21st Century Project-based Learning

The Digital Safari Institute for Innovation in Education has developed an innovative project-based teaching model that has proven to be effective in increasing attendance and graduation rates, decreasing behavioral problems, increasing self-confidence, and raising test scores among at-risk secondary school students. The Institute’s Innovation Project Model™ is specifically designed to improve competency in core subjects while fostering competitive “Silicon Valley” career skills, enhancing digital intelligence and truly preparing students for 21st century jobs.

The Innovation Project Model™ is a comprehensive standards-based teaching/learning framework that fully integrates core subjects with the Academy’s industry focus throughout a student’s sophomore, junior and senior years. The Innovation Project Model™ has been refined and tested over the last nine years at the Digital Safari Academy, an award-winning California Partnership Academy at Mt. Diablo High School in Concord, California, specializing in multimedia design and production. While the typical California Partnership Academy’s population is approximately 50% at-risk (see footnote on page 2), the Digital Safari’s population is roughly 90% at-risk. The Innovation Project Model™ has revolutionized how all core subjects at the Academy are taught.

The Institute is currently targeting teachers at California’s Partnership Academies particularly those who work with at-risk students. The core team that developed this proven teaching/learning methodology has demonstrated that the Innovation Project Model™ can be successfully applied to these challenging teaching/learning environments. The Innovation Project Model™ works.

The Innovation Project Model™ - A Revolution in Teaching

“Since we implemented Innovation Project™ as the core of our teaching methodology at the Academy, we’ve seen a dramatic increase in the quality of student work and engagement with class. The Innovation Project Model™ has revolutionized how we teach all of our subjects.”

- Randy Depew
Digital Safari Academy Multimedia Instructor and Digital Safari Institute Co-Founder
Addressing Key Educational Challenges

There are almost 300 Partnership Academies in California each of which is dedicated to career development in a specific industry, trade or business sector (e.g., environmental studies, construction, hospitality, etc.). The State of California intends to significantly increase the number of Partnership Academies over the next decade. Based on years of interaction with other Partnership Academies and their teachers, the founders of the Institute believe that there is a desperate need for a teaching model that is effective, particularly with at-risk students.¹

The problems in our schools are well-known and well-documented: rising high school dropout rates; growing disengagement of students from the learning process; graduates lacking both core academic skills and real-world business competencies; increasing difficulty addressing the needs of at-risk students; concerns about maintaining our country’s global competition. Teaching at a Partnership Academy is challenging. Even the most enthusiastic teachers find themselves isolated from their peers and struggling to find meaningful ways to engage their students.

The Innovation Project Model™ is based on a multi-subject, multi-teacher framework that encourages and supports collaborative teaching. This has proven to be fundamental to the Academy’s ability to attract and retain top teachers despite the challenging teaching environment. This framework has allowed Academy teachers to set higher academic and behavioral standards with excellent results.

Founded on a Decade of Innovation in Education

The Digital Safari Institute for Innovation in Education was founded in August 2008 by the core team that developed the Innovation Project Model™ at the Digital Safari Academy, a California Partnership Academy at Mt. Diablo High School in Concord, California. The Academy is an award-winning three-year college and career preparatory program launched in 1996 with a U.S. Department of Education grant to integrate vocational education with the core academic curriculum. The Academy’s cornerstone industry focus is multimedia design and production.

Since 1996, the Academy has designed and tested a variety of teaching methodologies. The Innovation Project Model™ is the result of this extensive development process. At the core of the Innovation Project Model™ is the learning community at the Academy – a behavior-positive culture that has proven to be highly successful, particularly with at-risk students. The DSA sophomores, juniors and seniors support each other (academically and personally) as they work together each semester to explore core subjects following the Innovation Model™.

