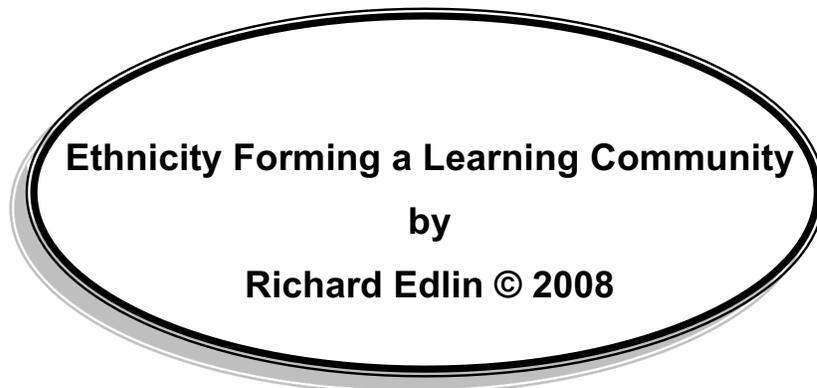# Ethnicity

Shaping a
Learning Community

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Ethnicity Forming a Learning Community

by

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Learning is a common term with an elusive meaning. Plato grappled with the learning paradox when he mused upon the quandary of how we can acquire knowledge of something that is not yet known to us (Bereiter, 1985). Some view learning as the cognitive process of the acquisition of knowledge (Wakefield, 1996). Others view learning as a behavioral process wherein experience causes a long term change in knowledge and behavior (Woolfolk, 1998). Still others would claim that learning is a biologically driven consequence of innate language functioning and experience (Borich & Tombari, 1997).

Perhaps the most useful discussion of the nature of learning for the context of this paper is the attempt to understand learning in terms of the metaphors of acquisition and participation (Sfard, 1998). In this explanation, learning involves the concept of the accumulation and construction of fixed information. However, this activity is merged with a social, dialectic function which is imperative if inert knowledge is to become truly learned and available to the learner (Good & Brophy, 1997). The synthesis of the acquisition metaphor with the participation metaphor creates a theory of learning that highlights its social nature:

> Learning activities are never considered separately from the context within which they take place. The context, in its turn, is rich and multifarious, and its importance is pronounced by talk about situatedness, contextuality, cultural imbeddedness, and social mediation. (Sfard, 1998, p. 6)

This contemporary view of learning theory is important in the context of this paper because it highlights the view that learning normally exists in community. Therefore, a child's learning experiences must be contextualized to the particularized norms of his or her community. There is an obvious relationship between this perspective and the view outlined below of individual learning styles and their cultural embeddedness.

Personal Preferences and Learning Styles

Ehrman (1996) commences her discussion of difficulties faced by second language learners with a very simple illustration. She asks readers to cross their arms. If this is being done in a group situation, she encourages participants to observe the

manner that other people's arms are crossed (left arm on top or right arm on top). She then challenges them to discuss the question "Which way is better?". The obvious answer is that no way is better--yet most people have an unconscious preference as to which arm they place on top. Whatever the cause of this preference (for example, physical position in the womb), a preference does exist. In all of life, Ehrman argues, we function according to preference. When faced with the task of assembling a new piece of do-it-yourself furniture, some people will carefully read the instructions before starting, while others will unpack the pieces and start right in with the assembly process. These are preferences.

There are several language institutes in Costa Rica that teach Spanish. One of them, *Instituto de Lengua Española*, offers two parallel programs. The first is the classroom approach where adult students undertake much of their language learning by formal instruction in language structure and grammar, followed by repetitive phonetic instruction. The second approach is *el faro*, where students spend most of their time in community settings, learning their Spanish on the street from local Costa Rican natives. Again, the question arises, "Which way is best?". Just as in the Ehrman case, this is the wrong question, since some students prefer the classroom method and learn best in that context, and other students prefer the *el faro* method and learn best in that context.

These examples serve to introduce the principle, well supported in the literature, that different people learn in different ways or using different styles. People learn differently. Some prefer to learn using visual stimuli. Others prefer to learn in an environment undisturbed by external stimuli. Some people respond rapidly to issues and see the big picture, while others are more reflective and are concerned with details. These different patterns in how people learn are called learning styles. They are also known as learning preferences (Woolfolk, 1998) or cognitive styles (Borich & Tombari, 1997).

