1. OVERVIEW

Montana Virtual Education Consultancy [MTVEd] proposes several changes to the control and funding of public education for the benefit of Montana citizens. The goals are to create a new awareness of the use of technology in support of quality education, to design and install the system, to provide the necessary teacher and administrative training to best utilize the new technology, to fund the initiatives, and to create the rubrics and metrics which will indicate relative success or failure of any given initiative.

Just providing the tools, will gain a considerable number of these goals. Providing the incentives will greatly increase goal attainment.   These incentives include greater reliance on motivation among students, teachers, administrators and a supporting public.

The funding must be substantial, if only to off-set the years of under-funding of Montana public education (as found by three courts). Each of our proposals must be tested for compliance with SB 152 and the court decisions. This initial report attempts lay the foundation to do so. MTVEd offers this report as guidance to the Committee and the stakeholders who are interested in the long-term success of our student population in the science and art of life. A final report will uncatalogued our findings and recommendations for action by the Legislature and Montana public educational institutions.

2.The MTVEd proposes the design and delivery of educational services via the public schools in Montana, as follows:

2.1. **Research relative to the status quo:** MTVEd has sought viable documentation of "nationally accepted methodologies of school finance" and found that generic forms of real and personal property taxation, proceeds from sales taxes and gaming revenues, general state funding and federal funding have been, in the main, the focus of school finance.   Other special sources, such as revenue from school land trusts and special levies have contributed to some school funding program.   School voucher programs, where adopted, have also provided some school funding. Funding by other units of local government has been used in joint exercise of powers agreements among cities, counties and other local governmental entities to aid school financing. In short, there is no "one size fits all" type of school funding on a national basis, nor is there a consensus of what constitutes "nationally accepted methodologies of school finance."

There is a crisis of quality education in Montana, as attested by the report, Schools in Crisis -- A Local Perspective published by the Montana Quality Education Coalition. [1] Rather than impose some fatuous concept of a "national methodology of school finance" [which does not exist], the solutions should be crafted according to SB 152 in an innovative and responsible manner.

2.2. **Generation MUX:** Generations of students currently in and coming into the pipeline will have multitasking digital capabilities. Ken Harney of Ness Technologies explores Generation MUX:

> "And today's IT job market is global. Future workers will compete with skilled people on several continents, not just at home. Who could possibly surmount such obstacles?

> "Thoughts like these were running through my head as I combed serially through some e-mail at home the other night. Then I happened" to glance up at my 15-year-old daughter

Brianna, who was working on another computer across the room. Brianna was preparing homework with Microsoft Word, reading and answering e-mail, using Instant Messenger to carry on separate discussions with several groups of friends, listening to her iPod, and surfing the Web for input on both her homework and her conversations." [2]

New revenue: MTVEd will propose that the State of Montana adopt, as an additional source of funding, the enactment of a proposed Montana Education Resources Act [MERA] which would impose a consumer retail tax on goods and services sold at retail in Montana to non-Montana residents. The objective is to make the operation of the act tax-neutral as to bona fide, permanent Montana residents. [3]

2.3. **Educational script:** MTVEd will also propose the creation of script which can be earned by students, purchased by third parties and given to students and awarded students. The script will be redeemable and used by the student to enhance his or her digital domain. Basically, the script would be used to upgrade the student's wireless laptop, buy additional educational software applications and pay fees for online courses which are not paid by the school.

Home-based schooling: MTVEd will also propose the expanded use of home schooling and its integration with local brick and mortar public schooling. Home schooling will be offered help through the Montana Cyber School. The concept of home schooling will be expanded by include enlistment of parents and other suitable family members, to aid students in their home work. Interns will be assigned on an as need basis. Interns will be university students doing their student teaching. Lessons can be distributed as text, audio, video and interactive web pages. [4]

Many schools place a high priority on getting the parents involved in extending the learning to the home environment. Schools should "enroll" the parents (and extended family) as a participant. Broward County Schools could serve as a good

example for Montana Schools. [5]

"SEED" schools: An uncommon boarding school in Washington, D.C., is "Schools for Educational Evolution and Development" and is a charter school. Despite drawing students from high poverty neighborhoods, the student's aspirations are college directed. [6]

2.4. **Educational vouchers:** MTVEd will also propose the institution of the voucher system thereby giving parents, guardians and students a wider selection of educational services in Montana. Adequate safeguards will be proposed so that the use of the vouchers are in faith-neutral settings.

2.5. **School-wide wireless network establishment:** MTVEd will propose the deployment of wireless network systems in all schools and the empowerment of students by entrusting wireless laptop computers to every K-12 public school student in Montana. Upon graduation from high school, the student's laptop will be awarded to him or her as part of the school's educational incentive program.

Multi-media studio: MTVEd will propose for each high school, a fully developed multi-media studio, thereby enabling students to learn both the artistic as well as the digital sides of multi-media school project productions. High end PC's and/or Mac will provide the OS and non-linear editing and post-production effects. Student productions should include daily webcasts, replays of sporting events, stage shows, documentaries,docudramas and indie digital films. [7]

2.6. **Master teachers:** MTVEd will propose the establishment of a "Corps of Discovery" of master teachers whose mission is to teach classroom teachers the use of digital resources and digital authorware for creating and administering lessons and other learning experiences.

Teacher recruiting, retention and compensation: "In recent years, the outmigration of teachers to states offering better pay and benefits has become an increasingly vexing concern among some Montana superintendents, union officials

and education experts". [8] Money is not the sole issue. The article reported that several teachers planned to return to Montana, once their economic needs were met. Chick Bruce, in his thoughtful article, lays out many attributes of a successful teacher recruitment and retention plan. New revenue from MERA should substantially increase the employment rate and retention rate of Montana originated teachers.   Adoption of the cyber education tools and learning methods advocated by MTVEd will inspire teachers to locate and remain in Montana.

2.7. **Wireless laptops for students:**

MTVEd will propose the use by students and teachers of wireless laptops, as a principal learning tool. The distribution of laptops will start at the top end of middle school then progress to first grade. Thereafter, laptops will be issued to all high school students starting with seniors and progressing to the entry level students.

The deployment in schools will be preceded by the installation of a complete wireless network system with security, backup, transmitters   and equipment RFID. Distribution will be on a school by school basis as funding is made available and staff is trained.

MTVEd will propose the purchase of ruggedized laptop computers for K-6 students for under $500.   Bulk purchasing will likely reduce the unit cost. MTVEd will also track the efforts of a major university in its efforts to produce an under $300 laptop. Most 7 -12 students will receive a basic model of a wireless laptop costing in the range of $600 to $1500.   By the use of script, the basic model can be upgraded or traded-in on a more robust laptop. Upon graduation, the seniors will be awarded the laptop entrusted to them.

An Idaho group supports computer based education by giving away computers.

"Computers for Kids, a Boise-based non-profit group, has announced it will give computers to children from kindergarten to 12th grade. The organization is the brainchild of Molli Wingert, a former math teacher in Boise. She conceptualized the idea during the 1999-2000 school year. She launched the program in 2001, giving computers to several students who helped her with a project." [9]

Significant educational progress has been well documented by the numerous schools which are adopting the use of computers as educational tools. The Montana experience should be no less robust than the best practices can provide. [10]

2.8. Focus on student motivation:

Ability to engage in rote memory is not, per se, "education". A trained monkey can learn to perform rote tasks. The best teacher is the student who teaches himself or herself. Motivation to learn, thus becomes the main focus of the MTVEd approach to education. Laptops and online courses are substantial aids to self-directed learning. [11] Motivation comes in all forms. Testing and grading is generally considered negative motivations. So too is bullying and negative peer pressure. A student code of conduct, together with enforcement is necessary.

The Harbor schools approach, where kindness is the rule, merits adoption by Montana. [12] Funding should be provided schools to add arts and entertainment to the menu. Classes can study history through the use of plays. [13] The amount and kind of entertainment should be linked to the overall school performance in all areas: academics, citizenship, attendance, and community involvement.

Start 'em young: Kids 2-5 can lean to "mouse" around the screen

and with some help getting started, can surf the Web. Partners in the Community Schools and home Ed can benefit by trusting a computer as an educational tool for the very young. [14]

2.9. **Computer support; help desk:** MTVEd will also propose the establishment by the State of two related prison industries: (1) the assembly, repair and upgrade of wireless laptop computers, and (2) the establishment of a 7/24 help center for computer hardware and software which will be available to teachers and administrators (but not to students). Mr. Miller will draft the proposed legislation establishing these prison industries.

2.10. **School-based computer store/shop:** MTVEd will also propose that in each school which joins the Montana Quality Education project, that a "computer shop/store" be installed which will function to issue, maintain, repair, replace, upgrade a track laptop and PC computers, while providing redemption of script earned by (or given to) students.

2.11. **Development of Pathways of Learning teaching:** MTVEd will propose the research and development of the three pathways of learning: Left brain dominant, right brain dominant and kinetic learning pathways.   Lessons in math and science will be required to be presented in all three modes so that the student can select the mode which best suits his or her best learning mode. These modes will reinforce the students best learning skills.