Students at the Digital Safari Academy tackle their first project as sophomores then refine their skills through a series of more challenging learning safaris as juniors and seniors. In addition to core learning, every innovation involves teamwork, written and verbal communication, public speaking, project planning, management of people and resources, working with clients and meeting high expectations and tight deadlines. Innovations are designed to prepare every student for post-secondary education and future careers, particularly targeting today’s globally competitive businesses. Over these three years, students learn to be confident, resourceful and creative problem-solvers with the ability to

¹ Students are identified as “at risk” of academic failure, as indicated by at least three of the first four criteria or one of the last two criteria: 1) past record of irregular attendance; 2) past record of underachievement in which the student is at least one year behind the coursework for the respective grade level; 3) past record of low motivation or a disinterest in the regular school program; 4) disadvantaged economically; 5) scoring in the 40th percentile or below (basic, below basic, or far below basic) in mathematics or English-language arts on the California standards tests; and/or 6) maintaining a grade point average of 2.2 or below, or the equivalent of a C-.
communicate effectively and work well in teams – all important skills in the 21st century
global economy. Academy instructors attribute the very low levels of behavioral
problems and the high academic achievement to the success of the Innovation Project Model™.

The Innovation Project Model™
The Innovation Project Model™ is more than a curriculum – it is more than a set of
guidelines and fact sheets. The key to implementing the Innovation Project Model™ is to
understand that it is a revolutionary framework for thinking about the teaching and
learning processes. The Model requires attention to detail beyond facts and figures, examples and exams such as creating an engaging physical environment and a strong
community among students.

In addition to mastering core information, students learn to communicate effectively through
speaking, reading, and visual media. The Institute works with teachers to learn how to
integrate project conceptualization and delivery.

Investing in Our Next Generation of Innovators
The Institute’s activities are focused in three primary areas:

Research & Development
- Assessing problems in the learning environment
- Developing Innovative teaching models
- Testing and evaluating methodologies

Services to Teachers
- Disseminating proven teaching models
- Training teachers in new methodologies
- Mentoring and supporting teachers

Advocacy
- Educating decision-makers and stakeholders
- Participating in education policy development

Building Bridges Between Business and Education
Mentoring
Our young people need positive role models in innovation and entrepreneurship as much or
more than in music and sports. Adult mentoring is an important aspect of the Innovation Project Model™. During most Innovations™, student teams meet both in person and on-line
with mentors from the community. The interaction between mentors and student teams
has proven to be extremely valuable in motivating individual students and keeping
them focused and on track. Our mentors are important role models –students often are
not exposed to the culture of entrepreneurialism nor are they empowered to be creative in
ways that can lead to productive careers. The Academy has implemented remote mentoring
using free on-line video conferencing. The Academy can now bring in mentors from
anywhere in the world into the classroom to work with its student teams.

Partnerships
The Small Business Development Center (SBDC) is an important strategic partner of the
Institute as it takes the Innovation Project Model™ to academies across the state of
California (and the nation). With a mission to provide business owners with educational
services and free professional advising, the SBDC is in a unique position to bridge the business-education gap. The SBDC was an active player in the development and testing of the Innovation Project Model™ and coordinating the Academy’s mentoring program. With an office in almost every county in the country, the SBDC is an ideal partner for helping to significantly increase positive interaction and active engagement between the business community and our high schools.

Colleges and Universities

The Institute also works closely with Diablo Valley College and the John F. Kennedy University School of Management. The Institute is developing ways for undergraduate business students and graduate MBA students to work with student companies as advisors, mentors and topical experts.

**Institute Objectives for 2008-09**

**Fall 2008**

- Host at least two Academy tours for Cal. Partnership Academy Teachers
- Develop the Creative Capitalism and Sustainability components of the GreenBizz Project

**Spring 2009**

- Upgrade Innovation Project Model™ tools and materials
- Create an Alumni Support Program
- Launch an outreach campaign to Cal. Partnership Academies
- Upgrade and expand the Institute’s Mentoring Program

**Summer 2009**

- Host the 1st Annual Innovation Project Model™ Teacher Training
- Launch Innovation Awards™ fund-raising campaign

**Fall 2009**

- Conduct a statistically valid impact assessment with UC Berkeley Dept. of Ed.
- Produce a video documentary of the Fall 2009 Greenbizz Project

**The Praxis Group: “Innovative Ideas, Practically Applied”**

The Praxis Group is the parent organization of and fiscal agent for the Digital Safari Institute for Innovation in Education. Founded in 1992 by Mark Westwind, The Praxis Group is a 501c3 non-profit organization (94-3169015). The mission of The Praxis Group is to 1) promote cultural activism as an important force in community development and a viable alternative to political activism, 2) stimulate culture and encourage community-based problem-solving by applying innovative ideas in practical ways through locally sponsored programs, projects, events, activities and publications, 3) to serve community-based organizations as a research and resource center for organizational know-how and know-where, and 4) to provide organizational development assistance to community-based organizations.
Rethinking Teaching and Learning

The following is a summary of the key elements of the Innovation Project Model™ for project-based teaching and learning. The Digital Safari Institute offers academy teachers in-depth training and support in redesigning their coursework around the Innovation Project Model™.