Research into the topic of learning styles dates back to the late 19th and early 20th centuries, where "finding the one perceptual mode that would best increase learning or retention" (Ester, 1994, p. 129) was emphasized. A learning style is an individual's preferred way of processing and thinking about what he/she learns. A benchmark definition from the National Task Force on Learning Style and Brain Behavior (Bennett, 1995), states,

> Learning style is that consistent pattern of behavior and performance by which an individual approaches educational experiences. It is the composite of characteristic cognitive, affective, and physiological behaviors that serve as relatively stable indicators of how a learner perceives, interacts with, and responds to the learning environment. It is formed in the deep structure of neural organization and personality which molds and is molded by human development and the cultural experience of home, school, and society. (p. 164)

In recent times, a proliferation of terminology and models has arisen. Curry (1990) states that this is due, in part, to the "wide variation in the scale and the scope of learning, in school achievement, and in other behavior predicted by the various learning style concepts" (p. 50).

Learning Style Models
There are several instruments that are available for assessing different learning styles. Models produced by Gregorc (1982), Dunn, Dunn and Price (1978), and Oxford (1994) are relatively well known. Irvine and York (1995) provide an annotated list of

learning style identification instruments. With the increasing popularity of the world wide web and of home schooling in recent years, materials concerning learning styles have become more sought after and more readily available. For example, it is now possible to access and complete a simplified learning styles inventory on the world wide web at <http://www.hcc.hawaii.edu/hccinfo/facdev/lsi.html>, where basic information is also supplied about visual, auditory and tactile learners.

Although at least 20 learning style dimensions have been described to help specify an individual's overall learning preference (Oxford, 1989), there is a basic collection that is usually identified. For example, in her Style Analysis Survey (SAS) which she developed in 1994 at The University of Alabama, Dr. Rebecca Oxford measures five different learning continua: visual-auditory-hands on, extroverted-introverted, intuitive/random-concrete/sequential, closure/judging-open/perceiving, and global-analytic.

Robert Sternberg is an educational psychologist whose systematic approach to learning styles has brought a new vocabulary to cognitive research. His insights complement the work of other educational psychologists through the concept of mental self-government (Sternberg, 1988, 1990, 1997), which is a helpful re-expression of learning style theory.

Education Is Situated: Constructivism

The existence of learning styles in education reinforces the concept that education is situated. Learning does not occur in a vacuum, but occurs in contexts that are specific to the learner. Constructivism, which has its modern origins in Jean Piaget and John Dewey, and had ancient proponents like Socrates, is built upon this principle.

There are two primary approaches to constructivism: radical constructivism and empirical constructivism. Radical constructivists, led by Von Glasersfeld (1984, 1991), are committed to the concept that truth does not exist outside of the individual. According to Oxford (1997), radical constructivists have "rejected the idea that there is a real world of objects that have an existence of their own and that can be known" (p. 40). Philosophers such as Berkeley, Fichte, and Vico are earlier proponents of similar ideas.

A radical constructivist's view of epistemology would be considered to be excessively nihilistic by many contemporary constructivists (Good & Brophy, 1997). Furthermore, as Oxford (1997) demonstrates, radical constructivism is also very difficult to sustain logically.

Empirical constructivists assert that there is a reality which can be known. The best way to help students to develop an authentic understanding of that reality is through reflective instruction and discovery learning that is closely related to the prior or existing experience of students. Good and Brophy (1997) argue that construction of knowledge is facilitated when learners can relate new information to existing background knowledge. In this way, students can develop a world view that is authentic, rather than learning accurate but meaningless or "inert" (Good & Brophy, 1997, p. 397) knowledge--the relevance of which may often escape them. A key component of empirical constructivism is cognitive dissonance, which is central to the theoretical construct of disequilibrium as a teaching strategy that is addressed later in this study.

Another aspect of empirical constructivism is the concept of situated cognition or contextualized instruction. Brown, Collins, and Duguid (1989) assert that education in the abstract is only marginally effective (this is the concept of inert knowledge once again). They encourage educators to recognize a principle of every day life, that learning and cognition are fundamentally linked and situated in the real-life experience of people. Education can only be truly authentic and purposeful when teachers demonstrate a real-life relevance in their instructional activities.