Dr. Mel Levine founded "All Kinds of Minds". The learning approach is to teach to the students' best skill sets. [15]

The differentiation of brain dominance is based on how people index their memories. RBD uses pictures and LBD uses sequential (word) associations (simplified). Kinetic learners use touching as a means of indexing. Thus, a RBD needs pictures to explain math and science concepts because of the need to index and relate concepts by pictorial means. A chemical formula written on the caulk board is

not a picture to the RBD learning; it is learned by the LBD learning as a sequence of letters and numbers by rote memory. [16] This author has yet to encounter a bubble test which contains a question framed in terms of a true picture.

2.12. **Open source software programs:** MTVEd will seek out, evaluate, test and recommend open source programs, including operating systems, office suites, online authorware systems, video and audio conferencing, white boards, forums, databases, help center administration, archival services, storage services, security services, and IT administrative services. Open source programs most often greatly reduce the cost of acquiring and maintaining software.

2.13. **Licenses, testing and evaluation:** MTVEd will acquire on behalf of the State, the necessary licenses and permissions to test hardware and software in nine test beds. These beds are directed at elementary, middle school and high school environments and will be spread among small, medium and larger schools. MTVEd will select the candidates after inviting all Montana school districts to announce their interest in becoming a test bed. MTVEd will prepare the protocols, rubrics, procedures, and deployment plan for the test beds during the three month contract period and will propose a follow-on contract to run the test beds for two years, beginning in the fall of 2005.

2.14. **The "mega-classroom":** MTVEd will propose the use of the "mega-classroom" where appropriate. This classroom increases the ratio of students to the teaching resource persons for such classroom. See discussion under TAB C.

2.15. **Current research, studies and field trials:** Most of these proposals have been researched by competent, independent researchers and have been in place in one or more public and/or private schools. For example, the Singaporean math text will be used as a model for teaching math. The research results will be incorporated in the studies and reports to be submitted.

2.16. **Models:** Where possible cost models will be based on the actual costs experienced by schools which have implemented a given technology or educational standard.   Cost estimates otherwise will be built on factoids gathered from cost incurred and costs avoided as reported by similar institutions and companies operating similar projects.

3. MONTANA SCHOOL LAWS AND COURT DECISIONS

3.1.1. Dr. Miller is familiar with the State enactments relating to Montana School Finance laws and is familiar with several studies published which discuss Montana school financing. He has a well-developed interest in school finance. While County Counsel of Imperial County, he actively campaigned in school bond elections. He acted as the legal advisor for many school bond and over-ride elections in Imperial County, CA. He is willing to draft school finance legislation such as the Committee may direct.

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3.1.2. Dr. Miller holds a J.D. from Stanford Law School and is an expert in school law. He has carefully reviewed the educational crisis litigation in Montana and is generally familiar with similar litigation in other states. He will continue to update himself as new cases are filed and decided throughout the nation. He is willing to prepare the initial draft of the report required to be delivered to the District and Supreme Courts on or before October 1, 2005.

4. FUNDING ISSUES:

4.1. **Equity in funding:** Dr. Miller will proposed amendments to MCA which sunset many of the mill levies imposed on real property in support of school funding as revenue from MERA becomes available to off-set the reduction in real property taxation for school funding. Equity demands that some relief be granted to real property tax payers.

4.2. **Funding adequacy:** MTVEd will propose that the initial costs of implementation of its recommendations be paid out of the new revenue generated by MERA and available grants from federal and foundation sources.   The capital, start-up, training and operational costs for the digital program suggested by MTVEd is expected to cost 150 million per year for the first three years. Part of the funding can come from repositioning costs saved by substituting ebooks for hard copy books.

4.3. **Regional cost differences:** Regional cost differences will be taken into consideration which includes differences based on costs of living, transportation costs, small size classes, interest and ability level of the student population, recruitment and retention rates for teachers and administrators and other significant factors.   The costing of school operations as proposed in principle is set forth under TAB D.

4.4. **Legal aspects of educational finance reform:** As part of the services to be offered by MTVEd, we will work with all of the stakeholders in Montana Quality Education field to draft the proposed report to the District and Supreme Court. Proposed draft legislation which is designed to carry-out the plans will be attached so that the drafts may be studied in preparation for the expected special session of the Legislature in December, 2005.   Proposed drafts include MERA and prison industry legislation.

4.5. **Issues related to preserving the cultural integrity of Montana's American Indians:** MTVEd recommends that all Montana Students be enrolled in one or more courses which teach the history and culture of America's Indians.   Further, MTVEd will recommend the extensive implementation of efforts to reduce the digital divide by offering home PC's to all parents who agree to learn and apply home schooling techniques relative to their respective children, in cooperation with the local public school district. These PCs will be on a loan basis initially.   When funding becomes available after the laptops have been deployed, the home PCs can be awarded to the parent(s) on the basis of economic need and/or the use of script. Each tribe will be heavily involved in the design and implementation

of the specific plans for its members.

4.6. **Issues related to isolated, rural, and urban schools:** The issues relative to quality education are: teacher recruitment and retention, distractions, attendance, learning ability, learning motivation, adequate counseling and administrative services.   The tri-pathways of learning will greatly aid the learning in math and science. Motivation will be enhanced by the use of the laptops, script and the use of the mega-classroom.

4.7. **Issues related to the attraction and retention of qualified educators and other personnel:** Teacher recruitment issues are discussed under TAB E.

4.8. **Relationships with school districts and State officers:** Mr. Miller, as County Counsel of Imperial County, CA, developed extensive and pervading communications with the chief executive and administrative officers of some 28 school districts. He developed a teacher dismissal kit. He actively promoted the passage of school bond issues (on his own time), and developed the legal means by which relocatable classrooms were obtained by school districts through the use of federal funds.   As the legal counsel for all of the school districts in Imperial County, he issued legal opinions, wrote and approved contracts, settled tax issues and advised on the implementation of California's extensive Code of Education. Dr. Miller's more passionate writing, Education's Double Whammy, is under TAB F.

4.9. **Relationship with other stakeholders:** More recently, as part of the research for the paper, Legislative Control and Funding of Montana Quality Education, he researched the websites of all of the stakeholders and wrote to each stakeholder organization, requesting copies of positions taken relative to the issues of Montana's Quality Education crisis. Only one response was received, indicating that more communication with other stakeholders is needed.

5. IMPLEMENTAITON OF RECOMMENDATIONS

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5.1. Communication devices: To the greatest extent feasible, communication will be in written form, via a forum to be established and maintained by MTVEd. This service will be the "white board" approach, using a form of Wikipedia, which allows any authorized user to edit any text.   The access is by any standard Web browser to a hosted site including a Virtual Private Network with firewalls and adaptive security.   The Wikipedia approach is described under TAB G.

5.2. **Very fast start:** Research will accelerate and produce drafts on-the-fly for each element. Most of what MTVEd is already in written form, thus allowing for a very fast start. Extensive use of hyperlinks will facilitate navigation of the Web resources. Much of MTVEd's work product is online and can easily be hyperlinked.

5.3. **Budgeting:** Budgeting for the study will be via Excel. Three demonstration budgets will be provided for each of three hypothetical (composite) school districts for each of three arenas of interest: K-6,7-9, 10-12 grades in small, medium and large districts.   The line items include staff costs, capital costs, infrastructure costs, student support costs, IT costs, and administrative overhead.

5.4. Recommended courses of actions:

5.4.1. **Existing studies:** We will review the rubrics used by existing studies and recommend a course of action, with associated costs, to update such studies.

5.4.2. **Analysis:** MTVEd will provide both statistical analysis and cognitive analysis of evidence-based methodologies, an analysis of the cost structure and the efficient use of resources for small schools, remote schools, home based education and urban schools.

5.4.3. **American Indian education programs and costs:** MtVEd,

working with each tribe's leaders, will provide an analysis of effective and efficient use of resources for American Indian education programs. Extensive use of cyber resources will be recommended, to reduce the digital divide. Also courses in Montana's American Indian history and culture will be available to all Montana students.

6. WRITTEN FINAL REPORT

MTVEd will present to the Quality Schools Interim Committee by September 1, 2005, a final report, including an executive summary, that:

6.1. **Inventory:** Creates an inventory of the assessment of educational needs for Montana's public schools based on the definition of a basic system of free quality public elementary and secondary schools as provided in Senate Bill No. 152;

6.2. **Cost of a quality education:** Articulates the findings regarding the costs of providing a basic system of quality schools;

6.3. **Funding formulas:** Makes recommendations for development of a funding formula that is based on the costs analysis and that ensures the equitable distribution of the State's share of the costs of a basic system of quality schools; and,

6.4. **Means:** Provide the means by which the funding formula, based on the educationally relevant factors identified by the Montana Legislature in Senate Bill No. 152, can be modified by such factors as inflation, stagnation, depression, and economic growth and increased student aspirations. MTVEd's report will cover an assessment of the educational needs of Montana's public schools, based on SB 152 and the applicable court opinions.   Each element shall be addressed as to needs, proposed solutions, cost and schedule. MTVEd's report will articulate, by line item, the findings and associated costs for a basis system of quality schools, using the proposed test bed methodology, where applicable, and the historical costs experienced by schools which have implemented a specific program. MTVEd will present the proposed draft of the

Montana Eduction Resource Act as part of the report. Included in the act will be the formula for an equitable distribution of funds to provide for a quality school system for all Montana public school students.

