Introduction
Education’s productivity is important at many levels. At one level it is about the realization of individual potential and personal success and achieving that in an appropriate length of time. At another level, when governments are reflecting on the distribution of “tax dollars” and are faced with challenging decisions on what to fund in health, welfare, security and economic development then investment in education quite rightly must stand up to close scrutiny. At a third level productivity in education may be related to governments achieving a peaceful and cohesive social structure. This is not to suggest that education should teach compliance, but that it should assist citizens in learning how to socialize, empathize, influence and communicate.

The costs of getting productivity wrong are not simply monetary, but are the human costs of societal disengagement and its consequences. Such costs may ultimately affect other areas of government spending, but may be perceived as separate from education.

Thanks to the hard work of professionals in education, dropout figures in many countries are reducing and improving. However, the figures are a bit like those for Internet or mobile phone access. With over 75% mobile phone contracts for every 100 people in the world, it does not mean that we can build systems that assume everyone can access services through them – not unless we are willing to exclude around 1.7 billion people.

While the arithmetic is over simplified, the figures illustrate the point that great progress may have been made but there is much still to do, and our systems should acknowledge the importance of work towards full inclusion, otherwise education’s productivity is simply not what it should be.

In addressing productivity, it is easy to be drawn towards questionable conclusions. OECD’s PISA has helped to highlight the policies of the nations that succeed in their benchmarked tests. As the excellent video “PISA-Measuring student success around the world” explains “school systems that invest in helping students learn their subjects the first time around do much better than those where teachers know that they can, if necessary, drill the same material year after year into the heads of the same struggling students”. The video goes on to say that “the most successful schools are the ones where the students do well, regardless of where they come from”. The OECD’s work on PISA has also raised questions regarding, for example, student-teacher ratios, indicating that the quality of teachers is more important than their number and that class size is a poor indication of system effectiveness.

What examples are there of real action to address these issues in education? Education Fast Forward was fortunate to learn from two leaders who stand out as making real innovative contributions to productivity in learning earlier this year:
Jean Johnson: Notschool.net

Challenge
Notschool was developed in England in 2000 to respond to the recognition that many young people were simply not attending school. At that time, few solutions were in place, technology in education was in its infancy, but potentially offered a cost effective solution to the problems of exclusion and disaffection.

Approach
Notschool based its development on the principle that if the child would not go to the learning, the learning was taken to the child. Faster, more accessible bandwidth and less costly readily accessible technology made this a realistic solution. However, access to learning does not equate with engagement and during the very early days of Notschool, a range of pedagogical approaches were trialled including a raft of content driven solutions. None of these was effective with this group of young people.

We asked the young people for their ideas about how they would see Notschool working. With hindsight it now seems obvious. Their chosen route to successful implementation was through a community of practice where formal and informal learning could be embedded and recognized. Constructivist pedagogies fit well into such a system with individualized and bespoke project based learning a natural outcome.

As a result, Notschool became a learner-driven, online system “owned” and shaped by its participants. It covers the breath of the traditional curriculum and in addition, hosts around 50 areas of interest each of which are mapped against accreditation and awards. Many of these areas of interest are “owned” by young people and have been developed to offer the hard currency of accreditation that young people need for the next stage of their learning.

Impact on outcomes
Notschool has now successfully worked with over 7000 young people and their families. Engagement is high and success is demonstrated with over 90% of participants moving on to further education or employment and ultimately becoming positive contributors to the economy. Notschool’s level of achievement should be viewed against the general profile of a Notschool young person.

They are usually within the bottom two socio-economic groups, with second or third generation unemployment, low aspirations and a culture of reliance on benefits.

In addition to its work in the UK, the Notschool model has been successfully implemented in the US with around 1500 young people currently involved in the W.A.Y programme in the State of Michigan, where Notschool has been adapted into a blended learning model. The latest evaluation shows this has been very successful with young school “drop-outs” achieving higher grades than their peers involved in other e-learning or outreach projects. Sweden too has adapted a number of smaller scale Notschool programmes and Australia is embarking on a pilot this academic year.

Eleven years on, Notschool continues to offer a well-researched, scalable and cost effective solution to an increasing problem, but is still considered to be an “Alternative Provision”; sitting on the fringes of education. The question then has to be raised as to why Notschool is not embedded in the UK education framework. The answer lies at policy level, where successive governments demand that every child attend school, but have failed to redefine school and its purpose. In a world of diminishing natural resources and technical innovation and societal development driving change in the work place, school systems too often sit in an age where fixed times, age groups and curricula are common place and traditional large group teaching is considered best practice. Technology has not been widely used to change pedagogical approaches but too often has been designed to resemble traditional classroom practice and used to implement content delivery approaches with downloadable lessons in text or video.

