

# **EDUCATIONAL REFORM PROPOSAL**

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Education Policy  
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## Introduction

Just as 100 years ago the nation struggled with the transition from an agrarian to an industrial economy, today we confront the transition from an industrial to a global, technological economy (Technological Literacy). Knowledge has become our key resource. It is not tied to any country. It is portable. Increasingly, an educated person will be somebody who has learned how to learn, and who continues [formal] learning throughout his or her lifetime (Drucker, 1994, pp. 4,10).

After studying America's past and present economic situation, President Clinton has grasped the enormous importance that "our future depends on the skills of our people, who compete in a world where what you can earn depends largely on what you can learn" (Marshall & Tucker, 1992, back cover). This means higher academic standards have to be set—not only for an elite few, but for *all* Americans (Educational Excellence, 1999).

## Problem

There is an old saying that goes like this, "There is so much good in the worst of us, and so much bad in the best of us, that it is rather hard to know which of us ought to *reform* the rest of us." This analogy can also be fittingly applied to our traditional educational institutions, who incorrectly assume that all students learn best by using one unified method of instruction. James Hillman suggests, "The more we rigidly insist upon unity the more diversity will constellate" (Mogenson, p. 4).

A central problem in education has been the failure to adapt teaching to the many ways children think and learn. From this perspective, many learning disabilities have in fact been created by schools (DeVries, 1987, p. 18). The traditional method of teaching has posed problems which are magnified because *less than half* of the school population learn best from teacher-initiated and direct-dialogue instruction (Gallagher, p. 1).

For example, in the typical school, ADD/ADHD students comprise about 30-35% of the total student population (Newman, 1998, p. 4). In conventional classrooms, these students suffer "chronic and severe under-achievement," 35% drop-out rates, 50% grade-repeaters, learning deficits in core subjects, and high suspension and expulsion rates. Sooner or later many of them *develop* oppositional defiant behavior, probably because of high frustrations built up from being "compelled" to perform in a foreign and unfriendly environment. At worst some of these become juvenile offenders which follows them into adulthood, robbing them of their childhood.

Studies demonstrate that the ability to concentrate, focus, and stay on the teacher's task of assignments are better predictors of academic success than other measures of academic ability (p. 4), i.e. intelligence, creativity, self-discovery & exploratory skills. Polemically, studies also show that a significant number of students who display poor performance in these traditional classrooms are long on attending to their *own* aims. There is simply a disparity of agendas, whereby their attention is focused on things of no interest to the teacher (Keirse, p. 2).

Though by no means scientifically definitive, but for the sake of simplicity, society in America has tended to place its members into two camps—conservative or liberal; republican or democrat; introverted or extroverted; constrained or unconstrained. It is now being discovered that students (and adults) fundamentally have two sides of learning dispositions: *convergent* thinkers and *divergent* thinkers (Gallagher, pp. 1-8). The *convergent* thinkers tend to think in concrete or singularly focused terms; whereas, those with *divergent* mindsets gravitate toward thinking in the abstract and visualize things in broad concepts. As such, they learn in diametrically opposite ways, creating many conflicts.

For instance, the primary clash between the two is—*convergent* thinkers normally do not question or challenge the status quo; whereas, *divergent* thinkers usually do, and are oftentimes very vocal in their non-conformist ideologies. As a result, the latter are viewed in the negative as weak and disruptive by the former. This hostility causes much strife in education because *convergent* thinkers predominately occupy the positions of teacher, principal, School Board member, and PTA member (Gallagher). *Convergent* thinkers also comprise roughly 40% or less of the student body. The other 60% or more are *divergent* thinkers (i.e. ADD/ADHD, LD, gifted, creative, edison trait, etc.), who either find a way to adapt to the *convergent* thinker's method of instruction, or eventually drop out of school.

Schools must provide educational experiences appropriate to the needs of *all* children. *Divergent* thinking students must be given stimulating educational experiences appropriate to their level of ability if they are to realize their potential. According to research on the nature of intelligence and the brain, we either progress or regress depending on our participation in stimulation appropriate to our level of development (Parent Information, p. 3).