6.5. Additional services:

Dr. Miller and Mr. Bruce offer to testify before the Committee either in person or via electronic means.

Respectfully submitted,

MONTANA VIRTUAL EDUCATION CONSULTANCY

By_____

     James E. Miller, J.D.
     Partner

     MTVED report#1.doc

7. REFERENCES.

7.1.References for James E. Miller

7.1.1.Dr.Geoffry Gamble, President, Montana State University, President's Office, 211 Montana Hall, Bozeman, MT 59717-2420, 406-994-2341 | 406-994-1893 (fax)

7.1.2.Dr. Nancy Callan, MSU Western Agricultural Experimental Center, Professor of Horticulture; Telephone: (406) 961-3025 FAX: (406) 961-3026 e-mail: ncallan@montana.edu Mailing address: Montana

State University; Western Agricultural Research Center; 580 Quast Lane; Corvallis, MT 59828

7.1.3. Dr. Martin J. Frick, Associate Professor, Agricultural Education, Department of Agriculture, Montana State University, Bozeman, MT 59715. Telephone: 406-994-5773; email: uadmf@montana.edu.

7.2. References for Charles Bruce

7.2.1. Mr. Guy Savage, Deputy Chief Information Officer - Information Technology Department, County of San Luis Obispo (CA); 805-781-5071

7.2.2. Ms. Jan Lane, Operations Manager, Electronic Data Systems/Washington Mutual Bank, Northridge, CA, 818-775-6528, jan.lane@eds.com

7.2.3. Mr. James Browarski, Information Technology Specialist, Veeco Corporation (Automotive Systems), 805-737-6961.

7.3. References for Montana Virtual Education Consultancy.

Montana Virtual Education Consultancy ("MTVEd") is a newly formed partnership between James E. Miller and Charles Bruce, and as such has no history of providing a needs assessment and cost analysis to clients within the past five years. As such, the references for the company are the same as for its partners. We are actively seeking additional partners who have broad educational and business backgrounds.

7.4. Resumes/Company Profile and Experience.

The relevant past services performed by the partners of the MTVEd, their respective skills, and their proposed contributions, are as follows:

7.4.1. James E. Miller

Dr. Miller has conducted research in the field of digital education during the past four years and is attending Montana State University. He has taken a Capstone course [similar to Senior thesis] in agricultural education and produced a paper entitled, Legislative Control and Funding of Montana Quality Education, spring, 2005. Digital copies are available on request. Please see Dr. Miller's resume under TAB A.

7.4.2. Charles Bruce

Mr. Bruce is an information technology expert and is currently starting a commercial children's center in Oxnard, CA. He has written on a variety of subjects, including recruitment and retention of teachers.

Please see Mr. Bruce's resume under TAB B.

TAB A:

RESUME OF JAMES E. MILLER - GENERAL

EDUCATION:

Santa Ana Senior High School, 1953; Stanford University, A.B. 1957: Majors: economics, political science, history; Stanford University School of Law. J.D. 1959. Moot Court award. Continuing education in law and computer science.

LICENSES AND MEMBERSHIPS:

Member of California State Bar since January 1960.   Previous licenses: California

Licensed Real Estate Broker, California Collection Agency, and California Talent Agency License

EMPLOYMENT AND PRACTICE

Private law practice, 1973 to 2001. Emphasis on commercial, real estate, business law, and construction defect litigation. Substantial experience in public and private school law, Intellectual Property Law and Entertainment Law. Owned licensed Talent Agency with offices in Los Angeles and San Diego.

Project Manager, Mt. Israel Recreation Project, 1991.

RohrIndustries, Inc. Corporate staff counsel, 1969-1972. Corporate and securities law, labor relations, litigation and advanced technology contracting.

County of Imperial. County Counsel, 1965- 1969. General counsel to County Board of Supervisors and departments, 28 school districts and five special districts.

County of San Diego. Deputy County Counsel, 1960-1965. Real property legal counsel, including eminent domain litigation, public works contracts and highway law.

United States Air Force, 1959 -1964. Staff Sergeant, Medical Corps.

Del Mangles Tile, 1953- 1957. Tile setter's helper and apprentice tile setter (summer job)

PROFESSIONAL EDUCATIONAL SERVICES

County Counsel, Imperial County, CA, 1965-1969. Chief legal advisor for 28 school districts. Advised on Calif. Education Code and applicable federal laws. Wrote and approved construction, maintenance and repair contracts. Prepared teacher dismissal kit. Develop legal means by which districts acquired relocatable classrooms. Represented school districts in litigation, including eminent domain. Attended course at Imperial Valley College. Wrote student handbook for Imperial Valley College. Issued

opinions on school taxation matters.

Produced a video in the form of a documentary of the use of community and school swimming pools in Imperial County which was part of Dr. Miller's campaign to pass school bond issues for swimming pools for Central Union High School District, El Centro, CA. **Supervised legal aspects of school bond issues and tax over-ride elections. Supervised legal aspects of unification of school districts.** As County Counsel of Imperial County, CA, Mr. Miller drafted proposed tax legislation, legislation affecting the cemetery industry, testified before committees of the California Legislature, and assisted staff. While a law student at Stanford Law School, he worked for the California Law Revision Commission.

Deputy County Counsel, San Diego County, CA, 1960-1965. Represented school districts of San Diego County in real property matters, including leasing, purchasing, sale, quite title and eminent domain. Researched and wrote formal legal opinions.

CONSTRUCTION EXPERIENCE:

Planned Unit Development. **Developed three unit planned unit development,** Chula Vista, CA, including purchase, planning, PUD legal work, annexation to City of Chula Vista, contracting for engineering, contract administration, major grading, extension of utilities, financing, supervision, landscaping and fire protection. 1972 - 1974.

House construction. **Planning for 3000 sq. ft. single story, residence, Chula Vista (Bonita), financing, bidding, contract administration, supervision, billing, fund control and labor employment. Performed construction work, including landscaping, concrete, irrigation, tile installation, carpentry and miscellaneous work.**

Office building projects: **Planned, financed and executed tenant improvements in four different office projects. Manager and part owner of 10,000 sq. ft. office building, Hillcrest, San Diego, mid-80's. Executed energy conservation plan: employed energy engineer, installed new temperature controls and a fire alarm system.**

Managed extensive remodeling of office building.

Project Manager:

Ivy Tower, San Diego, CA (1975-79) **Formed limited partnership and purchased a 10,000 sq. foot, three office building in San Diego, CA. Mr. Miller as GP, remodeled the building, installed an executive suite, upgraded the HVAC system and installed a fire alarm system. Sold the building and forwarded the proceeds to the Anchor building project.**

Anchor Office Building project, San Diego, CA (1979) **Above partnership purchased office space parcel in Pacific Beach. Mr. Miller, as GP, directed efforts of architect to design building. Involved heavily in design decisions: structural, communications, HVAC, security, lighting, fenestration and elevator***.* **Sold parcel with substantial profit to Mr. Miller and his wife and other partners.**

Mt. Israel Recreation Area, for Olivenhain Municipal Water District,

CA, 1991.Employed as Project Manager by Bellfree Contractors, Inc. Supervised construction of riding and hiking trails, picnic areas, horse tethers, fences, gates, landscaping and irrigation systems. Designed and prepared all job cost spreadsheets; prepared progress billing; kept books, did banking; hired employees and subcontractors; supervised execution of work; acted as owner's representative to owner's staff; resolved fire damage and property claims; and operated heavy equipment.

El Campito, Descanso, CA, 2000. Employed as Project Manager for the development of a 63 acre horse ranch. Duties included due diligence review of project prior to close of escrow, planning and permits, construction of an extensive irrigation system ($30,000 plus); refitting well with pump and electrical service; brushing and grading; fencing; planting of 300 fruit trees.

Trail construction: **Designed and build hydraulically operated mini-bull dozer. Extensive studies in hydraulic operating systems. Own and operate tracked excavator and maintained the same, including**

rebuilding hydraulic rams. Designed and built riding and hiking trails. Designed and built 8' wide by 20 foot long equestrian bridge. Wrote and obtain grants for trail construction. Supervised reconstruction of California Riding and Hiking Trail ($75,000 grant).

Equipment operation: **Proficient in operating a** skiploader, backhoe, and skid-steer loaders. Operated attachments including breakers, augers, and flail mowers. Have experience in operating a tracked front-end loader, CAT D4 bulldozer, compactors, trenchers, air tools, dump trucks, air compressor powered tools, power saws, most construction tools and engineering tools.