Other educators (Eldridge, 1996; Rogoff & Chavajay, 1995) have endorsed the concept of situated or embedded cognition, though it does have limitations. For example, constant, child-centered, individualistic, situated cognition is not always possible in classroom settings (Good & Brophy, 1997). Especially (but not only) when working with adults, there may be people with some learning styles--those who favor the analytic dimension for example--who find that teaching based on abstract concepts can be a more effective way of learning than teaching based upon situated cognition.

Another concern focuses upon the idea that, to some degree, education needs to be an exploration into the unknown (Prawat, 1993). Education is not always going to be immediately and overtly connected to prior experience. In fact, it may well be that the judicious use of some non-constructivist teaching strategies such as direct instruction could be very suitable for some topics and for some concrete-linear learning styles (Oxford, 1997).

The Culture/Learning-Style Connection

So far, this paper has considered the nature of learning and the support in the literature for the view that individuals have different learning preferences or learning styles. These learning styles are greatly influenced by, and must be understood in the light of, the culture or ethnicity of the learner.

Borich and Tombari (1996), McCormick and Pressley (1997), Lev Vygotsky (1978, 1987), Wakefield (1996), and Woolfolk (1998) provide a useful bridge between the constructivist idea that knowledge is situated and the idea that culture is one of the most important of these situations. Vygotsky, a Russian psychologist, is most well known for his concept of the zone of proximal development. He argues that instruction should be pitched at a level just beyond a student's ability to grasp but which is attainable with the assistance of a teacher (Pintrich & Schunk, 1996). This idea indicates a key to Vygotsky's view of learning and cognition: it is situated in socially interactive settings (Good & Brophy, 1997). Piaget and Erikson view cognition mainly from an individual perspective. In contrast, Vygotsky, Cobb, Rogoff, and others consider that cognition is profoundly rooted in relationships (Prawat, 1993). Cobb (quoted in Prawat, 1993) considers that the social process of the dialectical interaction of the group is central to the educative experience.

Oxford (1997) summarizes Vygotsky's position this way:

> Vygotsky's social-cognitive constructivism recognized that constructs have social origins; they are learned through interactions with others. An individual's cognitive system is a result of interaction in social groups and cannot be separated from social life. (p. 43)

A key determinant of people's social environment is their culture. Culture may be defined as the conscious and unconscious ambiance; the social and religious milieu in which one experiences life; or "the intangible symbols, rules, and values that people use to define themselves" (Dimen-Schein, quoted in Oxford & Anderson, 1995, p. 202).

Although differences of interpretation exist in the literature, there is a strong consensus that learning is culturally situated. Rogoff and Chavajay (1995) insist that educators must view "cognitive development as a cultural process" (p. 869). According to Guild (1994), cultures "have distinctive learning style patterns" (p. 16), and Carger and Ayers (1995) affirm that culture is the vehicle that gives us handles on reality. Other researchers make the same point (Good & Brophy, 1997; Banks, 1992, 1993; Trusty, 1996): culture and cognition are "dynamic processes that cannot be separated" (Rogoff

& Chavajay, 1995, p. 866). Oxford and Anderson(1995) perhaps put it most clearly when they state,

> Learning is fully situated within a given cultural context. . . . Research shows that individuals within a culture tend to have a common pattern of learning and perception when members of their culture are compared to members of another culture. (pp. 202-203)

An early theorist to espouse the culture/learning-style connection was Edward T. Hall (1977). His research considered people from different cultural groups and led him to postulate that different cultures possess different epistemologies, and that these differences can be described in terms of a high context-low context continuum. Low context learners, such as those from Germanic, Scandinavian, and American cultures, place a strong reliance upon the actual words used in communication. The words themselves, rather than the context, convey primary meaning. Therefore a computer message, which is impersonal, or a verbal communication, which is personal, can both be equally effective in conveying meaning to the message receiver.

The situation is very different for high context cultures, such as Asians, Arabs, and Latinos. Hall (1977) suggested that these cultural groups rely as much on the context of a communication as on the communication itself in order to gather an accurate understanding of that communication.