A new educational framework for *divergent* thinking students must be created which allows them great freedom to follow trails of self-interest; to make connections on their own; to reformulate ideas; to reach unique conclusions—even if they are unconventional and non-conforming—to explore and discover new territories of thinking; to question without fear of reprisal; to reshape and transform ideas; and internalize information according to *their* needs and aspirations.

**Policy Proposal 1: Constructivism and Charter Schools.** As indicated, being scheduled and routinized creates many complications for *divergent* minded students. In this regard, they are fundamentally different than *convergent* thinking children. A proposal of educational *reform* that will liberate these students, and thus greatly improve their academic performance, is to provide them with an educational method of learning called *constructivism*.

Since traditionalism commonly has immense difficulty adapting to major changes, much less initiating those changes, *charter schools* that promote “entire-school” *reform* using the *constructivist* method of instruction should be hastily established. Grouping of this nature allows for more appropriate, expeditious, and advanced instruction that matches the potential for rapidly developing skills and capabilities of students with *divergent* mindsets.

What is *constructivism*? During the last half of the 20<sup>th</sup> century, two very different views on teaching and learning developed. One view, called *directed instruction* (Roblyer, 1997, p. 55), is grounded primarily in behaviorist learning theory. This is the method which is

predominately used in today's traditional classrooms. The other view, which is referred to as *constructivism*, evolved from other branches of thinking in cognitive learning theory.

*Constructivism* is not a theory about teaching. It is a theory about knowledge and learning (Brooks & Brooks, 1993, p. vii). To understand *constructivism*, educators must focus attention on the learner (p. 22). The *constructivist* method emphasizes students' ability to solve real-life, practical problems. In this model, learners *construct* knowledge themselves, rather than simply receiving it from knowledgeable teachers. They tend to focus on projects that require solutions to problems rather on instructional sequences that require learning of certain content skills.

Problem-Based-Learning (PBL) is an example of a *constructivist* model. In a PBL setting, teachers decenter their roles as the source of knowledge by consciously refraining from giving only right-answers, and helping students observe how other resources can teach them about effective language use. Acting as "facilitators" and "cognitive coaches", teachers ask questions such as: "Why? What do you mean?" and "How do you know that is true?" By asking such questions, facilitators also model critical thinking, with the purpose of stepping back and letting students begin to ask themselves and their peers those same types of questions (Abdullah, p. 2).

Every day, millions of students enter school wanting to learn, hoping to be stimulated, engaged, treated well, and hoping to find meaning in what they do. And every day that educators stimulate and challenge the students to focus their minds on meaningful tasks, to think about important issues, and to *construct* new understandings of their worlds, both teachers and students achieve a meaningful victory (Brooks & Brooks, p. 120). Partitioning *divergent* minded students by placing them in *charter schools* archotyping the *constructivist* method of instruction will best assist them in accomplishing the highest of excellence in their educational pursuits.

### **Policy Proposal 2: Skill & Content-Based Reform in Conventional Schools**

No doubt, *constructivism* is not for everybody. If a student thinks *convergently*, is not naturally creative, or a self-discover, or independent-minded, then the formal teacher *directed* mode of instruction may still be the best learning environment for them. However, in order for these students to remain competitive in the new world order of technology—in addition to competing with any charter schools established in their district—educational *reform* is still imperative.

The *Skill and Content-Based Reform* is one model that can be used as a successful building block for comprehensive *reform* in traditional schools (CSRM, 1998, p. 121). This model focuses on improving particular skills or subject areas, such as reading, mathematics, and science. Though lacking the breadth of impact as entire-school *reform* paragons, this model provides a strong lever for broad-based *reform*. Pragmatically, the greatest hope for this model's improvement in education lies in extensive and effective utilization of computer, networking, and other technologies in support of a broad program of systemic and curricular *reform* (Report to the President, 1997, p. 5).

Technology plays a significant role in *Skill and Content-Based Reform* models. Children with access to computers and having trained teachers can learn faster and learn better. In some cases, scores on standardized tests of basic skills for children taught with computers rose by 10 to 15 percent compared to the scores of those taught using conventional instruction. With computers, students can learn at their own pace and practice as much as they need to. Children master basic skills in 30 percent less time than normally would have been the case (Technological Literacy).