Housing project: **Designed housing project, including 3000 sq. ft. house, three car garage and 640 sq. ft. apartment. Obtained permits and installed black and gray waste water systems, metal framing, metal roofing, finish plumbing, finish flooring, domestic water supply system, and fire water supply system. Designed, made and installed cabinets. Performed all contract administration, financing, employment of labor and supervision of work of others.   Designed and installed leach field. Installed landscaping and irrigation systems.**

*Hydronic*heating and cooling research: **Conducted extensive research into hydronic heating and cooling systems, including, technology, regulations, licensing, design, parts and equipment supply, labor costs and availability, marketing, competition, job cost accounting, and financing. Studied design manuals, including Wirsbo. Pursued legal and political avenues toward modification of current regulations affecting the use of used oil for extraction of energy. Prepared extensive business plan for Alpine Applied Hydronics.**

ACCOUNTING AND FINANCIAL EXPERIENCE

Conducted nationwide search for job cost accounting software and evaluated 13 packages. Selected Master Builder by OMWare as best fit.

Used, sold and installed One-Write Plus, entry level business accounting - three businesses (office building, bread jobber, horse ranch).

Installed SBT Job Costing for blind and drapery business ($50k - 72k/mo. gross sales); accomplished data conversion, prepared financials for two years and trained bookkeeper.

Used QuickBooks.

Used Unix based, multi-terminal, debt collection software, including trust accounting, for collection agency.

Litigated numerous contractor cases involving accounting issues

Litigated several partnership dissolution cases involving accounting issues

Setup and operated job cost system for Bellfree Contractors for the Mt. Israel project (see above).

Setup and used several different accounting systems for law practice.

Two quarters of accounting, Stanford University

Evaluation of several software packages for use by the Company. Selection, review and evaluation of Master Builder software for the Company.

Bibliography. See End Note

COMPUTER LITERACY:

Conducting search for and evaluation of enterprise-wide business information systems. Focusing on relational databases and distributed computing with "best" technology. Examination includes LAN and WAN networks, Intranets and Extranets using browsers, and dedicated circuits. Evaluating enterprise level contact and sales managers including ACT! 2000, Telemagic Enterprise, Goldmine Front Office 2000 and Lotus Organizer.

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Operated dedicated word processor (NBI 3000), 1979-1991

Operated CP/M, computer system, multi-task, system 1982-1989

Operated DOS based system; applications included MS Word, Word Perfect, Excel, and other office software. 1986-1991. ACT! user from 1988 to present.

Southwestern College courses in operating system (Sperry-Univac) and business information systems.

Operated collection agency with service bureau (mainframe) collection software 1982-1986.

Operated Throughbred (Unix clone) computer system, multi-task debt collection system. 1986 -1990.

Purchased and operated UNIX system, 1989-90, with dual station monitors. Completed UNIX class, 1991, at Palomar College.

Installed STB job cost accounting for client, did data conversion and produced two years of financial reports.

Purchased several computers running Windows with office suites. 1991 to present. Proficient in Word Perfect, Excel, ACT! Know many other office applications.

BIBLIOGRAPHY:

Books and Articles:

Long, Mark; *FINANCING THE NEW VENTURE***; Adams Media Corporation; Holbrook, MA; 2000.**

Lowry, Albert J., Ph.D; *HOW TO BECOME FINANCIALLY SUCCESSFUL BY OWNING YOUR OWN BUSINESS - A Step-by-Step Guide to Independence and Profits,* **Simon & Schuster, New York, 1981.**

Ruff, Howard, *MAKING MONEY* **-** *Winning the Battle for Middle-Class Financial Success;* **Simon and Schuster, New York, 1984.**

Small Business Resource Web Sites:

California Technology, Trade and Commerce Agency;

Liraz Publishing Co.; *Managing a Small Business***:**

First Union, *Small Business Resource Center:*

National Information Clearing House, Small Business Development Center [Market Research, Business Counseling and more]:

U. S. Environmental Protection Agency, Energy Star site, "Find Money":

Small Business startup and venture capital financing & money finders web sites:

EnviroTech Financial Inc.:

Early Bird Capital:

Small Business Administration, *Business Plan*

TAB B

RESUME OF CHARLES W. BRUCE

Charles W. Bruce
6901 Heron Street - Ventura, California 93003 – (805) 642-1596
Chick_bruce@bigfoot.com

Employment History and Achievements
January 2003 - Present
SENIOR DATA ENGINEER/DIRECTOR OF SECURITY – DolphinSearch, Inc.

Departing EDS after eight years, I pursued short-term contract-type opportunities with businesses in the Southern California area until I accepted an excellent position with DolphinSearch. This company is a software development start-up, specializing in a web-based client litigation support application used by major law firms in the US. My tasks are varied, mostly involved with the management of over 100 file servers, including WWW, development and production servers. The environment is primarily open source (Apache web servers running on Red Hat 7.3 Linux) with a mixture of Windows 2000 and Linux. I manage the DNS tables, server builds, fiber/RAID configuration, SAN administration, MySQL table maintenance (via Python scripts), and specialize in Microsoft products problem resolution.

My primary responsibilities are related to introduction of client data to the local file system. These tasks utilize my familiarity with various operating systems, network operating systems and email systems to restore data from client backups and archives. I work closely with the project manager and executives to anticipate technical needs and develop a smooth process that accomplishes the goal of timeliness and quality. My other activities include assisting the production engineers with network and desktop process issues, as well as learning and using the DolphinSearch software and processes to

produce searchable and relevant data specific to the client's and court's needs.

After six months, I received a new assignment, Director of Security. In this position, I am responsible for all areas of company security, including data handling and protection, physical building security, implementing video surveillance, and meeting with client representatives to provide security assurance.

December 1994 – April 2002
INFRASTRUCTURE ANALYST - Electronic Data Systems (EDS)

My career at EDS began as a desktop support technician for the Delco Defense Systems client (a division of General Motors). I was part of a team that provided technical data and voice services to a large engineering and manufacturing environment. The campus featured approximately 1300 nodes running various platforms, eleven file servers, several UNIX servers, and a large international WAN. Within a few months, I began working closely with the networking and project teams, providing technical assistance with server consolidations, operating system and email system conversions, network protocol and topology changes, technology refresh deployments, and physical re-locations. I became the on-site manager of the AppleTalk network used for promotional and technical documentation.

When the contract expired with this customer, I began performing project work for another EDS client, Washington Mutual Bank, as well as continuing technical consulting activities with several EDS Technical Resource Centers around the country. My work with the bank included leading projects to implement Automated Teller Machine processing systems at centers throughout the US. I also led or participated in several projects involving systems used for transaction imaging, item and check processing, customer research, and acquisition conversion efforts. During these projects I was responsible for managing large teams of technicians, administrators, system engineers, developers, as well as outside vendors. In addition to the

successful systems implementations, I also provided executive-level support for the EDS management staff.

During this time, I received formal training in all of the Microsoft Office Suite products, including MS Project, and attended advanced Macintosh repair, troubleshooting and networking classes. I became a Microsoft Certified Professional, and took all of the courses required for MCSE and CLNA certifications. I also received training in Cultural Diversity and Corporate Cultural Management. In April of 2002, EDS re-organized its divisions, and the technical center in Goleta, CA., where I was based was closed.

April 1993 - November 1994
SYSTEMS COORDINATOR - BEHAVIORAL SCIENCE TECHNOLOGY

In an attempt to become more involved with emerging client/server technology and customer support, I took a position as Systems Coordinator working with the IT Director to design and install a corporate WAN and provide daily technical user support. In addition to building and maintaining the network and deploying PC's, remote support of international consultants was also required. While with this company, I fine-tuned my strengths with customer service and ability to translate business requirements into technical and process solutions. In November of 1994, I left BST amicably to pursue an even better opportunity in the Information Technology field.

June 1989 - April 1993
SYSTEM MANAGER - VENTURA COUNTY NEWSPAPERS

Beginning as a typesetter and compositor, I grew with this company as it expanded from one into five daily newspapers over three years. I became the Group Leader of the Display and Classified Typesetters, managing daily tasks and maintaining strict deadline adherence and quality control. I managed the computerized typesetting systems made up of PC workstations, Macintoshes, color and black and white imaging units, and interface to AS/400 business system. I worked on projects that introduced full-page pagination, electronic image scanning, and expanding the LAN to a WAN to accommodate the newly acquired papers. Needing to choose between continuing a career in graphics arts and newspaper production, or explore the growing field of information technology, I chose to leave the newspaper in April of 1993.

June 1991 - June 1992
FEDERAL GRAND JURY/7th DISTRICT - U.S. DEPT. OF JUSTICE

Grand Jury Secretary

August 1988 - June 1989
COMPUTER SPECIALIST - ANR FINANCIAL SERVICES

During this year, I accepted and completed a unique contract to build and support a small PC network that would be used by a specialized team of accounting professionals to reconcile and collect outstanding loans for Arabian horses. Although I worked mostly independently with the team, there was also interface required with divisions of large corporations and banks. The project included gathering requirements from the financial team, and learning the note amortization process to develop specialized spreadsheets to perform the calculations.