A. Emphasis on Innovation

Innovation Project™ topics are designed to be imaginative and relevant

B. Sets High Expectations

Teachers set high standards for academic performance, teamwork and individual behavior

C. Includes Varied Outcomes (RAID)

Each project includes research, analysis, innovation and deliverables (e.g. a business plan or proposal, and audio/visual production, a presentation, and printed collateral materials)

D. Requires Public Display

Projects take students outside of the classroom (outside of the traditional learning environment) and involve interaction with non-academic audiences. Examples include:

- Performance
- Presentation
- Thesis-style defense
- Film festival

Projects involve a formal or informal competition:

- Informal: Showcases where students win by meeting criteria
- Formal: Challenges where there are a set number of winners

The program typically includes a capstone competition during the senior year in the form of a formal off-site competition, e.g. the Digital Safari Innovation Fair™

E. Linked to State Standards

All Innovation Projects™ and related activities are rigorously linked to the State Educational Standards.
F. Set in a Stimulating Learning Environment

Most Innovation Projects™ involve working with adult mentors who provide guidance, inspiration, perspective, and insights.

Projects take place in a dynamic learning community:

- High academic and behavioral standards
- A flexible learning environment
- Comfortable physical space (e.g. couches, free flow of people, etc.)
- Students see teachers as guides and counselors and know that they care for each student individually
- Students have personal space (e.g. storage areas for personal project work)
- Students and teachers share off-campus adventures (e.g. camping, ropes course)
- Students feel that they are valuable members of the community and that their absence has a real impact

G. On Track Toward College

Regardless of personal background and/or previous academic achievement, students are tracked toward college in everything they do. Experience has shown that students who have participated in Innovation Projects™ are more prepared for college and better able to do college level work. Whenever possible, students earn college credit while completing their high school courses, allowing them bypass introductory college classes. Most Academy students plan to go to a community college after high school graduation.
Training Next Generation Entrepreneurs

The GreenBizz Project is the capstone Innovation Project™ at the Digital Safari Academy. Academy students in the fall semester of their senior year are tasked with forming high-tech companies, creating innovative products, then pursuing the same steps that any Silicon Valley entrepreneur would follow to raise seed money from angel investors and venture capitalists including creating a corporate identity, conducting an opportunity assessment, writing a business plan and a marketing plan, designing collateral material, and producing a Powerpoint presentation and a video commercial.

Innovation Without Limitation™

“Beyond the edge” GreenBizz products invented by Academy students have included a hand-held scanner that measures the nutritional content of a meal, and a personal GPS system for the visually impaired. Over the years we have seen many GreenBizz products appear on the market – one of our goals is to create a channel whereby our students can actually cash in on their ideas by developing their inventions as real products.

The Academy has adopted Sustainability, Social Entrepreneurship and Creative Capitalism as primary themes for the GreenBizz Project. GreenBizz products must fall into one of the following “greenbizz” categories: Clean technology, Lifestyles of Health and Sustainability (LOHAS), Green Building, Medical/Health, and Safety. Each business plan must also include a lifecycle analysis that addresses both the social and environmental impacts of the product and offer solutions for mitigating negative factors.

The project culminates in a series of business plan competitions that lead to the annual Digital Safari Innovation Fair where companies compete for recognition and scholarships.

Learning Core Subjects and Silicon Valley Skills

“The Workforce Development Board of Contra Costa County sponsors the Digital Safari Innovation Fair because it provides students with real-world business experience they will need to enter the workforce.”
- Bob Lanter, Executive Director
Workforce Development Board of Contra Costa County

“Here it is July and we have students already bragging about their GreenBizz products and who’s going to win the next Innovation Fair.”
– Randy Depew, Digital Safari Academy Instructor

Beyond the Edge Tech Exposition

See more photos and read winning business plans at www.InnovationFair.org
Invest in Our Next Generation of Innovators and Entrepreneurs!

The Digital Safari is seeking donors at all levels who believe in our mission, share our vision and are willing to invest in our next generation of innovators and entrepreneurs.