Knowledge (however best obtained) is still the most important economic resource, vital for the competitiveness of individuals, enterprises, and nations. The technological wave is making possible major changes in the way education is produced and delivered (Knight, 1996, p. 2). At the heart of this change is the Internet—a key tool to be used in *Skill and Content-Based Reform* models.

For the post-compulsory students, access to a global classroom may enlarge their information awareness. Within this framework, such behaviorist strategies as competency-based curricula, generic and specific competencies, specified levels of achievement and national qualification frameworks make a different kind of logic from the normal one of analyzing changes within paradigms (Campbell, 1997, p. 2).

Since traditional classrooms are already firmly grounded in America, they provide the greatest access and quickest opportunities for educational *reform* revisions. Combining technology with tested and improved formal teaching models is an ideal proposal that will greatly aid *convergent* thinking students in their quest for higher academic standards.

### **Key Decision Maker**

The contrasting methods that are now available for instructing our children in our school systems should be democratically presented before the American people. The voters are the ones who should be provided a “clear understanding” of the issues involved in educational *reform*, allowing them to vote their support one way or the other.

Perhaps the quickest and most efficient way this could be achieved would be through the campaign policies of a presidential candidate—who has the Department of Education within his or her Executive Branch as the launching platform. Since Vice-President Gore has been personally involved in every phase of President Clinton’s *Improving America’s Schools Act* and *Goals 2000: Educate America Act* (among others), he perhaps would be the best presidential candidate to present these policy proposals to the American voters.

## Advantages and Disadvantages of Policy Proposal 1

There are many advantages with Policy Proposal 1. Perhaps the greatest benefit will come because the *divergent* thinking students will finally be released to explore, discover, and create new levels of learning which have been categorically denied and suppressed in traditional classrooms.

In the last seven-years, the U.S. charter-school movement has produced about 1100 schools in 29 states, enrolling over 120,000 students (Hadderman, p. 1). Most of these charter schools use some type of *constructivism* (when defined in broad terms) as their primary method of instruction. The following table displays a variety of instructional methods being used in random charter schools that adopt a *constructivist* theme or format (CSRM):

<i>Name of Charter School</i>	<i>Method of Instruction</i>
<i>Accelerated Schools Project (K-8)</i>	Democratic: no set method demanded
<i>Coalition of Essential Schools (K-12)</i>	Personalized learning; less is more; student-worker; teacher-coach; unanxious expectation
<i>Community Learning Centers (PreK-Adult)</i>	Curriculum based on experiences of learner based in part on student's questions & all experiences of learner
<i>Different Ways of Knowing (K-7)</i>	Student-centered learning; every child has talent and learns by doing
<i>Foxfire Fund (K-12)</i>	Begins w/ learner choice & design; teacher facilitator & collaborator; active vs. passive learning; peer teaching, small groups, imagination & creativity encouraged
<i>Modern Red Schoolhouse (K-12)</i>	Innovative teaching methods; student groupings; flexibility in organizing instruction; advanced technology as learning tool

It is interesting to note that most charter schools exhibit mark improvements in attendance, behavior, class participation, and homework completion. In addition, a majority of these non-conventional new schools display an increase in student's grades and test scores, as well as reductions in referrals, suspensions, and drop-outs. Both teachers and students express very favorable attitudes about the positive changes that have been made in their school (CSRM).

Montesori schools, which have practiced a *constructivist* format since 1907 in the U.S., typically rank in the upper one-third of the schools in their district on achievement test scores. Their parental involvement is unequalled by any school system. Montessori schools also maintain above average ratings on basic skills, following directions, turning in assignments on time, listening attentively, asking provocative questions, adapting to new situations, being responsible, showing enthusiasm for class topics, being individualistic, and exhibiting multicultural awareness (CSRM, pp. 83-85).

Because of their nonsectarian and democratic approach to education, charter schools are growing in their popularity. They are noted by their autonomy and accountability. They are freed of many restrictive rules and regulations. But in return, these schools are expected to achieve positive educational outcomes within a certain period—usually three to five years—or have their charters revoked by their sponsors (Hadderman).

