioner.

Coaches also develop relationships with targeted teachers, which are aimed at helping teachers enhance their current job performance (Gbemiye-Etta, 2005). Coaches focus primarily on providing feedback to correct deficiencies or maximize their teaching potential by working on self-perceptions, helping teachers improve their teaching techniques, classroom management, or anything else related to the classroom. Unlike mentors, coaches have a peer relationship with targeted teachers. Their relationship does not rely on an "expert-to-novice" transfer of knowledge. Effective coaches work to help teachers recognize their own thinking processes and make changes based on their own thinking (Costa & Garmston, 2002)

Research has proven that coaching improves teaching and student learning. When specific feedback is provided, coaching has been proven to increase skill development and instructional practices. Training or coaching that provides transfer of skills into instructional settings is crucial for teaching and learning (Barkley, 2005). Veteran teachers as well as beginning teachers can benefit from coaching. Research has demonstrated that the kind of professional development that is most effective is ongoing, in school, high quality, and focused on instruction (Guiney, 2001). Since the English language learner (ELL) population is growing rapidly in U.S. schools, there is a growing need for instructional guidance with the ELL population.

#### ELL Coaches in Premier Dekalb County School District

From 1993 to 2003, Georgia experienced a 200% growth in its ELL population and the current population is over 50,000 students (OELA, 2007). At the same time, the state has not

required any specialized training for mainstream teachers of these students. This has been the catalyst for implementing ELL Instructional Coaches in Premier Dekalb County School District (DCSS). This school district, located east of metropolitan Atlanta has approximately 13,081 students identified as ELLs (Premier Dekalb County School District, 2007). DCSS has a plethora of coaches dedicated to improving instruction such as for literacy, math, graduation, Title I and class-size reduction. What was missing were coaches specifically dedicated to the development of the ELLs. In an effort to keep administrators and teachers abreast of the multifaceted mandates for ELLs, the county expanded its ELL studies program to include Instructional Coaches.

The role of the ELL Instructional Coaches is a conglomerate of instructional guide, advisor, advocate, and teacher and administrator trainer. ELL Instructional Coaches can provide some of the necessary training for these mainstream teachers who may not be familiar with the best teaching practices for ELLs. Providing this assistance requires that ELL Instructional Coaches first follow basic mentoring steps for any teacher which may include: (a) Modeling ESL teaching strategies, (b) analysis of formative and summative assessments, (c) providing learning opportunities through professional development or professional readings, and (d) providing feedback on teachers' daily instruction.

The strain of making adequate yearly progress (AYP) has placed schools with a high number of ELLs at a disadvantage since these students are held to the same academic requirements as their monolingual peers. By "coaching" schools through self evaluation, best practices for ELLs can be addressed. Strategies for ELLs are good for all learners but these teaching practices need to be intentional. By leaving it up to chance, these practices will not only remain random but

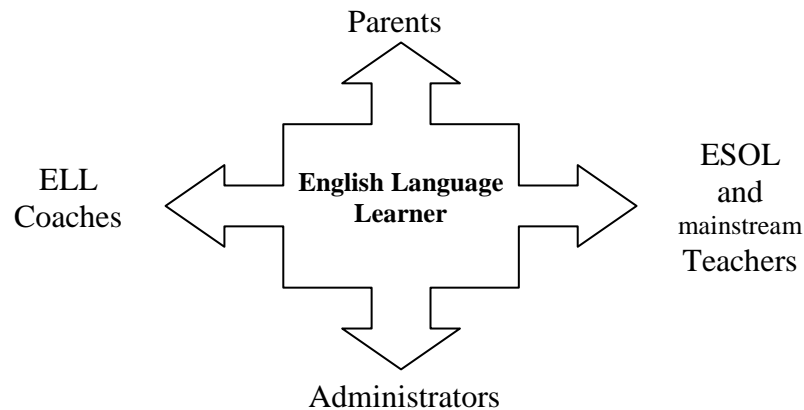
ineffective for language acquisition. Crandel, de Jong & Harper (2007) suggest coaching as a strategy to address the needs of the school's instructional community.

By working collaboratively with the school community, coaches can provide several services to a district. DCSS' model is on the forefront of adopting and utilizing coaches to advocate for the ELL population by having coaches: (a) Provide instructional support to local school administrators, teachers, students and parents of ELLs; (b) evaluate programs including curriculum, scheduling, staffing and proper student identification; (c) develop professional development opportunities for the school community; (d) promote parent engagement; and (e) continue to develop themselves professionally.

Before improved instructional practices, attitudes and perception can take place in classrooms for ELLs, a holistic approach to educating and activism must take place at a much larger scale, to seep into the culture of the school community. Implementing coaches for ELLs can aid in faster adoption and improved instructional practices district wide with the objective being success for ELLs.