June 1987 - August 1988
GENERAL MANAGER - HANDS & HEART PRODUCTIONS

Developed and produced promotional materials including a weekly radio broadcast. Wrote,

produced and sold advertisements, and performed the weekly broadcasts.

November 1986 - June 1987
ASSISTANT SUPERVISOR - PRODUCTION ART - ACORN NEWSPAPER

Performed paste-up and camera work for a small, weekly newspaper. Supervised the composition staff of five people.

February 1984 - March 1987
PRODUCTION CONTROL ANALYST - TERADYNE INC.
GROUP LEADER/STOCKROOM - TERADYNE INC.

As Group Leader, I supervised a multi-shift staff of fifteen in an electronic components stockroom. I worked with system developers to help implement a successful MRP system. I transferred to Production Control and became the master scheduler for software shipments that accompanied large semi-conductor test devices.

**INITIAL REPORT TO THE QUALITY SCHOOLS INTERIM COMMITTEE
STATE OF MONTANA
BY MONTANA VIRTUAL EDUCATION CONSULTANCY**

Summary of Education and Training

1980 - Saddleback College – Mission Viejo, CA

    12 Units Completed – Computer Information
    Science/General Business

1987 - Compugraphic, Inc. – Los Angeles, CA

    Certification – Photo-Electronic Typesetting

1990 - Dewar Information Systems – Chicago, IL

    Certification - PC-Based Computer Typesetting

1995, 1996, 1998, 1999 - Computer Focus – Goleta CA

Certifications –
MS Project; Supporting Windows 95;
MS Exchange 5.0;
IIS 4.0;

        NT Core Technologies

        CompTIA Network+

        Supporting Windows NT Workstation; Administrating NT Server

1996 - Productivity Point International – L.A. CA

    Supporting Macintosh;
    Adv. Macintosh Troubleshooting

1997, 1998 - New Horizons Training Center – Oxn. CA

Professional References:
Mr. James Browarski – Professional Colleague
527 West Alamar #66
Santa Barbara, CA
805-569-6905
mistersports@earthlink.net

Mr. Jerry Colyer
Systems Administrator

Computer Sciences Corp.
Goleta, CA
805-961-7743
jerry.colyer@csc.com

Mr. Art Drummond
PC Support Manager
Electronic Data Systems/Avista
Spokane, WA
509-495-2591
art.drummond@avistacorp.com

Ms. Jan Lane
Operations Manager
Electronic Data Systems/Washington Mutual Bank
Northridge, CA
818-775-6528
jan.lane@eds.com

Mr. James Knox – Professional Colleague
Raytheon
Goleta, CA
805-570-5750

Mr. Guy Savage
Deputy Chief Information Officer
Information Technology Department
County of San Luis Obispo
805-781-5071
gsavage@co.slo.ca.us

TAB C

MEGA CLASSROOM-- A SOLUTION

Individual attention can and should be the focus of the Mega Classroom. By combining three normal classrooms of say, 20 students each, an expanded classroom of 60 students would receive greater individual attention.   Rather than use the talking head approach, one credentialed teacher would head the teaching team, set the agenda, prescribe the course content and materials, pick and supervise the other team members, and perform the final student evaluations.

Each Megaclass would have teaching aids, supplemented by parents, interested community members and student teachers.   A mix of approximately five to seven "helpers" would give individual attention to each small group of students.   Mentors could give individual instruction. All activities would be under the supervision of the certified teacher. Funding based on student count could be modified so that the better the ratio, the greater number of helpers would be engaged.

TAB D -- FUNDING OF MONTANA QUALITY EDUCTION PROPOSED BY JAMES E. MILLER

Funding of a free, quality education for all Montana children attending K-12 schools could easily consume $300 million per year over and above current spending levels, during the first three years, for capital costs, basic education services and enhanced educational services. The funds need would be raised by enacting the Montana Quality Education Resource Act (MQEDRA).

In summary, MQEDRA would impose a tax of five percent on the sale at retail of all tangible goods and services, subject to exceptions and

limitations, sold, used or delivered in Montana. The act would not apply to bona fide, permanent, full-time legal residents of Montana. To the extent that part-time residents paid the levies, they could obtain either a proportional refund or could elect to off-set the refundable tax against real or personal property tax paid or income tax paid to Montana.

The cost of collection would be paid out of the revenue. Retail merchants would be allowed to retain from remittances, the reasonable cost of collection, to be determined by regulation. The net remittances would then be exclusively dedicated to support of Montana public education costs.

Allocation of funding would proceed along the following formulas:

7.5. Personnel costs. "Personnel costs" would include salaries, benefits, retirement, recruiting, retention, continuing education and training, and similar costs. Personnel costs would be estimated per pupil per year, based on average daily attendance, and would be the same for all districts. A salary cap would be imposed so that no district employee would be paid more than four times the lowest paid district employee.

7.6. Structure costs. "Structure costs" would have three components:

7.6.1. New Construction. New Construction would be based on pupil growth with emphasis on the use of relocatable classrooms. Funds would be allocated on a "new" per pupil basis.

7.6.2. Replacement, repair and reconstruction. Replacement, repair and reconstruction would be based on the number of square feet, modified by the age and condition of the structures. An annual assessment would be created by each district and funding sought according to regulations developed by competent building engineers and system maintenance experts.

7.6.3. Maintenance and operation. Maintenance and operation of structures would be based on square feet and would be the same for all districts.

7.7. Transportation costs. "Transportation" costs would have two components:

7.7.1. Mileage. Mileage allowances would be based on the probable annual costs by type of vehicle used by the districts, on a uniform basis.

7.7.2. Maintenance and repair. Maintenance and repair costs would be individually submitted by each district, based on actual or probable costs.

7.7.3. Additional new and replacement vehicles. Additional new and replacement vehicles would be at cost of the district based on competitive bidding. Caps would prevent overcharging by districts. Specifications would be approved by a state agency.

7.7.4. Overhead and general administrative expenses. Overhead and general administrative expenses would be based on the annual pupil attendance which in turn is based on the average daily attendance. A 15% cap would be imposed.

7.8. Exceptions. All calculation of costs would be subject to an "exceptions" clause which would allow for special circumstances of dire need, such as a fire, storm, flood or other disaster.

7.9. Local property taxes. Local real property tax levies (including renewals, extensions and adverse changes) by school districts would be allowed only upon a majority vote of all of the voters of a district voting at the election.

7.10. Voter approval. The MQEDRA would be submitted to the voters of Montana at the next general election. A majority vote of those voting would pass the issue.

TAB E -- TEACHER RECRUITMENT

The Ability Of School Districts To Attract And Retain Qualified Educators And Other Personnel

REPORT BY MONTANA VIRTUAL EDUCATION CONSULTANCY TO THE QUALITY EDUCATION INTERIM COMMITTEE, STATE OF MONTANA

By Charles W. Bruce

Introduction

A basic factor in any effort towards improving student achievement is the recognition of the importance of the capability, knowledge and instructional skills of the teachers and the supporting staff. Success in any program of motivating and capturing the attention of modern students primarily rests with well-educated, highly-skilled, experienced and practical professionals – at all levels - that have been provided with the necessary resources for their tasks. Montana VEd recognizes the vast issues involved with the ability of school districts to attract and retain qualified educators and other personnel. These issues can be begin to be addressed by looking at core components of school leadership, organizational structure, exploration of previously overlooked resources, atypical compensation programs to attract and recruit the highest level of talent, and a declaration of a common vision of a positive future.

Leadership

Research and experience clearly shows all successful endeavors have a common core in the strength and capabilities of its leadership – particularly the 'building-level' leaders. To address this need, Montana VEd promotes all efforts at attracting and retaining the highest level professionals for educational leadership roles. Montana VEd supports rewarding the highest achieving instructors not only with compensation, but by recognition of results, and by creating paths to leadership opportunities and encouraging the successful to follow these paths and serve as leaders. This path of leadership ensures the best and most successful ideas can carry forward into the future.

Montana VEd would encourage the State of Montana to address its immediate gaps in education leadership with a deliberate and conscious conviction to facilitate change in current policies and practices. The State must not be afraid to seek results-oriented individuals from outside the academic sector for leadership positions, whom are likely to infuse the system with new ideas and techniques. These new leaders would be tasked with creating an atmosphere that embraces changes that can

produce positive results, to upgrade school support processes and internal infrastructures, and to create momentum going in a forward direction.

This approach is especially important at the local district/school levels. Superintendents and principals of the future must be open-minded, motivational visionaries who can fully endorse new ideas and organize his staffs into efficient, cooperative functional teams. These leaders must accept and embrace technology and incorporate it as wholly as possible into their solutions. They must be willing to encourage teamwork not only within their walls, but to promote their success to their peers in other schools. The leaders will be challenged to discover and document the commonalities of seemingly unique issues. They will be willing to communicate these weaknesses, be receptive to consultation and collaboration with elements that may have previously been considered competitors. They must have a view towards the future, and not be restrained by subjective notions; be open-minded towards ideas traditionally believed to be 'outside the box'. By placing qualified, talented, forward-thinking, tech-savvy executive-level professionals who are have an intense interested in educational achievement and have a proven track record of success with implementing tested methods and ideas, the seeds are sown for continuous, perpetual, improvement.