Investors and Partners underwrite the operation of the Institute and the development and delivery of its services. Investments may be directed to specific activities and/or programs (see our 2008-2009 Objectives). Investors and Partners are also encouraged to visit the Digital Safari and meet our students.

Lead Investor $100,000
Strategic Investor $50,000
Angel Investor $25,000
Strategic Partner $10,000
Contributing Partner $5,000
Partner $1,000
Friends and Family $500

Teaching Innovation, Changing Lives

At-risk students experience executive challenges through Innovation Projects™.

More than simply teaching business administration, the Innovation Project Model™ for project-based learning challenges young people to “think high-tech” and develop skills relevant in a globally competitive marketplace.

“The Digital Safari students know more about economics, marketing and how to convince people to invest in a business than some professionals we have seen.”

- Matt Ching, Regional Vice President
City National Bank and Academy Investor

October 2008 8
A Grand Showcase of Youthful Creativity!

Imagine a ballroom filled with the energy and excitement of a dot-com era technology exposition. Thousands, even millions, of virtual venture capital dollars are at stake as young entrepreneurs engage potential investors in animated conversations about their innovative products. This is the annual Digital Safari Innovation Fair™ and Beyond the Edge Technology Exposition™. Sounds like Silicon Valley during the Dot-Com Boom? Absolutely! But unlike most tech expositions and business plan competitions, the presenters are high school students. It’s clear from the packed ballroom and the pervasive energy that innovation really can be as cool as music and as exciting as sports!

The Innovation Fair is an annual showcase of youthful imagination and entrepreneurialism - a grand exposition of futuristic products based on Beyond the Edge Technology™ created by student-run virtual companies during the semester-long GreenBizz Project. It is also a forum for presenting high school seniors and their talents to the business community in a fun and focused way that will result in 1) more students being offered internships and jobs, and 2) more business people getting involved with our schools.

Making the event interactive and fun, every adult attendee is given $50,000 in virtual dollars to invest as they visit the individual companies during exposition. Later, selected companies pitch for funding to a panel of investor-judges in a formal business plan competition complete with Powerpoint slides and detailed financial projections. The Digital Safari Innovation Awards Fund provides cash scholarships for winning companies and students.

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NextGen Entrepreneurs Competing for Virtual Venture Capital

I-Fair Sponsors
- Workforce Development Board of Contra Costa County
- Heritage Bank of Commerce
- East Bay Innovation Group (eBIG)
- Contra Costa Council
- Wired Magazine
- East Bay Business Times
- City of Concord
- Diablo Valley College

Innovation Awards Sponsors
- City National Bank
- John F. Kennedy University’s Continuing Education Program

Producers
- Contra Costa Small Business Dev. Center
- Digital Safari Academy
- The Praxis Group
# Sponsorship Opportunities

## 4th Annual Digital Safari Innovation Fair

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*Making Innovation as Cool as Music and as Exciting as Sports!*
Randy Depew, MA  
Digital Safari Educator: Multimedia  
925-682-4030 x 3417  
Co-developer of the Innovation Project Model™  
Co-founder of the Digital Safari Institute

Randy Depew began teaching in 1996 as a founding teacher of the nationally acclaimed Digital Safari Academy at Mt. Diablo High School in Concord, CA. Currently he serves as the lead teacher in charge of curriculum and project development for the eight teachers and 170 students at the Academy and teaches three levels of multimedia design, the career/technical focus of the academy. He earned both his teaching credential and M.A. in Education from Chapman University College in Concord where he began teaching in 2001. At Chapman, Randy has taught several different courses in the teaching credential program including, Technology in the Classroom, Introduction to Teaching, Secondary Teaching Strategies, and Strategies for Culturally Diverse Classrooms.

Randy has recognized expertise in the area of curriculum development, cross-curricular integration, project based learning and career academy development. He has presented on these subjects at several state and national conferences including the Autodesk Foundation’s national project based learning conference, “Kids Who Know and Do,” the California Tech Prep Conference, The California CUE Conference, and the California Partnership Academy Conference. He also serves, with his Heather Fontanilla, as an independent consultant to individual teachers, schools and districts surrounding the development of career pathway academies and project based learning environments.

