## A Case For Waldorf Education

oelhaf@hotmail.com

### Robert C Oelhaf

The case for Waldorf Education is clear for anyone familiar with pedagogical and physiological research of the last few decades. Although Waldorf schools have been working and teaching in much the same manner as the original school established by Rudolf Steiner in Stuttgart, only recently have independent research programs confirmed the soundness of Steiner's pedagogy. Further, international comparisons of test results for high school young people have also produced support for the important Waldorf school program elements. Although students are usually quite happy attending Waldorf schools, often parents have questions about a school system which is in many ways different than the conventional. This report seeks to summarize the relevant research results. In my opinion, for those aware of the facts, the case is overwhelming. (e.g., Richtel, 2011)

# **Building Brain Cells**

In general, we presume that one is better off with more brain cells than fewer. As a child grows, the brain grows as well. Research has shown that there are five ways to build brain cells. (Begley 1996, Hancock 1996. See also Chugani 2011) These ways are: music, art, handwork, movement and personal connections to adults. All of these ways are strongly represented in Waldorf education.

- 1> Music. We all know that Einstein played the violin. Whether this influenced his intelligence is anyone's guess. However several research projects have shown the positive influence of musical experience on learning. Musical training stimulates brain development. (First Evidence, 2006; Kingsbury, Overy, Woo 2005), and comparison studies in schools have shown that students who received music classes did better on math than those who did not, even if the music classes replaced some of the math classes. The musical students also scored better in foreign languages and were noticeably more socially conscious. (Stokes 2002, Uhlig 1999)
- 2> Art. Specific pedagogical studies have verified the positive relationship between art and academic achievement. (Gardiner et al 1996)
- 3> Handwork. Fine motor movements are now recognized as contributing to intelligence and school success. (Gardiner et al, 1996; Auer, AWSNA)
- 4> Movement. The image of the dimwitted athlete is hard to dispel. And head injuries and

early dementia are in the news. Nevertheless, aside from boxing, football and soccer, sports generally have a good reputation as far as intelligence goes. After all, sports require focus and strategic thinking as well as skill. (Zauer 2010) Waldorf schools have always included eurythmy and gymnastics. Sports are played in the upper schools, but generally the head-bashing varieties are not encouraged.

Case for Waldorf, 2

5> Personal connections to adults. (Richtel 2011) This is one area where Waldorf schools stand out dramatically from the trend in public and other private schools, where increasingly teachers and books are being replaced by computers.

## The Early Language Window

Children find it especially easy to assimilate a foreign language during he first seven years of life. At that point the language window begins to close, but children are still able to learn fairly easily through the lower school years. (Hancock 1996) This is recognized by Waldorf schools, virtually the only ones to teach foreign languages from grade one.

## Ability to Focus

More than the assimilation of facts or passing tests, success in life requires focus. (Tough, 2012) Waldorf schools instill this ability through the main lesson system and through the deemphasis of testing and memorizing facts.

### **Artistic Teaching**

<u>Deep learning takes place through emotional or artistic connections, awakening the feelings.</u>
(Foer, 2011, The Art and Science of Remembering Everything). This is how Waldorf teachers design their lessons.

#### Breaks between Classes

Controlled studies of university students have demonstrated that taking a break after a learning session, prior to going on to new material, significantly improves retention of what was learned. (I cannot locate the reference at the moment. It was in the NY Times.2012)

### Private Schools, School Choice

Several attempts at making inroads into the public school system in this country have been introduced in recent years, in addition to the prep schools, Montesori schools, Waldorf schools, free schools, home schooling. More recently school vouchers, charter schools, for-profit schools have been tried. The available studies have shown improvements in many cases in school achievement among students attending independent schools.. (Free, 2007, Bohlmark and Lindahl 2012) Further, when school choice was introduced in Sweden, not only did the achievement of students in independent schools improve, but the the students remaining in public schools also improved their test scores. The speculation was that competition had caused the state schools to improve as well.

## Anecdote: Knut Wicksell

A brilliant economist, Knut Wicksell developed Keynsian economics prior to or parallel to John Maynard Keynes, but was given little credit as he published in Swedish. However Wicksell is recognized as the one who brought Sweden out of the Great Depression long before any other nations. Wicksell did not wish his sons to be subject to the state state school system, so he sent them to live on a farm in the country until high school. Nevertheless one became a mathematician and the other a medical doctor.

Case, 3

## Graduates of Waldorf Schools

A detailed survey of Waldorf school graduates was carried out in Germany several years ago. (Barz and Randoll 2007) The general findings were that graduates at first found it more difficult to orient themselves in the higher academic world. However once they had made the transition, they were better able than their peers to set a course and pursue goals successfully. As far as I know the book has not been translated.

<u>International Comparisons: The Relevance of Finland (Alvarez 20004, "Charlemagne," 2006, Finland, 2006, "Overhaling" 2010, Sahlberg, 2010, Wooldridge 2013)</u>

For several years international student performance comparisons of 15 year olds have been carried out

using standardized tests, the so-called PISA studies. (PISA is an acronym standing for "Program for International Assessment," not the Italian city.) The school system which consistently tops all the others is that of Finland. There has been much speculation as to why this might be, and many researchers have traveled to Finland to try to find out.