Such things as kinesics (body language), haptics (concept of touch), proxemics (personal space), and social organization are contextual factors that are much more important for high context cultures than they are for low context cultures. Bennett (1995, p. 66) provides a useful chart that illustrates some of these cultural variants.

Hofstede (1986) took the concept of cultural difference and developed a four-dimensional model based upon the ideas of power-distance and collectivism-individualism. He applied these concepts to multicultural classrooms and used them to make suggestions as to how teachers from one culture should construct the teaching and learning experiences in their classrooms when other cultures are present. Other research among adolescent school children in the international setting has supported Hofstede's findings, though not with universally conclusive results (Nelson & Brown, 1994; Deeds, Stewart, Bond & Westrick, 1998).

Guild (1994) explains that there are three kinds of information that support the culture/learning-style connection. First, there are observation-based descriptions of cultural groups of learners where external observers describe cultural learning traits that they have observed. Second, there are data-based descriptions of specific groups, often based upon personality and learning style instruments such as the Myers Briggs Personality Type Indicator and Oxford's Style Analysis Survey. Third, there is direct discussion based upon qualitative research.

Examples abound that illustrate the culture/learning style connection and its importance for education. Guild (1994) summarizes data from several researchers and concludes that many Hispanic Americans prefer personalized rather than theoretical instruction; the author suggests that this may be a reason why these students are observed as seeking a personal relationship with teachers more often than do other cultural groups in the same class. She also points to research which shows that African Americans often value oral learning experiences more than do their peers from some other cultures.

Burry-Stock, Dorogan, Varrella and Yager (1996) completed a study with American and Russian educators. It was predicated upon the notion that U.S. teaching

tends towards constructivist principles while pedagogy in the Russian culture relies much more upon direct instruction.

Tinajero and Páramo (1997) conducted a quantitative study of 408 high school students in northwest Spain. Using a multivariate analysis of covariance, they were able to support their research hypothesis that the cultural factor of field dependence-independence is related to overall academic achievement in this population.

Huang (1993) illustrates his writing with a number of examples that show specific culture/learning-style connections. For example, he highlights the way that the Asian cultural view of the teacher impacts education. For many Asians, authority figures, including parents and teachers, are held in very high esteem. This Confucian respect for elders may inhibit Asians from asking questions in class, since to do so could indicate an implied criticism of the teacher's skill at explaining new ideas. In the same context, Feng (1994) argues that the informality of the typical U.S. classroom can be inhibiting and confusing, rather than liberating, for many Asian students since it conflicts with their own more tightly structured cultural system.

Huang (1993) also explains ways that high context-low context cultures can come into conflict in the classroom when one culture misunderstands the learning style and cultural cues from other cultures:

> APIs [Asians and Pacific Islanders], particularly East Asian Americans, are typically polite and even submissive in [classroom] social encounters, but when a dispute persists, they may become very hostile without providing warning signals. This happens because of the unconscious cultural conflict between low-context and high-context cultures. . . . Misinterpretation of APIs' verbal and nonverbal expression occurs because neither APIs nor teachers are aware of the mismatched hidden dimension in communication. . . . APIs expect teachers to understand their concerns, confusion, and hesitance, whereas teachers take APIs' head-nodding, smiles and verbal assent as clear indications of consent. (p. 3)

Hayes and Allinson (1988) investigated industrial managers from East Africa, India, and the United Kingdom. Using a categorization system similar to that of Hofstede (1986), they found significantly different learning styles that showed clear cultural patterns in the three cultures that they investigated. Ramirez (1988) reflected upon research and his own experience to conclude that "culturally unique learning styles represent a critical variable . . . in education" (p. 199).

So widespread is the recognition of the culture/learning-style connection that it has even penetrated to the level of the mass media. In a recent article in an airline magazine, Reid (1997) describes the contrast between the Japanese culture's systematized, standardized methodology for teaching reading and writing, and the more individualized and flexible approach used in the educational culture of the United States. Burry-Stock (1996) observed a similar learning style characteristic in Russia:

> the monolithic system required that all teachers in the USSR be in the same content place, in the same book, with the same teaching methods, on the same day throughout the country. (p. 6)

Oxford and Anderson (1995) have compiled an extensive summary of research projects that demonstrate the culture/learning-style connection. They grouped the responses that they observed in the literature and in their own research into cognitive

styles and cognitive strategies which they then categorized into eight dimensions or continua: global and analytic, field dependent and field independent, impulsive and reflective, intuitive-random and concrete-sequential, closure-oriented and open, extroverted and introverted, and visual-auditory and hands-on. Each of the continua are explained, and a host of examples are included.