Randy has received considerable recognition for his teaching. He was chosen as the 2000 California Technology Teacher of the Year by Technology and Learning Magazine and was the 2001 Mt. Diablo Unified School District Teacher of the Year and a finalist for Contra Costa County Teacher of the Year. Additionally, Randy’s program, the Digital Safari Academy, has received recognition from several organizations including the National High School Alliance, The Career Academy Support Network at UC Berkeley, the Autodesk Foundation for Project Based Learning and the National Association of School Administrators. His students have been recognized with over 20 awards in the past eight years in the California Student Media Festival including Multimedia Student of the Year five times.
DIGITAL SAFARI INSTITUTE

KEY TEAM MEMBER

925-682-4030 x 3417   Co-developer of the Innovation Project Model™
Co-founder of the Digital Safari Institute

Heather Fontanilla began teaching in 1998 in the Digital Safari Academy at Mt. Diablo High School in Concord, CA. Currently, Heather serves as the co-lead teacher for the academy with the primary responsibility of managing grant funds and compiling the necessary data and reports for the state. With her teaching partner, she has also been instrumental in planning curriculum for the academy, including the development of the Digital Safari Innovation Project Model™.

Heather has presented at several state and national conferences including the Autodesk Foundation’s national project based learning conference, “Kids Who Know and Do”, the California Tech Prep Conference, The California CUE Conference and the California Partnership Academy Conference on the subjects of curriculum development, cross-curricular integration, project based learning and career academy development.

Heather received her BA in History. She then attended University of Pacific, McGeorge School of Law, where she received her Juris Doctorate, with distinction. After receiving her law degree, she practiced law in southern California and the Bay Area. After practicing law for six years, she began teaching while earning her teaching credential at Chapman University.

In 2007, Heather was nominated for Mt. Diablo Unified School District Teacher of the Year. As a key member of the Digital Safari teaching team, the Academy received recognition from several organizations including the national High School Alliance, the Career Academy Support Network at UC Berkeley, the Autodesk Foundation for Project Based Learning and the National Association of School Administrators.
DIGITAL SAFARI INSTITUTE
KEY TEAM MEMBER

Mark Westwind, MPA  Consultant to the Digital Safari Academy
925-372-8486  Co-developer of the Innovation Project Model™
Producer of the annual Digital Safari Innovation Fair™
Co-founder of the Digital Safari Institute

Mark Westwind has more than 30 years experience working with businesses, government agencies and non-profit organizations. Mark was the founding director of the Contra Costa Software Business Incubator in Concord, California and the founding associate director of John F. Kennedy University's Center for Entrepreneurship. Mark serves as a technology consultant for the Contra Costa Small Business Development Center. He has also served as the U.S. associate for Canton Venture Capital Company, a $100 million Chinese venture capital firm. He has visited more than a dozen Chinese incubators, science parks, and high-tech development zones and has participated in several executive exchange projects with international business incubators in Wuhan and Guangzhou. During the dot-com era, Mark worked with several technology start-ups and produced a series of technology expositions. More recently, he has served as a mentor to U.S. and Chinese high-tech start-ups selected to participate in the annual World’s Best Technology Showcase (his mentored company took the WBT 2005 Gold Award). He is the co-author (with Dr. Tapan Munroe) of Silicon Valley: The Ecology of Innovation.

Mark is also the founder/co-founder of over a dozen community organizations, including a regional association of videographers, several farmers markets, the California Council for Community Gardening, the James Howe Homestead Park (Walnut Creek), and Project Glean (a suburban harvesting program selected as one of President George H. W. Bush's "1000 Points of Light."

Mark graduated from the University of California at Berkeley with a B.A. in Environmental Studies. He earned a Master of Public Administration (MPA) degree from California State University, Hayward and a Certificate in Entrepreneurship from John F. Kennedy University.
References

Beverly Hamile
Executive Director
Contra Costa Small Business Development Center
925-646-5377

Jon Erlandson
Consultant and Investor (former member of the Keiretsu Forum of business angels)
GreenBizz Project Mentor
925-600-8774

Bob Lanter
Executive Director of the Workforce Development Center of Contra Costa
Sponsor and GreenBizz Project Competition Judge
925-646-5239

Tapan Munroe, PhD
Former Chief Economist for PG&E, Author, Speaker
Member of the Annual Innovation Fair Business Plan Competition
925-377-1424