### Essential Attitudes

In the beginning, it was feared that the ELL Coaches were in place to "catch" any wrongdoings related to ELLs. That mindset had to change because the coaches were in fact highlighting many things being done correctly and were able to share what practices were improving student achievement. Changing ESOL teacher's attitudes to assure them we are a resource for them has happened slowly but surely. By building these relationships around "partnerships," has established a sense of teamwork.



In conclusion, coaching is an effective, non-threatening way to improve student achievement, enhance best teaching practices and ultimately retain teachers. Providing a framework for educators to reflect on their teaching is powerful. The benefits of reflective thinking and allowing educators to take charge of their progress impacts the design of lessons, delivery, and accountability of the classroom. As we move from good to great, we must consider new innovative ways to support educators.

### References

- Barkley, S (2005). *Quality teaching in a culture of coaching*. Lanham, MD.: Scarecrow Education.
- Costa, A. & Garmston, R. (2002). *Cognitive coaching*. New York, NY: Christopher-Gordon.
- Crandell, J. de Jong, E. & Harper, C. *Is the Emperor wearing any clothes?...Is ESL just good teaching?* Retrieved October 10, 2007, from  
<[http://www.tesol.org/s\\_tesol/sec\\_document.asp?CID=1426&DID=9353](http://www.tesol.org/s_tesol/sec_document.asp?CID=1426&DID=9353)>



Galbraith, P. & Anstrom, K. (1995). Peer coaching: An effective staff development model for educators of linguistically and culturally diverse students. *Directions in Language and Education National Clearinghouse for Bilingual Education*, 1(3). Retrieved October 10, 2007, from <http://www.ncela.gwu.edu/pubs/directions/03.htm>

Gbemiye-Etta, E. (2005). What are the differences between coaching and mentoring? *IPMHR*.

Volume, issue and page numbers?

Guiney, E. (2001). Coaching isn't just for athletes: The role of teacher leaders. *Phi Delta Kappan*, 82(10), 740-743.

Kram, K.E. (1985). Improving the mentoring process. *Training and Developmental Journal*,

Volume and issue #? 40-43.

*Merriam-Webster Online*. (2007). Retrieved October 10, 2007, from <http://www.merriam-webster.com/dictionary/coach>

Murphy, L., Mahoney, S., Chen, C., Mendoza-Diaz, N., & Yang, X. (2005). *Distance Education*, 26(3). page numbers?

Office of English language Acquisition, Language Enhancement and Academic Achievement for Limited English Proficient Speakers (OELA). (2007). *Georgia: Rate of LEP Growth 1994/1995 – 2004/2005*. Retrieved October 10, 2007, from

<http://www.ncela.gwu.edu/policy/states/reports/statedata/2004LEP/Georgia-G-05.pdf>.

Premier Dekalb County School System (DCSS). (2007). Retrieved October 10, 2007, from

<http://www.dekalb.k12.ga.us/support/ell/>

# The Rubik's Cube and the Education of ELLs: A Metaphorical Comparative Parallel

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## How to Solve the Rubik's Cube

The *naïve* way to approach this problem is as follows: there are 12 edge pieces, and 8 corner pieces. A corner piece could never go in the spot of an edge piece. Edge pieces and corner pieces can be arranged in  $12 * 8$  ways, according to basic counting laws. Each of the edge pieces can have one of two orientations, and each of the corner pieces can have one of three orientations. So we must multiply the previous number by  $2^{12} * 3^8$ , representing the total number of positions. This number is 519,024,039,293,878,272,000 ( $\approx 5.19 * 10^{20}$ ). I like to give a physical representation to big numbers, so here goes: if you had a cube for every legal position, then you could cover the entire surface of the earth, including oceans about 250 times (Jeays, 2006, section 3).

## The Rubik's Cube as a Metaphor for the Education of ELLs

Words, metaphors, analogies, in sum, *epistemological representations* have a powerful draw on me. Thoughts and ideas are the centrifugal force of a personal ontology born from learning and thus being. Consequently, I feverishly prodded my imagination in an attempt to craft the ideal representation for the teaching and learning process of ELLs and their teachers. My purpose was to rein in the epistemological multiplicities into a straightforward solidifying thought. Teaching and learning for ELLs and their teachers is so complex but so doable!

When bridging the distance between *known knowledge* and *new knowledge*, an analogy or metaphor readies our understanding for new schema. Lakoff and Johnson (1980) define metaphor purely as an “understanding and experiencing of one kind of thing in terms of another” (p. 5). But in truth, how could I come up with *one kind of thing* to describe the complex process of teaching and learning for ELLs? Suddenly, my thoughts fortuitously turned to the Rubik’s cube, an enigma from my times of youth, and I got excited.