>The Finnish school system turns out to have much in common with Waldorf schools. One thing it obviously does <u>not</u> have in common is independent schools. In Finland the schools are part of a government system. However it is a system totally different than in other countries, including this one. For there is no national curriculum nor national testing. Each school is independent and run by the teachers themselves. The administration is there to do administration, facility management, etc. All pedagogical decisions are made by the teachers. Generally, the teachers work collegially planning classes and programs together. (This is also true in Chinese schools reporting, big city schools to be sure.) There is testing, but tests are designed by the teachers, primarily as diagnostics. Because the teachers are in a real profession, where they are able to be creative and take initiative, there is a high demand for the available teaching positions. The profession has the top talent and pays comparatively low salaries. Applications to mandatory teacher training institutes far exceed available places. Because of their professional status, teachers generally enjoy a high regard in the community. So the state school system is essentially a system of independent teacher-run schools.

Beyond the fact of being teacher-run, the schools (and Finland in general) have many features reminding us of Waldorf Schools.

> There are breaks between classes for students to go outside, play music or games, snack or

just relax and let the last class sink in.

- > The State subsidizes music lessons, so playing music is not just for the upper classes.
- >There is a strong handwork and craft tradition in Finland.

The Finnish example demonstrates that the main solutions often offered, namely, more funding and independent schools, though helpful, are not necessary for a first-rate school system. On the contrary, independent schools which are teacher-run give the best results, whether in a state system or not. All of these findings support Waldorf education.

Case, 4

#### References:

Alvarez, Lizette, "In Finland, the ABC's of success. Educators seek key to schools' top rank" International Herald Tribune, April 9, 2004

Auer, Auer, "Hand Movements Sculpt Intelligence," AWSNA, with references

Barz, Heiner and Dirk Randoll, <u>Absolventen von Waldorfschulen</u>. Eine Empirische Studie zu Bildung und Lebensgestatung Ehemaliger Waldodrfschuler." 2007

Begley, Sharon, "Your Child's Brain," Newsweek, February 19, 1996, 41-46

Bohlmark, Anders and Mikael Lindahl, "The Impact of School Choice on Pupil Achievemt, Segregation and Costs: Swedish Evidence," Institute for the Study of Labor (IZA) #2786, reviewed in "Schumpeter. Exit Albert Hirshman," The Economist, December 22, 2012, 106

"Charlemagne: Back to school," The Economist, March 25, 2006, 33

Chugani, Harry T MD, "Human Brain Development: Windows of Opportunity." htchugani@med.wayne.edu and www.house.mi.gov/SessionDocs/2011../Committee 5-9-28-2011

"Finland," The Economist March 25, 2006, 33

Foer, Joshua, Moonwalking with Einstein. <u>The Art and Science of Remembering Everything</u>, Penguin Press, 2011. Review in Michiko Kakutani, "How to memorize everything, even this book," NY <u>International Herald Tribune</u>, 11 March 2011

"First Evidence That Musical Training Affects Brain Development in Young Children, Science

News, September 20, 2006

"Free to choose, and learn," The Economist, May 5, 2007, 60f

Gardiner, Alan Fox, Faith Knowles and Norman Jeffrey, "Learning improved by arts training," Nature 381, 284 (23 May 1996)

Hancock, LynNell "Why Do Schools Flunk Biology?" Newsweek, February 19, 1996, 44-47

Kingsbury, Annette, "Music Education and Childhood Brain Development," www. EduGuide

"Overhauling schools: How to get good grades," The Economist, November 27, 2010

Overy, Katie, "Can Music Really Reprise the Mind? The Question of Transfer Effects," www.musi

Richtel, Matt, "For high-tech families, a low-tech school is the way to go," <u>NY Inernational</u> Herald Tribune, October 24, 2011, 17

Case, 5

Sahlberg, Pasi, "Global lessons from Findland's schoolrooms," <u>International Herald Tribune</u>, December 29, 2010,

Stokes, Paul, "Mozart 'makes maths easier,' <u>The Daily Telegraph London</u>, Telegraph Group Ltd, October 19, 2002

Sylvester, Robert, "A Celebration of Neurons: Guide to the Human Brain," Association for Supervision and Curriculum Development, 1995

Tough, Paul, <u>How Children Succeed: Grit, Curiosity and the Hidden Power of Character.</u>, 2012. Review: "Stay Focused" <u>The Economist</u> January 19, 203, 81

Uhlig, Robert, "Piano Puts Children in Tune with Maths," <u>Daily Telegrah</u> London, March20, 1999

Wang, Jin-Zhu,"Recognizing the Wisdom of Handwork," Journal of Lonyday University

Woo, Elaine, "Gordon Shaw: His Work Led to 'Mozert Effect' Learning Theory." <u>Boston Globe</u>, May 2, 2005

Wooldridge, Adrian, "More for Less," Special Report: The Nordic Countries, <u>The Economist</u>, February 2, 2013, 5f (center section)

Zauer, Carl, "The Brain: Why Athletes are Geniuses." <u>Discover, April 2010</u>