Organization

In addition to attracting the "best in field" professionals from around the world to become involved in academic efforts, Montana VEd strongly supports intelligent, thought-out and well-documented organizational change. Being receptive to new ideas is essential to implementing successful change. Montana VEd is not suggesting complete, immediate restructuring or organizational structure. A phase-in program needs to be employed.

Resources

Montana VEd also endorses the exploration and utilization of previously untapped resources to assist problem schools and issues, including the use of cross-age assistants and internships. Recognizing the teachers are not alone in the efforts of improving student performance, Montana VEd

also promotes a strong, technically-sound, cooperative internal infrastructure that provides the necessary support to education's 'front lines'. By focusing attention and effort into facing towards the future, modernizing current teaching tools and resources, and introducing modern technical experience and methodologies into the classroom, schools, districts and throughout the state, a revolution in learning the learning environment is made possible.

Compensation

Montana VEd encourages promotion of results-driven, business-tested methodologies, including more horizontal-hierarchy, peer collaboration and cross-functional teams that encourage positive change by empowerment the participants.

Expectations from 'Task' Phases

In addition to the minimum staff identified on the evaluation committee, Montana VEd would include at least one Information Technology Analyst to inform the committee on current levels of technology services being provided, and, to advise on feasibility of future technology-oriented programs. These IT Analysts must be knowledgeable with current technology services and funding for education, and should be familiar with any educational programs currently being considered by the state.

Montana VEd promotes an educational future where the focus is technology-oriented. It is recognized that the students of Montana's public schools deserve to be provided with the best, most talented professionals in education, and that these teachers and leaders deserve to be compensated appropriately for their efforts. Montana VEd supports requiring all practitioners to demonstrate subject-matter knowledge, and possess necessary credentials.

In order to address the needs of recruiting and retaining the 'best in field' professionals, Montana VEd strongly supports methods to attract knowledgeable, qualified, non-traditional candidates, such as persons changing careers, retirees, and others with non-education backgrounds. This is particularly true with attracting technology teachers from the

private sector. Special emphasis should be made to attract and retain specialty teachers, including Native-American instructors and technology educators. Programs must be developed to identify and encourage talented students to pursue teaching opportunities. Institutions that provide teachers and leaders must establish better, cooperative relationships with the local districts, allowing both to share resources, technical infrastructure and knowledge.

Better use of existing resources, such as internships, teachers aides, and student 'cross-age' assistants are also promoted. Montana VEd also encourages expansion of technology resources, such as Web Learning Centers and inter-school/district collaborative efforts. By promoting such methods, and being receptive and taking a positive approach towards other, new ideas will strengthen the ability of school districts to attract and retain qualified educators and other personnel.

Respectfully submitted,

Charles W. Bruce

TAB F

EDUCATION'S DOUBLE WHAMMY
-- If Educators don't know what the problem is, how can they fix it?
By Jim Miller

Up font: My thesis is that the folks who populate the world of education (with few exceptions) are either unaware of or ignore the different learning abilities of left-brain dominant (LBD) versus the learning ("dis")abilities of right-brain dominant students (RBD). You want proof? I got proof.

The main difference between the learners is how they index their memories. This is not a course on the subject, but the reader should know that the RBD's, as they acquire information and later attempt to recall it, index in terms of visual images (a formula on the blackboard is

not a visual image – a picture of an object is) in a relational mode. LBD tend to index using key words and symbols, in a sequential mode. Don't argue with me on these simplified premises – just accept them for the time being.

Students who are tested for a variety of reasons, perform differently, based on racial background. Study after study in all different fields have shown that the Afro-Americans, American Indians, and Latinos, as academic learners, under-perform the Caucasian and Asian students. [17] What is the causal connection between brain dominance and educational aptitude? Is it that the Caucasian and Asian students have genes which promote a higher level of intelligence? Possible, but unlikely since on a broad level, all human genetic stock derived from African ancestors.

First the facts:

From High School to College, by Kirst and Venezia (2004) reports studies on K-16 integration (more so the lack of integration) of academic services. [18] The recommendations made relate to increasing the coordination among institutions of higher learning (IHL) and 8-12 schools so as to increase the quality of student performance not only for admission to IHL but more importantly, the "success" rate, i.e. graduation, from IHL's. The study included taking field data as well as review of field data studies by other researches. The Texas Education Agency reported results of students taking SAT, ACT and TAAS (Texas Assessment of Academic Skills) tests for an unnamed high school. Some findings were:

> "Forth-six percent of all seniors scored at least 1000 on the SAT or 24 on the ACT in 1995. Fifteen percent of African American seniors, 58 percent of white, non-Latino students, and 10 percent of the Latino seniors all scored at least 1000 on the SAT or 24 on the Act in 1995. Twenty-eight percent of African American students; 40 percent of Latino students; 77 percent of white, non-Latino students; and 28 percent of economically disadvantaged students, passed all sections of the TAAS in 1995. The school's students tended, on average, to earn higher SAT scores than in the district as a whole, but lower TAAS scores." (Kirst & Venezia, 2004) [19] The

study reported similar findings in all of the areas studied. What accounts for the differences?

The Single Whammy

The answer is that the vast majority of African American and Latino students are RBD. The SAT, ACT and TAAS tests are intentionally or negligently constructed to benefit LFD learners and to prejudice RBD learners. This explanation fits as no other explanation has ever fitted.

The Double Whammy

Moreover, the "under performing" RBD students come from the low economic strata of our general population. Not only are they "under performing" because of the skew against RBD learners, but their opportunities and motivations are much less in force than in the high economic levels. Because many students from low economic strata are Afro American or Latino, they suffer the double whammy. Lack of parental education has some influence on the lack of the child's motivation and exposure, thus giving them a triple whammy. Is this fair?

Why? Simple. The vast majority of educators and educational regulators are LBD or subscribed to the policies formulated by LBD teachers, professors and administrators. The LBD educators typically account for over seventy percent of those employed in public education in academics. These folks have depended mostly on rote memory themselves to get their degrees and positions. They assume that "rigorous academic preparation" exclusively means the ability to commit information to rote memory and mark the correct bubble on the machine read answer sheet. Some of the LBD policy controllers grudging admit that the arts should be permitted limited testing by means of essays.

Fixation with machine testing. The entire education industry is so fixated with testing by machine, the actors cannot understand why the essay should be the principal means of testing, despite the fact that the vast

number of rote memory tests administered each year in the United States. When President Eisenhower signed the 1954 enactment of the Internal Revenue Code, he held up a copy for the TV cameras and announced that the new act was really the "Attorneys and Accountants' Employment Act of 1954". In a sense, the widespread use of the essay would have the same effect (good for the student, "bad" for the taxpayer, but "good" for our highly complex society). Apart from the economic consequences, the fairness doctrine should kick-in and drive demand for at least equal parts of testing between rote memory and relational thinking.

Consider this possibility: the student is given the choice of taking a rote memory, machine graded test in each of three areas or can write essays in one or more of the areas. That would stand testing as we know it, on its head. A disruptive solution, no doubt.

What to do?

The English Departments should be separated from the "Creative Authorship Departments. English teachers are, by and large, mostly LBD and teach English as if it were exclusively a LBD subject – a multiplicity of "rules". Creative writing, on the other hand, demands putting ideas together in terms of relationships, relevancy, pictures and flow of ideas. Descriptive language is intended to create a "picture" of the scene either in still form or in action form. LBD English teachers are so taken with applying the rules of grammar and style, that they ignore or dismiss the relatively more important "creative" side of the use of the English language. RBD learners deserve to apply their skills under the tutelage of RBD teachers. [20]

It is time for a change in the education industry in favor of fairness for the "learning disability" of RBD students, especially including genetically Afro American and Latino students.

REPORT BY MONTANA VIRTUAL EDUCATION CONSULTANCY TO THE QUALITY EDUCATION INTERIM COMMITTEE, STATE OF MONTANA

1 *A Local Perspective* published by the Montana Quality Education Coalition: http://mqec.org/testimonial2.pdf; accessed June 3, 2005. Teachers, administrators and other learned persons vent their opinions and personal experiences in several very moving testimonials. Jack Copps' summary is right on point. A MUST READ.

2 "But there was nothing magic in her performance. All over town there were thousands of other kids doing the same thing. Theirs is the generation that grew up with planned sports, academics, religious instruction, and social activities. They did algebra in the backseat of SUVs as they were shuttled between appointments They learned to use technological tools that were barely dreamed of 30 years ago. And somewhere along the way, they perfected the art of carrying on multiple activities at once.

"In a phrase, they are the multiplexed generation or Generation MUX."