For example, in the global-analytic dimension, Oxford and Anderson (1995) report research findings which indicate that Hispanics, Egyptians, and Native Americans have a global learning style; Anglo-Americans generally have an analytic learning style; and Chinese and Japanese, in differing circumstances, exhibit characteristics from both global and analytic learning styles. They include in their paper (Oxford and Anderson, 1995, p. 211) a very useful table that summarizes their findings and those of other researchers. In a subsequent study, Oxford and Nuby (1998) identified significant learning style preferences among high school students from five different cultural backgrounds: Native American, African American, Mexican American, Caucasian American, and Russian.

Even the United Nations Educational Scientific and Cultural Organization, UNESCO, has declared its commitment to the propagation of curriculum materials that acknowledge the culture/learning style connection. One of their publications includes research and samples from New Zealand that are based upon the principle "that language and culture are inexorably bound up with each other" (UNESCO, 1995, p. 40).

Along with an extensive list of references, Nelson and Brown (1994) provide a useful summary concerning the culture/learning-style connection:

Research supports the problematic nature of pedagogic situations in which the teacher is from one culture and the student is from another. Studies suggest that when the culture of the school is different from the culture of the learner, students experience less satisfaction in school, tend to learn less, and often fail. In contrast, when teachers adjust their teaching to the cultures of the learners, student satisfaction and learning increases. (p. 3)

REFERENCES

Banks, J. A. (1992). Curriculum guidelines for multicultural education Social Education, 56(5), 274-294.

Banks, J. A. (1993). Multicultural education: Development, dimensions and challenges. Phi Delta Kappan, September, 22-28.

Bennett, C. I. (1995). Comprehensive multi-cultural education: Theory and practice. Boston: Allyn and Bacon.

Bereiter, C. (1985). Towards the solution of the learning paradox. Review of Educational Research, 55, 201-206.

Borich, G. D., & Tombari, M. L. (1997). Educational psychology: A contemporary approach. (2nd ed.). New York: Longman.

Brown, J. S., Collins, A., & Duguid, P. (1989). Situated cognition and the culture of learning. Educational Researcher, 18(1), 32-42.

Burry-Stock, J. A., Dorogan, L., Varrella, G. F., & Yager, R. E. (1996). <u>Russian/American Comparison using the expert science teaching educational evaluation model (ESTEEM).</u> Paper presented at the International Ecological Conference, Voronezh, Russia.

Carger, C. L., & Ayers, W. (1995). Diverse learners in a multicultural world. <u>Social Studies and the Young Learner</u>(March/April), 4-6.

Curry, L. (1990). A critique of the research on learning styles. <u>Educational Leadership, 48</u>(2), 50-54.

Deeds, O., Stewart, S., Bond, M., & Westrick, J. (1998). Adolescents between cultures. <u>School Psychology International, 19</u>(1), 61-78.

Dunn, R. K., Dunn, K., & Price, G. E. (1975). <u>Learning Style Inventory</u>. Lawrence, KS: Price Systems.

Ehrman, M. E. (1996). <u>Understanding second language difficulties</u>. Thousand Oaks, CA: Sage Publications.

Eldridge, D. (1996). When the shoe won't fit: Sizing up teachers' concerns about and responses to diversity in their language Arts Classroom. <u>Language Arts, 73</u>(5), 298-304.

Ester, D. (1994). CAI, lecture, and student learning style: The differential effects of instructional method. <u>Journal of Research on Computing and Education, 27</u>(2), 129-140.

Feng, J. (1994). Asian/American Children: What teachers should know. <u>ERIC Digest</u>. (Eric Document Reproduction Service No. ED369 577)

Good, T. L., & Brophy, J. E. (2002). Looking in classrooms. (9th ed.). New York: Addison-Wesley.

Gregorc, A. F. (1982). <u>Gregorc Style Delineator</u>. Maynard, MA: Gabriel Systems.