There are also many disadvantages to adopting Policy Proposal 1. There is nothing simple about setting up a charter school. Some person(s) has to take the tremendous amount of time and energy to propose the primary goal and main features desired for the charter school, hire and contract the teachers, train them in the *constructivist* method, and set up curriculum guidelines. A facility with classrooms has to be secured. And most importantly, funding for the charter school has to be approved by either the local School Board, school district, state department of education, or obtained by donations from private organizations.

Because of the great diversity in learning provided by *constructivism*, standardized testing for students will have to be adjusted in the higher-grade levels after the “basic” learning skills are accomplished. Rather than being in the traditional objective form which grades and analyzes according to externally determined “correct” answers, the reformatted tests will need to be more subjective, disclosing the students’ *capacity* to learn, *ability* to solve problems, and *competency* for critical thinking.

Likely support for Policy Proposal 1 will come from parents (especially those with children having special needs). In fact, the success of charter schools will be directly determined by parents taking responsible action and being accountable for educational *reform* in the lives of their children. And as already stated, leadership support for this proposal should also come from the next elected President—provided he or she continues the educational *reforms* already set in motion by President Clinton.

Likely opposition to Policy Proposal 1 will come from the local School Boards, school districts, and state departments of education. Not only will they have to share the funding for those students who choose to attend charter schools, they will also lose control of how that money is spent. And they will have to adjust their budget which has certain fixed expenses, as well as downsize their number of teachers. Added to this is the competition which faces them from the newly formed charter schools, something they have never had to deal with before. Furthermore, all of this comes at a time when the local schools need more money to upgrade their classrooms and teachers with newer technology, i.e. computers, maintenance, upgrades, and software.

There is a very favorable probability for implementation of Policy Proposal 1. For the charter schools already in existence, their state and national test scores have exceeded all expectations (Charter Schools, 1998, p. 2). The popularity of these immediately successful schools usually have long waiting lists for students desiring admission. For charter school founders, starting brand-new schools is an exhausting, yet exhilarating experience that “stirs the creative and adaptive juices of everyone involved” (Hadderman, p. 1).

Regarding approximate costs of Policy Proposal 1, ongoing costs range from about the same for any other established school to 10% more (CSRSM). But in reality, charter schools rarely receive as much funding as other public schools (Hadderman, p. 2). Startup costs can range from \$23,000-60,000 or more depending upon the number of students and teachers. This figure could be much higher depending upon the number of computers, Internet access, and educational software planned for the charter school (CSRSM).

Many associations specializing in a form of *constructivism* are available to provide initial and ongoing training for teachers and staff. These fees range from a few thousand dollars to \$65,000 the first year, usually reduced on a sliding scale thereafter. Additionally, these associations require either a full-time coach present on the school campus or a specified number of on-site visits from a specialist-per-year. These salaries/fees range from a few thousand to \$40,000 a year.

Reimbursed federal funding is available on a competitive basis under the Comprehensive School Reform Demonstration Program (Dahlkemper, p. 1). Grants of \$50,000 minimum, renewable for two years, are possible under this federal program, contingent upon a comprehensive proposal and application approval. It should be noted, though, that 80% of the monies available under this program are earmarked for Title I schools.

What are the likely impacts of Policy Proposal 1? First, it shouldn't overthrow the larger governance system in the schools, like the school-choice movement involving vouchers and privatization would achieve. Charter schools might even provide successful alternatives that may force existing schools to compete with *reforms* of their own. On the other hand, they could reduce district *reform* by drawing off reform-minded teachers and parents, isolating them from the larger system (Lashway, 1999, p. 2).

### **Advantages and Disadvantages of Policy Proposal 2**

The biggest advantage of Policy Proposal 2 is the fact that a structured educational institution is already solidly established—facilities, funding, teachers, administrators, students, busing, technology, activities, and clubs. Since the *Skill and Content-Based Reform* model targets *convergent* thinking students, the educational *reform* needed for these students doesn't have to be as exhaustive and comprehensive as the entire-school *reform* necessary for *divergent* thinking students.