Ken Harney is a vice president at Ness Technologies in Hackensack, N.J., where — in typical serial fashion — he serves the company's client base of over 5OO public- and private-sector customers in North America, Europe, and Asia. Write to him at ken.harney@ness-usa.com.

Source: Infoworld, "My Turn", 7/18/05, pg. 42.

3 The State of Montana created the Montana K-12 Public School Commission to study the quality of education issues. The Commission's report recommended:

> "Using a balanced taxation approach that includes existing statewide taxes such as property taxes, income taxes and natural resource taxes and also considering new revenue such as a general statewide sales tax to be used as a mechanism for funding quality public schools."

Montana K-12 Public School Commission Findings and Recommendations, September 15, 2005, para. 9(e), pg. 7; http://www.bpe.state.mt.us/pdf/finalreport.pdf; accessed June 3, 2005 [hereinafter referred to as the "K-12 Commission Report"]

4 One of many examples of software available for webcasting is *F5*. Here is a talking head edition:
http://www.accelacast.com/webcasts/f5_enterprise_architecture/

5 Broward County School's website announces:

"There are lots of ways for parents to be involved in their child's education - keeping track in the classroom, at home and throughout the school district.

"Broward County Public Schools encourages all their parents to be actively involved with, and committed to, their child's education. Here are a few ways that parents can have a real voice and make a real difference for their student."

Source: **www.broward.k12.fl.us/esol**

The several ways parents can get involved include:

"DISTRICT ADVISORY COUNCIL (DAC)

The District Advisory Council advocates and promotes the highest quality of public education for students within our schools, areas, district and state by sustaining an effective network of parents, students, business, government, school, district staff and the community.

PTA WEB SITE

Broward County has a dynamic PTA which is connected to the state and national PTA. It is an important advocacy group for children's education issues. Many schools have PTAs which work to support and advance school improvement at individual schools and also have a

structure where concerns and issues are discussed at the district level and with the Superintendent. To find out more call you local school.

PTO

Some schools have independent PTO organizations which function to support individual schools and their school improvement efforts. These organizations are independent and work within a particular school setting.

SCHOOL ADVISORY FORUM

Every school has an advisory forum which acts as a proactive group which addresses various educational issues. Their ideas and concerns are forwarded to both area and district advisories which meet regularly with key staff and the Superintendent. Advisories do outstanding work on behalf of kids. If you wish to join this group, call your local school for more information.

SCHOOL ADVISORY COUNCIL (SAC)

School Improvement is an absolute priority for all Broward schools. To make it happen, every school has a school Advisory Council which studies the school's track record and comes up with an annual plan to improve education in vital areas such as: student achievement, curriculum, safety and discipline. These plans are on file at every school. Call your local school to be a part of this great team.

ESOL Leadership Council

This is a district wide forum for Limited English Proficient (LEP) parents and interested community members to assist the District in identifying the educational needs and priorities of LEP students. The ESOL

Leadership Council meets on the first Wednesday of each month during the school year at the K.C. Wright Administration Building. For more information, contact Yvette Fernandez in the Bilingual/Foreign Language/ESOL Education Department at 754-321-2951; or visit the department website at **www.broward.k12.fl.us/esol**

VOLUNTEERS

Our kids count on volunteers in their schools who do it all - helping teachers, tutoring students, assisting in the front office and acting as Youth Motivators. You can volunteer at your child's school or another school via a number of ways. Call the Volunteer Services Office at **754-321-2040** and sign up today."

Source: http://www.browardschools.com/involved/

6 "Adler, who spent eight years teaching physics and working as dean of students in a Baltimore prep school, and Vinnakota, whose parents were teachers, built SEED on the premise that kids need a safe, stable place where they can concentrate on learning. They believe these kids have the best chance of succeeding and going on to college if they are nurtured before they get to high school."

Eric Adler and Rajiv Vinnakota raised 12 million in donations across the country and sold 14 million in bonds to remodel a vacant elementary school is southeast Washington.   The buildings include separate dorms for seventh and eight grader boys and girls, a gym, academic buildings, and a couple of playing fields.   Wake-up is at 5:45 a.m., classes begin at 8:00 a.m. and last until 4:00 p.m. and includes an hour's study hall in the evening. The school servers grades 7 through 12.

Bacon, Jr., Perry, *Urban Preppies;* Time Magazine, January 12, 2004, pg. 61.

7 **General Electric** is a leader in technology; see the infomercial as a webcast: http://ge.ecomagination.com/@v=022005_0606@/index.html.

You-niversityuses the Web to demonstrate webcasting and webconferencing of their educational content delivery systems. See introductory webcast: Also see demo examples including Fordham University: http://www.you-niversity.com/demos.asp

Online video production software is provided by **Channel Storm** at: http://www.channelstorm.com/. Testiominial:

> "If you need software for Webcasting, this is the best you're going to find."
> David Nagel
> Creative Mac

Vodium offers self-service webcasting:

> "Self-Service Webcasting - MediaPod Producer™
>
> MediaPod Producer is webcasting straight from the desktop.
>
> Powerful, manageable, affordable, and simple! MediaPod Producer is a self-service web authoring tool allowing you to quickly create, publish, and distribute audio and video webcasts."

http://www.vodium.com/home/s_webcast.html

Uazone offers webcasting on demand. Here is a small sample found at: http://www.uazone.org/znews/mmis/mmis-edu.html

> **Berkley Multimedia Research Center**
> http://bmrc.berkeley.edu/index.html

- Berkley Internet Broadcast System (BIBS), Live (scheduled) and On-Demand Class Lectures - http://media2.bmrc.berkeley.edu/bibs/schedule.cfm Archive is provided

Adaptive (34 K, 200 K) Real Player G2

- Innovations in interactive teaching and learning. Conference video transcript, January 1999 - http://bmrc.berkeley.edu/frame/about_bmrc/retreat/retreat99/index.html

University of South Florida Netcast
http://www.netcast.usf.edu/

- Events http://www.netcast.usf.edu/99calendar.htm

- **Sorenson Media and Pinnacle Systems Live QuickTime Streaming:**

   "Sorenson Media and Pinnacle Systems will jointly deliver live video and audio streaming for QuickTime within Pinnacle Systems' StreamFactory product line. StreamFactory is a 1RU real-time Web media encoder designed for corporate, studio and educational Webcasting.

   "The StreamFactory product uses Sorenson Media's recently announced Sorenson Broadcaster for Windows. Sorenson Broadcaster for Windows lets Webcasters enjoy the quality and depth of the QuickTime platform with a Windows-based encoder.

   "Sorenson Broadcaster is a leading encoder on the Macintosh platform. The availability of Sorenson Broadcaster for Windows and the integration with Pinnacle Systems' StreamFactory now allows Sorenson Media to cover the entire customer spectrum. "

   http://www.digitalwebcast.com/2001/04_apr/news/pinnacle_sorenson.htm

8 Slovic, Beth; *Teacher migration*, Bozeman Daily Chronicle, June 12, 2005, Pg. A1. Full story:
http://bozemandailychronicle.com/articles/2005/06/12/news/vegas.txt

   "Eric Feaver, president of the MEA-MFT teachers' union, sees the situation as particularly dire, although it's not as bad as it was five years ago, he said.

   "If it weren't for the magnetism that home has, we would lose almost

everybody," he said. Lure of money versus comfort of home.

As a first-year teacher working in a second-grade classroom, De Shazo earned $28,500, plus a $2,000 signing bonus. Nevada has no state income tax.

If she had stayed in Montana, depending on where she worked, she likely would have earned about $23,000, the average salary for first-year teachers, according to MEA-MFT."

"The effects and the magnitude of the trend are a matter of debate. However, almost everyone agrees that Montana's salaries for teachers are well below what they should be. Id.

As a result of the growing gap between Montana's teachers salaries and other states', several things are happening:

- Many first-year teachers are headed out of state, where they have an easier time finding a higher-paying job with long-term possibilities.

- Veteran teachers are leaving their posts when they're eligible for retirement so they can pull a salary and still draw on their Montana pension.

- Montana's rural school districts and those on Indian reservations are having a particularly tough time attracting teachers, as they are forced to compete with schools around Montana and the nation." Id.

Printable version is at:
http://bozemandailychronicle.com/articles/2005/06/12/news/vegas.prt

9 Hancock, Jimmy, _Boise-based group gives computers to area kids,_ The Idaho Statesman, July 20,2005.   Printable version is at:
http://www.journalnet.com/articles/2005/07/20/news/local/news09.txt

10 The River's Edge Charter School of Florida implemented its laptop project by providing take-home laptops to its students. *River's Edge joins national trend toward technology,* by *BY KIMBERLY C. MOORE, a reporter for FLORIDA TODAY,* reports:

> "The school is the first in the district to implement widespread, take-home technology into its middle school curriculum. School officials said they plan to train students and their parents on the machines and, by Christmas, hope to allow the students to take them home. They are also trying to broker a deal with Bright House Communications to install Internet access in the students' homes. Bright House officials declined to comment on the project but acknowledged they are working with River's Edge officials.