The Rubik’s Cube is a three-dimensional puzzle; “it is a modern day mechanical marvel surpassing the ancient wonders of the Hellenistic traditions and rivaling John Dee’s Scarabaeus of 1547 in the ingeniousness of its internal construction” (Taylor, 1980, back cover). Rubik’s became a craze in the United States about two decades ago. The challenge was to manipulate the cube so all of the same-colored squares were on the same side. I gave it a try as a young woman and returned to it recently in my search for the ideal metaphor that would exemplify the complexities of teaching English language learners. The unsolved puzzle on my night stand reminds me that solving *the Rubik’s cube is hard work and so are teaching and learning!*

Back in the 1980s, everyone gave the Rubik’s Cube a try, typically through trial-and-error. What most people eventually learned was that trial-and-error didn’t work; in fact, a wrong move could wind up eventually sabotaging the entire task. Soon it was evident that *solving the*

*puzzle was not a matter of luck or randomness; it required forethought, strategy and an understanding of which successive series of moves would lead to the desired result* (Jaey, 2006).

Some people embraced the challenge; the majority of people, like me, just threw up our hands.

No matter how much you fiddle and twiddle at random with the cube, you will never be able to return it to its original state. There are over forty-three billion possible ways of arranging the pieces of the Rubik's cube, so you need to have a method to get it back the way it began (Bossert, 1981, p. 5).

The Rubik's cube has been a source of inspiration for thinkers who see in this enigma the possibility of representing a number of fascinatingly complex processes. Yet, most papers written on the subject of the Rubik's cube tend to focus on the mathematically generated algorithms to solve the cube. It was stimulating to find Robertson's work (2005) tying in critical pedagogy and the mysteries of the Rubik's cube. In *Stories from More Sides Now: The Rubik's Cube and other Journeys through Critical Pedagogy*, Robertson describes her journey as a dissertation writer in search of a method to bring critical pedagogy into her college teaching practice. "I now turn to play out additional metaphorical parallels between the Cube and critical pedagogy – building blocks that represent the foundational pieces in this study" (p. 7). For Robertson practicing critical pedagogy compassionately and intellectually in the midst of a group of students who wanted a straight answer for their tests or papers felt as an unsolvable puzzle.

I can't think of a better metaphor to describe my instructional reality. I am puzzled about what to do, as I am also, metaphorically speaking, and facing disparate pieces of a critical pedagogy puzzle, i.e. power practices, democracy, my Freirian values, etc. Without a strong conception of the whole, or the bigger pedagogical picture, I am stuck turning the same logics around in my mind (pp. 10 -11).

As educators, we find ourselves challenged with solving elaborate puzzles created by the interfacing of teachers, students and mandated curriculum. The puzzle of teaching and learning is infinitely more complex than the renowned Rubik's cube. The conundrum we are obliged to solve is how to teach and learn, how to create knowledge best and as an on-going process, within a scenario *influenced by far more facets than those ever possible in a Rubik's cube!* Decision making in critical pedagogy must take into consideration the lives and stories of ELLs and their teachers as these are manifested in the stages of language acquisition, prior knowledge and cultural worldviews. In the interpretation and application of this knowledge educators and students recreate educational practices for social justice and learning in classrooms and communities. *Who are we, who are our students and what ought we to teach and learn, are facets of the instructional process that influence every possible outcome in the classroom and are far more complex than all the possible mechanical moves in a Rubik's Cube!*

### The Naïve Way to Approach Teaching and Learning

In teaching and learning it is impossible to compile all the possible moves of all the possible selves caught up in the everyday educational act. It is further impossible to summarize the complexities of the teaching act in a scripted, sequential, infallible curriculum as the standardization movement in education seems to suggest. Informed teachers and students *make sense of the instructional process as an arena for educated decision making* in order to move towards more effectual academic execution.

Like kaleidoscopic images, the education of ELLs is a multi-dynamic and multi-faceted opportunity that allows for the consideration of the unique characteristics of the students and teachers embedded in the teaching and learning process. Each component in the educational process interacts in multiple ways within and among each other to create descriptions of

academic learning that varies from ELL to ELL. These academic interactions can never be scripted or prescribed. Teaching and learning become insightful, personal and dynamic. In my research of the Rubik's cube, not one source proposed every possible Rubik's cube move or solution. *How naïve to believe that we can accomplish this feat in the immeasurably more complex site of education!*

#### REFERENCES

- Bossert, P. (1981). *You can do the cube*. New York: Puffin Books.
- Jeays, M. (2006). *How to solve the Rubik's cube*. Retrieved July 28, 2007 from <http://jeays.net/rubiks.htm#order>
- Lakoff, G. & Johnson, M. (1980). *Metaphors we live by*. Chicago: University of Chicago Press.
- Robertson, R. R. (2005). *Stories from more sides now: The Rubik's Cube and other journeys through critical pedagogy*. Ph.D. dissertation, Southern Illinois University at Carbondale, United States -- Illinois. Retrieved July 28, 2007, from ProQuest Digital Dissertations database. (Publication No. AAT 3176519).
- Taylor, D. (1980). *Mastering Rubik's cube: The solution to the 20<sup>th</sup> century's most amazing puzzle*. New York: An Owl Book.