Tony Wagner’s Seven Survival Skills

Tony Wagner is co-director of the Change Leadership Group at Harvard Graduate School of Education. In his 2008 book, *The Global Achievement Gap*, Tony Wagner discusses a variety of ways to improve education in the United States. At the heart of his thinking is the need for all schools to teach what he calls the “Seven Survival Skills”, which have much in common with the thoughts of Friedman and Pink (who are both cited in his book). Most of what follows summarizes his ideas but I’ve thrown in a few of my own. The Seven Survival Skills are:

Critical thinking and problem solving

An essential component of this is *asking good questions*. As Wagner argues elsewhere, the education system in the USA (as it is in much of the world) is about *getting the right answer*. People in their lives and in work need to deal with vast amounts of information and a key skill it to figure out what’s important and what’s not, what’s accurate and what’s not. This is a key part of being a critical thinker.

Wagner writes: “in schools, critical thinking has long been a buzz phrase. Educators pay lip service to its importance but few can tell me what they mean by the phrase or how they teach or test it.” Indeed, you can find references to the need for critical thinking in many government curricula and it is a key theme in the EU Key Competencies framework. But if an education system massively emphasises testing and then doesn’t test the skills it claims are important, they’ll be underemphasised by teachers - the essence of what it means to narrow the curriculum through testing.

Wagner quotes an interviewee who argues that schools need to start teaching critical thinking as soon as children are capable of abstract thinking, so it’s not just a secondary school thing; students need years of practice developing their thinking skills in order to apply it to university study, work and life effectively. The same interviewee suggests schools need to throw out the textbooks - they don’t encourage critical thinking, problem solving or questioning.

Collaboration across networks and leading by influence

In the old world of school, "students are accustomed to having teachers tell them what to do. And students almost never work in teams." In the new world of work people work in teams (often virtual teams that work together through video conferencing and email) and have to make their own decisions: "corporations are increasingly being organized around a very different kind of authority and accountability structure - one that is less hierarchical and more reciprocal and relational." So again, schools are failing to teach modern skills.

Agility and adaptability

“Our system of schooling promotes the idea that there are right answers, and that you get rewarded if you get the right answer.” (p.31) But in the real world of work and life, the right answers aren’t there and things change so people need to adapt and be able to deal with disruption. Most children are naturally agile and adaptable. They quickly take to new physical skills like walking and riding bikes. Thrust a new piece of technology in their hands and they will immediately explore and play with it; children have adapted readily to the Internet revolution. Move home and most children will soon fit into the new neighbourhood. They have to deal with changing schools and every year they get a bunch of new teachers. Schools seem hell-bent on destroying this life skill.

Initiative and entrepreneurialism

The world needs proactive people, self-starters. This is Stephen R Covey’s second habit of highly successful people. It involves creativity and creating your own answers and solutions. And schools, again, do little to encourage this, and much to destroy it.

Effective oral and written communication

Everyone would agree with this, but what surprises Wagner, himself a former English teacher, is the demand that employers have for "clear and concise" writing that has "focus, energy and passion." Wagner points out that English teachers spend a great deal of time focussing on grammar, punctuation and spelling, and formulaic styles of writing, but these are driven again by the demands of testing (which seek objective and therefore correct answers). What schools emphasise less is writing that has focus, energy and passion.

Accessing and analyzing information

People have to deal with an astronomical amount of information in their lives and work. It needs to be found, and evaluated. Important too is the ability to use information from a variety of sources: web pages, magazines, podcasts, TV, face to face interviews and discussions, surveys, books. Also key is the ability to synthesize information (which Daniel Pink and others place as a distinct skill in itself - right brain thinking rather than analysis which is left brain). This is simply reading for the 21st century.

Curiosity and imagination

This is also natural for children and, like adaptability, it is one that schools aim to destroy; unlike adaptability, they generally succeed, usually through a diet of teaching that bores and demotivates them.
So where's Maths?

Interesting that Wagner has not included Maths as one of the essential survival skills. In a later chapter on testing he discusses this, pointing out that employers “appear to place comparatively little value on content knowledge in either math or science as a prerequisite for work today” (p.91) and supports this with a survey of the skills sought by employers that put maths knowledge in 14th place. To graduate from high school in the USA students must pass a maths exam that includes algebra; given that few ever use it again, even MIT graduates, he questions why this is the case, and whether the other Maths that is taught in schools is relevant. Is it being used to solve problems, recognise patterns and as a way of thinking, or just as a way to do lots of rote learning and sums?

As I have found out, questioning the significance of maths in the school curriculum raises hackles. When I raised this question on a teachers’ forum once, I was once told to resign as a teacher because I clearly did not understand my job, along with various other horrified and appalled responses including suggestions that I wanted to handicap children for life, so Tony Wagner has my utmost respect for raising the question.