The main disadvantage of Policy Proposal 2 is its continuing inability to provide for the educational environment essential to better learning for *divergent* minded students. By not providing this opportunity to these students, it forces them to seek out and establish a school which *will* help them achieve their potential to attain much higher academic standards, and thus better prepare them to exist successfully in the competitive economic world of tomorrow.

Because of increasing competition in education, along with accountability for higher standards now being required, support of Policy Proposal 2 will likely come from local School Boards, school districts, and the state Department of Education. Unless the public schools begin to democratically offer *constructivist* methods of learning across-the-board to *divergent* minded

students, opposition will continue to mount from parents. Given a choice, parents will always opt for what is best for their children.

Policy Proposal 2 has solid feasibility of being implemented, because traditional schools have always been able to make minor modifications or small adaptations in their classrooms. Their problem in the past has been their inability (and perhaps ignorance) in instituting major *reform* and across-the-board change in their instructional method and curricula agenda.

One of the main components needed in order for this proposal to work is the teaching and training of the teachers. Among teachers who report to having one or more computer systems readily available at school, only 62 percent use a computer regularly for instruction. The more ambitious and promising pedagogic applications of computers, the greater the calling is for more technological skills from the teacher. In this synopsis, teachers must select appropriate software, effectively integrate technology into the curriculum, and devise ways of assessing student work based on potentially complex individual and group projects (Report to the President, p. 25). As such, computers *will* make the teachers' job more difficult initially; yet, in the long term, technology should be their best friend.

Costs for professionally developed *Skill & Content-Based Reform* models are high. Charges vary per program and model chosen. Based on 50 teachers, 50 classes, and 1200 students, the costs range from \$1,600-50,000 for teacher training, \$5,000-10,000 for travel and lodging for teachers' training, \$5,000-60,000 for student materials, \$1,000-\$5,000 for franchise fees, and \$1,000-5,000 for start-up costs (CSRM). Some school *reform* models have a flat charge per classroom, and can run as high as \$450,000 for 50 classrooms. There are even a few programs available in which the only costs are for textbooks, equivalent to a normal classroom. However, these models are remedial, and as thus may not be as professionally developed.

The likely impact of adopting Policy Proposal 2 should have positive results from the teachers because of the in-depth, professional training given to them. *Convergent* minded students should also gain good results from these programs because of their successful tested-and-tried results. Being out of the ordinary, students should also receive stronger stimulation by the novel learning techniques and applications.

### **A Compromised Proposal**

Policy Proposal 1 and Policy Proposal 2 both recommend educational *reform*, affirming the reality that students have clashing learning styles, and thus should be taught in radically different ways. Both proposals have advantages and disadvantages. However, by combining the advantages of both, a compromised proposal can be attained.

Everyone knows that a marriage breakup is costly, because it means two-separate homes will have to be maintained. Likewise, if public schools are divided and our children are placed into two separate school systems, the costs of education will dramatically rise, i.e. two facilities, two bus routes, two sets of administrators, two School Boards, two extra-curricula activities, etc. It will also have the negating affect of separating school siblings, placing them in separate schools having perhaps the same goal, but using two different methods of instruction to meet the

unique needs for *all* students. A Compromised Policy Proposal is hereby recommended which keeps *all* students under the same roof, yet at the same time guarantees that the educational needs for *all* students will be ideally met.

How can this be best accomplished? First, a determination will have to be made to find out which students think *divergently* and which ones think *convergently*. This is really not that difficult to achieve. Parents and school counselors usually already know the answer to this question; but in case they don't, online tests are readily available which can assist. David Kiersey, a lifetime clinical psychologist, has a Website available which helps to define the relationship between one's character and temperament. A second site which can help one discover their vocation and temperament traits can be found at <http://www.csun.edu/~sp20558/dis/discover.html>.

School counselors can also provide many good ideas to help determine a student's special learning temperaments. But given the limitations of all tests, *no single measure* should be used to make identification and placement decisions. The most effective and equitable means of serving students is to *assess* them—to identify their strengths and weaknesses, and to prescribe services based on these needs. Best practices indicate that multiple measures and valid indicators from multiple sources—in different ways and in different contexts, justly appraises each student (Position Papers, pp. 1,2). Because students are constantly changing and growing, these appraisals should be updated constantly, perhaps one or two times a year.