Guild, P. (1994). The culture/learning style connection. <u>Educational Leadership, 51</u>(8), 16-21.

Hall, E. T. (1977). <u>Beyond culture</u>. New York: Anchor Books.

Hanvey, R. G. (1982). <u>An attainable global perspective</u>. *Theory into Practice, 21*(3), 162-167.

Hayes, J., & Allinson, C. (1988). Cultural differences in the learning styles of managers. <u>Management International Review, 28</u>(3), 75-80.

Hofstede, G. (1986). Cultural differences in teaching and learning. <u>Journal of Intercultural Relations, 10</u>, 301-320.

Hofstede, G. (2004). *Cultures and organizations (2nd ed.).* New York: McGraw-Hill

Huang, G. (1993). Beyond culture: Communicating with Asian American children and families. ERIC Digest (Eric Document Reproduction Service No. ED36 673).

Irvine, J. J., & York, D. E. (1995). Learning styles and culturally diverse students: A literature review. In J. A. Banks & C. A. McGee Banks (Eds.), Handbook of research on multicultural education (pp. 484-497). New York: Macmillan.

McCormick, C., & Pressley, M. (1997). Educational psychology: Learning, instruction, assessment. New York: Longman.

Nelson, G. L., & Brown, K. (1994). Hofstede's four-dimensional model of cultural differences: Pedagogical applications. Unpublished manuscript, Georgia State University.

Oxford, R. L. (1989). The role of styles and strategies in second language learning. ERIC Digest. (Eric Document Reproduction Service No. ED317 087).

Oxford, R. L. (1994). Style Analysis Survey. Tuscaloosa, AL: The University of Alabama.

Oxford, R. L. (1997). Constructivism: Shape, shifting, substance, and teacher education applications. Peabody Journal of Education, 72(1), 35-66.

Oxford, R. L., & Anderson, N. J. (1995). State of the art article: A cross-cultural view of learning styles. Language Teaching, 28(4), 201-215.

Pintrich, P. R., & Schunk, D. H. (1996). Motivation in education: Theory, research and applications. Columbus, OH: Prentice Hall.

Prawat, R. S. (1993). The value of ideas: Problems versus possabilities in learning. Educational Researcher, 22(6), 5-15.

Reid, T. R. (1997). The Japanese character. Sky, November, 21-24.

Rogoff, B., & Chavajay, P. (1995). What's become of research on the cultural basis of cognitive development? American Psychologist, October, 859-877.

Sfard, A. (1998). On two metaphors for learning and the dangers of choosing just one. Educational Researcher, 27(2), 4-13.

Sternberg, R. J. (1988). Mental self-government: A theory of intellectual styles and their development. Human Development, 31, 197-224.

Sternberg, R. J. (1990). Thinking styles: Keys to understanding student performance. *Phi Delta Kappan, 71*, 366-371.

Sternberg, R. J. (1997). *Thinking styles*. New York: Cambridge University Press.

Tinajero, C., & Páramo, M. (1997). Field dependence-independence and academic achievement: A re-examination of their relationship. *British Journal of Educational Psychology, 67*, 199-212.

Trusty, J. (1996). Counseling for dropout prevention: Applications from multicultural counseling. *Journal of Multicultural Counseling and Development,* April, 105-117.

Von Glasersfeld, E. (1984). An introduction to radical constructivism. In P. Watzlawick (Ed.), *The invented reality* (pp. 17-40). New York: Norton.

Von Glasersfeld, E. (1991). Cognition, construction of knowledge and teaching. In M. Matthews (Ed.), *History, philosophy and science teaching* (pp. 117-132). New York: Teachers College Press.

Vygotsky, L. S. (1978). *Mind and society*. Cambridge, MA: Harvard University Press.

Vygotsky, L. S. (1987). Thinking and speech. In R. Riber & A. Carton (Eds.), *The collected works of L. S. Vygotsky* (Vol. 1, pp. 39-285). New York: Plenum Press.

Wakefield, J. F. (1996). *Educational psychology: Learning to be a problem solver*. Boston: Houghton Mifflin.

Woolfolk, A. E. (2006). *Educational psychology*. (10th ed.). Boston: Allyn & Bacon.