

**TEACHING  
SELF-DISCOVERY SCIENCE  
with  
BIOFEEDBACK  
and  
ELECTROMAGNETISM**

**Suggested Lesson Plans for  
Grades Five Through Twelve**

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## PREFACE

This CD provides lesson plans to facilitate *“Teaching Self-Discovery Science with Biofeedback and Electromagnetism.”* There are eight .doc files to complete a 76 – page booklet, which can be printed out or installed on your own web site for free downloading. The four .jpg files must be printed on four 8 1/2” X 11” pages in color. When the pages are taped together in the proper order, they become a one-meter long Electromagnetic Spectrum Chart, which is required for the lessons on Electromagnetism in Chapter One. The color of the chart is important for the youngest students, so they can see right away the relationships between their own frequencies and those of the Sun and Moon. For this chart we most grateful for the helpful advice of these experts: Joe Kamiya, Ph.D., Timothy Scully, Ph.D., and James Johnston, Ph.D. The booklet includes reports we have found and collected (for 30 years) from researchers and teachers because they share our belief that biofeedback (introduced into public education), could fundamentally improve the present systems of education and health care, which have become seriously broken. Some papers were published in small newsletters and conference proceedings (see references), and we owe much gratitude to all those who recorded these important observations so they would not be lost. Their stories describe the need to re-organize our basic concepts about what “teaching” is and what it might become. We chose to put this collection in a CD format for easy access for all those who know that education needs a complete conceptual overhaul. Who among you might be willing to help spread this information about the need to install biofeedback equipment and trainers in schools across the country? We must prepare our young people for the major challenges of the 21<sup>st</sup> Century.

The brain and nervous systems are electro-chemical systems. Our current emphasis on health care focuses on the chemical part - pills - at great cost and some danger to the average consumer. Our politicians and newscasters continually report how this country might become bankrupt over the staggering costs of health care for our seniors and children, so we have an urgent need to focus on energy medicine, energy education, and our natural energetic relationship to our sources of Life: Sun and Earth. Today, prevention of major expensive illnesses is paramount to the future economic health of the nation, as well. Many of these illnesses are caused by the unrelieved habits of stress that children learn very early and very well. Why? The answer can be found in every inner city with violent neighborhoods, overcrowded classrooms and hungry children. Answers can be found also among top students competing for college entrance, with the anxiety of too much “testing” at the expense of less in-depth learning, and even less attention to wholesome self-discovery. The creative and destructive energies are equal in our electro-chemical systems. When the creative energies are blocked, as it is so often in many classrooms, the destructive energies take over. Guns are freely available for the expression of that unrelieved anger. Why not have Biofeedback and Neurofeedback freely available to show teachers and students how to manage all that energy creatively?

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## FOREWORD

**By Buryl Payne, Ph.D.**

Former teachers (Marge King, Jean Millay and others) helped students learn about how their bodies and nervous systems relate to their behavior, especially mental behavior. This represents a major advance in education. For students, this learning (about how to control their nervous system’s reactions to stress) can help them in many ways:

- 1) To improve some health conditions.
- 2) To develop mental focus and concentration, so necessary to learning.
- 3) To enhance creative abilities, which depend on intuitive ideas for proper fruition.
- 4) For smoother relations with others, so they don’t “get bent out of shape” uncontrollably.
- 5) For better understanding of how to live in the biosphere of our planet.

Better use of the body-mind by biofeedback training for all students could advance our culture far beyond the present levels, by improving human beings that comprise our society. Truly society could be elevated to being composed of super men and women. Decades of work by these dedicated teachers to introduce all aspects of biofeedback into education deserve recognition. How I wish I had learned this at a young age, instead of Latin, or other practically useless subjects.

**TEACHING SELF-DISCOVERY SCIENCE  
With BIOFEEDBACK and ELECTROMAGNETISM  
In GRADES 5 THROUGH 12**

**By Jean Millay, Ph.D.**

Author of "MULTIDIMENSIONAL MIND: Remote Viewing in Hyperspace" (1)

*Jean Millay introduced biofeedback into her parapsychology classes at the Santa Rosa Community College in 1974, using two Aquarius Electronic brainwave analyzers and the phase comparator designed and manufactured by Tim Scully, Ph.D. Together they built the first Stereo Brainwave Biofeedback Light Sculpture to watch the EEG signals from both sides of the head at the same time in mandalas of color. The analyzers provided tones when the signals were in the same frequency and also when phase coherence occurred. In 1980, she had an opportunity to try out biofeedback instruments in a 5<sup>th</sup> grade class with excellent results. Between 1980 and 1994, she created computer graphics for interactive educational courseware. In 1974, all forms of biological feedback were called "biofeedback," and this term is still used by some writers, since is better known to most readers. However, researchers now prefer the term "Neurofeedback" when discussing the feedback from electrical signals produced by the brain and body. Both terms are used here.*

**ABSTRACT:** One of the most important purposes of education is to put all children in complete possession of their abilities and talents. To date, those abilities and talents have been defined without reference to the autonomic nervous system. Biological feedback introduced into the school curriculum, brings an understanding and control of the nervous system to children before they become habituated to unhealthy reactions to the stresses in their educational environments.

Decades of research in the medical use of biofeedback have established the viability and health benefits of stress management. The "The Medical Model" of biofeedback has worked well to alleviate health problems for those already caught in the habits of stress. Now it is time to introduce the "Self-discovery Model" to each child. Consider the economic savings in health care for adults if they had learned to manage stress early in life. The evolution of healthcare in the 21<sup>st</sup> Century should follow our best research, which has created the technology of **energy medicine**, and the tools for learning self-regulation of the autonomic nervous system.

Biofeedback has been proved to alleviate ADHD so children can extend their ability to focus attention, reducing or eliminating the use of dangerous drugs now commonly prescribed for this. Focus of attention is a key to intelligence. When learned early enough, it can be instrumental in increasing the intelligence of students everywhere. Students can even find healthy ways to enhance their sports performance, eliminating the competitive attraction of unhealthy and illegal drugs. When children see that their own personal human energies are directly related to those of the Sun and the Earth on this specially designed Electromagnetic Spectrum Chart, they also find that they connected energetically to everything.

*In the "Self-discovery Science" class each child finds his/her own interactions between mind and body, and therefore, the power of his/her own multidimensional consciousness, which can produce a **quantum leap in intellectual efficiency and emotional equilibrium**. ( from "Seeds of the 60's" by Tim Leary )*