After a student's learning temperament is determined, they should be placed in a classroom which best fits their learning style. For the *divergent* minded students, they should be placed in classrooms where *constructivism* is the primary method of instruction. And for the *convergent* thinking students, they should be placed in classrooms that practice some type of *Skill and Content-Based Reform* model. It is a given that technology will play a key role in both instructional methods. The goal should continue to be an Internet-accessed computer at every desk for every student across America, networked with highly adaptable educational software on the Web or local school server.

Using the triad—student, parent, teacher—some kind of *Individualized Educational Plan* (IEP) should be devised for every student. Included in this IEP should be 1) an educational goal; 2) plan or strategy for achieving that goal; and 3) accountability from the student (and parent) to see that the goal is being met. Regular revisions of the IEP will need to be made as required.

Obviously, teachers will need a lot of training, regardless of whether they will be using the *Constructivist* or the *Skill and Content-Based Reform* models of instruction. But the overall costs in providing teachers with this kind of professional training will be minimal when compared to beginning charter schools as suggested in Policy Proposal 1. And Administrators will also need specialized training and networking in order to appropriately provide the different instructional methods under one roof. Since most of them are traditionally *convergent* thinkers, many *divergent* minded parents should be given equal representation on the School Board. Both temperaments should also have equal representation in the teaching staff and administration.

## Summary

Advancing technology and world competition are now demanding major *reform* in the educational sector. The quality of America's schools will determine whether our children hold highly compensated, high-skilled jobs when they reach adulthood. Moreover, it is widely believed that workers in the next century will require not just a larger set of facts or a larger repertoire of specific skills, but the capacity to readily acquire new knowledge, to solve new problems, and to employ creativity and critical thinking in the design of new approaches to existing problems (Report to the President, 1997, p. 5).

*Reform* efforts based on challenging academic standards and assessments linked to those standards are currently underway in schools across the nation (Executive Summary, 1998, p. 10). But their success depends upon putting the right student in the right learning environment for the right reasons—which is not being currently done! Therefore, by adopting the above Compromised Policy Proposal, it will provide the best opportunity for a win-win situation of educational democracy, equality, and success for *all* students, parents, teachers, and school districts across America.

August 30, 1999

Mr. Albert Gore  
Vice-President of the United States  
1600 Pennsylvania Ave.  
Washington, DC 20500

Dear Mr. Vice-President:

Along with President Clinton, you are to be applauded for your efforts in educational *reform*, safeguarding that our children will be competitive in the economic world of tomorrow. Your efforts toward making sure every student in America is equipped with the latest technology is magnificent! And your concern that *all* students achieve higher academic standards shows your great compassion and empathy for children of every demographic background.

I have been closely observing our local school systems, who are currently underway in their efforts toward adopting the Executive Branch's recommendation for our schools to aggressively "develop *rigorous* standards for what every child should know and be able to do." In itself, this is impressive. However, there is a colossal *flaw* with this approach, and it is destined for failure in traditional schools. As Principal Robert Dorn of Pasco County, Florida, explains:

Our district has tried numerous strategies . . . What needs to be examined now is the unhappy consequence of these efforts; there have been no significant improvements in student achievement patterns. These innovations have failed to eliminate poor instruction and ineffective and redundant curricula.

The problem with the current approach to educational *reform* is that the best intentions of schools have failed to adapt teaching to the numerous unique and different ways students learn and think. For example, we have a 13-year old son who has ADHD. He has a brilliant mind; yet in the 8<sup>th</sup> grade he is already 2-3 years behind in his core subjects. If our schools become *more rigorous* without changing their instructional methods, he and all the other students like him will never be given a fair chance to learn in an environment conducive for their learning style!

Therefore, I have prepared a paper (enclosed) which includes three policy proposals for educational *reform*. These recommendations, if adopted, will best insure that higher academic standards will truly be within the grasp of *every* student in America. I pray that you will give strong consideration to endorsing one or more of these policy proposals in your upcoming bid for the Presidency of the United States. You have my full support.

Sincerely Yours,

Mark S. Barnett  
Enclosure

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