



# Designing 21<sup>st</sup> Century Learning

Our philosophy, taken from our book: *Classroom for the Conceptual Age* (Barton, 2012).

## **Foreword**

As the title implies, *A Classroom for the Conceptual Age: Chronicles of an Integrated Exploratory Teacher* tells a story. It is intended to be a springboard for conversation; one teaching professional to another, about what happened during the 2009-2010 school year and why I think it is noteworthy. Perhaps this story will inform your practice. Better still if it inspires you to action.

Because *A Classroom for the Conceptual Age* is a practical rather than a theoretical work, each chapter of the chronicle is followed by a *Blueprint for Replication* or “How to...” section intended to guide educators toward implementation. Each *Blueprint* section draws directly from the story that precedes it.

The purpose of this book is not to present detailed research on the topic of school reform. Occasionally the text will refer to an educational luminary or cite a piece of writing that has impacted my thinking. But I leave the task of further research and synthesis to the educator-reader who proceeds to the *Blueprint* pages in an effort to revolutionize education at the classroom level.

The attitudes, actions, and recollections contained within this chronicle are wholly mine. They stem from lengthy experience in diverse school settings, wide reading and research, personal reflection, and deep, thoughtful conversation with peers and champions of education. Should these words provoke a strong response, they are meant to do so.

Marcy Barton  
July 2010

## **Introduction**

### **The Conceptual Age**

The term Conceptual Age has been around for about a decade. Like the Stone Age, the Bronze Age, the Age of Enlightenment, the Industrial Age, or, in the nomenclature of the recent past, the Information Age, the Conceptual Age can mean different things to different people.

Daniel Pink, in his book *A Whole New Mind: Why Right-Brainers will Rule the Future* (Penguin, New York, 2005), describes the progression from the last four decades of the Information Age, with its emphasis on computer technology, into the Conceptual Age. The Information Age, he suggests, all but demolished inventiveness, empathy, and meaning as we abdicated creativity to the console and its wizard-like programmer. Pink makes the case that the Conceptual Age is an apt antidote as it provides a promised future where the reinstatement of randomness, the reemergence of intuitive relationships, and perceptions of the bigger picture from an informed perspective will help us regain our humanness.

More than a decade into the 21<sup>st</sup> Century, some of us in the field of education see the dawning of the Conceptual Age as a welcome reprieve from the prescriptions of the past. The Internet, Twitter, Facebook, and social media sites have provided an enormous and constantly shifting knowledge database. Teaching no longer needs to be focused on the conveyance of basic information. Information is out there, everywhere. Its ubiquity is mind numbing.

Creative minds, those right-brainers who will inherit Pink's future, are beginning to synthesize data in new and sometimes improbable ways. These

children of the Conceptual Age understand how to harness the power of the Information Age and are - in the fashion of a sound engineer at a studio audio board - mixing, remixing, and inventing new concepts from banks of old ideas. They are not blindly responding to yesterday's patterns of knowledge acquisition or behavior. They are actively engaging with the data, picking and choosing from the vast array of what's-out-there to construct innovative concepts and fresh meanings for themselves and their constituents.

Nowhere is the Conceptual Age more apparent than in the Middle East. Although it is true that the leaders of this so-called 'Arab-Spring' have equipped themselves with the weapons of popular revolution, they are also armed with an important slice of the 21<sup>st</sup> Century global knowledge base: the understanding that life does not have to be lived under the harsh rule of tyrannical dictators. The Information Age provided the technological infrastructure to secure or distribute the information, but the Conceptual Age is permitting people to determine how best to re-formulate this knowledge for the good of all.

The 21<sup>st</sup> Century teacher will play a critical role in this Conceptual Age. It is a role of guidance. Students will need to learn how to weigh and evaluate information, triangulate it from various sources and points of view, and to discern fact from fiction. It is also one of assistance. Teachers will be integral to the process of re-conceptualizing data in unique and ethical ways to form novel ideas and attitudes. Many of our educational institutions remain mired in the Industrial or Information Ages as other countries begin to make sense of the new global paradigm. The *Integrated Exploratory* model is my beginning.

## **Ideation**

In its 5-Year Strategic Plan,<sup>1</sup> the Portola Valley School District (PVSD) recognizes the development of intellectual curiosity, personal responsibility, and the skills to navigate a diverse and rapidly changing world as fundamental attributes of a “global student.” To that end, the plan is unambiguous in its call to provide a world-class education for its students.

Components of this plan, defined by this 2006 public statement, include the student’s ability to understand and value other cultures and perspectives, and to confront academic and personal challenges by applying critical thinking, problem solving, research, and communication skills. That same document challenges the professional staff to identify and implement instructional strategies that effectively meet individual student needs and learning styles by investigating alternative structures for classroom organization and instructional delivery. Changes in delivery structures, initiated in our 4<sup>th</sup> and 5<sup>th</sup> grade classrooms during the 2009-2010 school year, have met these calls for conscientious restructuring. The *Integrated Exploratory* class exemplifies this mandated shift in content delivery methodology.

The Portola Valley Elementary School District, located in Portola Valley, California, is not alone in its quest to provide authentic instructional strategies designed to increase student achievement, engagement in learning, and accountability by shifting responsibility for learning from teacher to learner. Identifying the risks, but understanding the consequences of inaction, a smattering

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<sup>1</sup> See <http://www.pvsd.net/StrategicPlan/mission.pdf> or reprint Appendix p. 1

of other visionary schools and districts across the nation are proposing a similar trajectory. From the High Tech High organizations across the nation, to the Foothill School of Arts and Science in Idaho, to progressive school divisions on the east coast like the Newport News and Virginia Beach Public Schools in Virginia, the drive toward doing things differently is clearly upon us. These school organizations understand that students in the next century will have to be comfortable with ideas and abstractions, be good at both analysis and synthesis, be creative and innovative, be self-disciplined and well organized, be able to learn very quickly and work well as a member of a team, and have the flexibility to adapt quickly to frequent changes. A huge order. And what are we, as classroom teachers, doing to fill it?

### **Replication**

Education futurists, from Guggenheim to Wagner, have issued repeated calls to step away from the strictures of the 'standards movement' into collaborative classrooms that promote synergy rather than competition. Classrooms that exude a collaborative entrepreneurial spirit. Classrooms that acknowledge individual learning styles, engage multiple pathways to goal achievement, and promote connections instead of discreet skill development. Classrooms that provide rich opportunities for higher-level problem solving. Classrooms that generate a playful and risk-taking atmosphere, where effort and attitude, not necessarily raw intellect, lead to success. Classrooms that should not even be called 'classrooms,' but 'design studios.'

It was from this complex ideological foundation that our *Integrated Exploratory* class was designed.