> "Research shows a smattering of schools around the state are issuing laptops to students. Manatee County Schools began a program several years ago to provide every student in the district a laptop, and, so far, more than 5,200 of the computers have been handed out.

> "In San Diego, the Bill and Melinda Gates Foundation is helping to fund High Tech High, a science and technology school where 100 percent of the students advance to college.

> "In 2002, Maine began an initiative to give laptops to every student in the state. The goal was to make Maine students the most technologically savvy in the world. Has the Maine Learning Technology Initiative worked? Studies by the Maine Education Policy Research Institute show it has.

> " 'As the students begin to use the laptops more within their classes, they report an increase in interest in their school work and

an increase in the amount of work they are doing both in and out of school,' one report states.

"So far, the school has spent about $40,000 on the electronic equipment for about 150 students.

Source:
http://www.floridatoday.com/apps/pbcs.dll/article?AID=/20050529/NEWS01/505290336/1006

11 The River's Edge Charter School of Florida implemented its laptop project by providing take-home laptops to its students. *River's Edge joins national trend toward technology,* by *BY KIMBERLY C. MOORE, a reporter for FLORIDA TODAY,* reports:

River's Edge has a high percentage of impoverished students, with 85 percent of the school's 450 students receiving free or reduced price lunches. In addition, 30 percent are special education students and need extra help throughout the day.

FCAT scores show many River's Edge students struggle academically, with only 35 percent of the school's eighth-graders reading at or above an eighth-grade level.

Administrators are hoping the computers entices kids into loving school.

"It's a tool, but it's a tool to get kids engaged in the learning process," Sartori said.

One student said he is excited about the prospect of having his own laptop.

"I hope I would get a lot of education out of the laptop and get all my work done and I hope to experience all these computerized things for your work and stuff," said 14-year-old Derrick Black, who will be an eighth-grader at the school in August.

His mom, Racquel, said she is also pleased the school is taking this giant technological leap. She said her son has gone from C's to straight A's at River's Edge and she is looking forward to seeing what computers will do for her son.

"It prepares them for the work force at that age and it prepares them for college," said Black.

She has her own computers at home, but can't allow her children to use it because she fears they would download a virus. She uses her laptop for nursing school at Indian River Community College.

Soon, he won't have to borrow one -- he'll have one of his own.

http://www.floridatoday.com/apps/pbcs.dll/article?AID=/20050529/NEWS01/505290336/1006

12 The better approach is to create a very positive, kindness-reinforced atmosphere in schools. The Harbor school approach exemplifies this proactive approach:

"Fans of Idaho's Harbor schools say the schools cultivate a "culture of kindness" where bullying is banned and peer pressure is non-existent — schools that are literally protective "harbors" where children can learn.

Critics insist Harbor schools are cultures of rigidity where children march silently and single-file in the hallways and suffer humiliations disguised as discipline.

This homegrown teaching method has spawned the fastest-growing charter school network in Idaho. The Harbor Method will be used at one in every three charter schools next school year. Seven of the 10 charters approved by the Idaho Charter School Commission have been Harbors. "

For more of the story, see:

http://www.idahostatesman.com/apps/pbcs.dll/article?AID=/20050522/NEWS0104/505220340/1001

13 "Fourth-graders in Nikki Weirs' class at Whittier School did their best to bring the wild frontier to life on Friday with a musical, "The Burley Crew". The title is taken from a line in Lewis and Clark's journals about the hardy soldiers who made up the expedition. Nineteen students sang and acted out highlights from the journey, which helped America lay claim to the West."

"Weirs, a Whittier teacher for five years, said the musical, which was handed down to her, provides a great springboard for teaching about Montana history. Students really remember anything they learn with music, she said."

Bozeman Daily Chronicle, June 4, 2005, pg. C-1.

14 An AP report appearing in the June 5, 2005 edition of the Bozeman Daily Chronicle, catalogues the usefulness of early computer training. According to the U. S. Department of Education, kids 2 -5, 23 percent go online and by kindergarten, 32 percent have used the Internet.

"At school and home, children are viewing Web sites with interactive stories and animated lessons that teach letters, numbers and rhymes."

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"At Arnold& Porter Children's Center in Washington, 4- and 5-year olds have the option to spend time on a computer, working in small teams. They learn basic problem-solving and hand-eye coordination, but the social component of working with classmates on computer exercises is just as important, said Sally D'Italia, director of the center...."

(Id. p. A2)

15 All Kinds of Minds Website promotes the neurological approach to understanding how learning takes place:

"A Neurodevelopmental View

The human brain is like a complex orchestra, with many different instruments playing many roles. These roles, or neurological functions, desperately need to be coordinated, integrated, and synchronized. As with any orchestra, each player's role varies depending upon the situation. Just as the strings or woodwinds may be highlighted in music, different neurological functions take the lead when students study English or math, have to write a report, or take part in athletic activities. And, just as instruments create harmony in an orchestra, the different neurodevelopmental functions interact to enable students to acquire certain knowledge, skills or sub-skills, or to accomplish specific school tasks, such as being well-organized, efficient, or strategic planners.

When students are having difficulty with a particular academic skill, the task of parents, teachers, and clinicians is to pinpoint the areas of

difficulty, to specify the weak sub-skills, and to create a plan for strengthening strengths and areas in need of improvement.

There is a need to ask: Where is the breakdown occurring? Which sub-skill is not playing its role? And within that sub-skill, which related functions are not operating well? For example, students with strong vocabulary skills and memory abilities may still have problems remembering words. In this case, the difficulty might lie with their word retrieval ability, a very specific sub-skill that enables students to remember words on the spot. "

Read About Observable Phenomena
Read About the Profile
Read About Recurring Themes

http://www.allkindsofminds.org/about_neuroview.aspx

16

"Left Vs. Right

Which Side Are You On?

Take The Hemispheric Brain Dominance Test

Basic Right Brain and Left Brain Characteristics

In general the left and right hemispheres of your brain process information in different ways. We tend to process information using our dominant side. However, the learning and thinking process is enhanced when both side of the brain participate in a balancedmanner. This means strengthening your less dominate hemisphere of the brain. Listed below are information processing styles that are characteristically used by your right or left brain hemisphere. Read the information below to help you

understand how your brain processes information. Pay attention to your less dominant style so that you can learn how to improve it.

[Linear Vs. Holistic Processing](#)

[Logical Vs. Intuitive](#)

[Sequential Vs. Random Processing](#)

[Verbal Vs. Nonverbal Processing](#)

[Symbolic Vs. Concrete Processing](#)

[Reality-Based Vs. Fantasy-Oriented Processing"](#)

http://brain.web-us.com/brain/LRBrain.html

31 Yet many folks in the minority groups perform jobs as well as majority folks, and sometimes out perform the whites and Asians. asketball is a good example for Afro Americans. Take a good look at the winners in the Olympics. The current academic methods appear to favor LBD Anglos over RBD Blacks and Hispanics.

32 Kirst, Michael W., and Venezia, Andrea (Editors), (2004) *From High School to College: Improving Opportunities for Success in Postsecondary Education,* Jossey-Bass; San Francisco, CA, www.josseybass.com; ISBN 0-7879-7062-X.

33 Id. At 96.

34   As interesting and as well document as is *From High School* …, no mention was made of the right versus left brain dominance as having an influence on test scores. Only slight mention was made of the use of essays which are beginning to creep into testing for measuring for admission and predicting success in college.

TAB G

WIKIPEDIA reference list:

Wiki Wiki Web

„This is a web site written by its users, people like you and me. Anyone can change any page or create new pages. Read the TextFormattingRules to find out how, and then go to the WikiWikiSandbox to try it yourself. If you make a page you don't want to keep, just replace its text with the word "delete". "

This Web site and the software were created by Ward Cunningham for the Portland Pattern Repository. It is home to an Informal History of Programming Ideas, as well as a large volume of material recording related discourses and collaboration between its readers.

http://c2.com/cgi/wiki?WikiWikiWeb

Wikipedia
"A wiki (pronounced [wɪkiː], [wiːkiː] or [viːkiː]; see section Pronunciation) is a web application that allows users to add content and their own version of history, as on an Internet forum, but also allows anyone to edit the content. The term Wiki also refers to the collaborative software used to create such a website (see Wiki software).
Wiki (with an upper case W) and WikiWikiWeb are both used to refer specifically to the Portland Pattern Repository, the first wiki ever created. Wiki proponents often spell 'wiki' with a lower case "w". The name is based on the Hawaiian term wiki wiki, meaning "quick" or "informal". Sometimes wikiwiki (or Wikiwiki) is used instead of wiki."

http://en.wikipedia.org/wiki/WikiWiki

REPORT BY MONTANA VIRTUAL EDUCATION CONSULTANCY TO THE QUALITY EDUCATION INTERIM COMMITTEE, STATE OF MONTANA

1st SPOT
Wiki Wiki Web

A list of a wide variety of Wiki Websites, such as: **eBook Wiki**
     Math Science Wiki

http://1st-spot.net/topic_wiki.html