Notschool has demonstrated how an effective virtual learning community can work successfully with groups of young people who are unable to engage with existing school structures where there continues to be systemic resistance to change. Parental choice and a bottom up approach might hold a key to driving change at implementation level, but there also needs to be acceptance at policy level that the existing school system is not for everyone.
The Challenge
Despite years of reform and thousands of essentially minor modifications to the traditional approach to schooling, the US education system has largely failed to produce widespread, significant, and sustained gains in student achievement. In 2009, Art Levine, president of the Woodrow Wilson National Fellowship Foundation and president emeritus of Teachers College, Columbia University, likened this system to an assembly line: “America’s current education system, created during the industrial era, resembles an assembly line, the era’s quintessential method of production. It puts all students through a common process tied to the clock…with all students required to master the same body of knowledge in the same period of time…Given what we know today, this approach no longer makes sense.” (p.34)

The Approach
The Re-Inventing Schools Coalition (RISC) was established in 2002 as a nonprofit foundation with the mission of helping all students achieve, particularly lagging and failing students and those who others think can only reach a certain level of attainment due to their background, disabilities, prior performance, or other obstacles to learning. The RISC Approach to Schooling is the first comprehensive school reform framework set up as a learner-centered performance-based system rather than a teacher-driven, Carnegie unit or time-based system.

In a traditional education system, time is the constant and learning is the variable. In a RISC system, learning is the constant and time is the variable. Robert J. Marzano, leading education researcher, says “[The RISC Model] has all the pieces. We have known about all of the pieces literally for decades, but…no one has put it together as elegantly as the RISC Model has and then demonstrated that it works” (RISC, n.d.).

RISC’s research-based framework is a system approach to teaching and learning that intentionally empowers students to take control of their education, engages them in learning in real and relevant ways, honours their unique differences, and prepares a clear pathway toward individual career and college readiness and life success. The RISC Approach to Schooling implements an integrated, systemic model for reform rather than a series of discrete strategies. The RISC framework is realized through four interrelated elements:

1. Shared Vision: A critical mass of students, parents, teachers, administrators, and other stakeholders – 75-80% of the school community – must embrace the system as their own. A strong base of support, partnership, and advocacy is needed at every level.

2. Personalized-Mastery: The nuts and bolts of RISC’s distinctive approach to the teaching and learning process addresses what students will learn, how they will learn it, how they will be assessed and graded, and how their performance will be reported. Personalized-mastery has a number of critical characteristics:
   A. Individualization & Flexibility. A unique component is the development of a performance-based system. Standards content is articulated into performance or developmental levels, and students have the opportunity to move at their own pace in every subject, as fast or as slow as needed. For example, a student may be at level 8 in math, level 9 in science, and level 6 in English.
   B. High Standards & Student Responsibility. A performance system sets a high bar for advancement. Every child must demonstrate proficient or better understanding, the equivalent of 80%, or grade B or above, before he or she can advance to the next level in a content area.
   C. A Transparent Curriculum. The standard students must learn as they progress through developmental levels to high school graduation are published and available to parents, students, and other stakeholders. Standards-aligned school and district assessments measure individual student progress, which is then reflected in progress reports. Assessment items are directly matched to specific standards, providing data to improve and adjust instruction.
   D. Student Ownership & Leadership. The key ingredients of a RISC system are student engagement, motivation, ownership, leadership, and responsibility. RISC’s performance system ensures that students are aware of the standards they must learn through high school
graduation and (2) they take responsibility for learning them. Students are not only allowed to co-lead their learning journey, they are encouraged and empowered to take the lead in every phase of learning including goal setting, the tracking process, and assessment.

3. Leadership – Leaders must learn to shift from the paradigm of “manage crisis, comply with federal and state mandates, and avoid risk” to becoming highly skilled, forward-thinking leaders who build leadership capacity in others.

4. Continuous Improvement – Regular, deliberate continuous improvement cycles ensure that school systems have highly detailed, frequent, and systematic feedback from teachers, students, parents, and others and from every level of the system, creating a climate of ongoing innovation.

If we want to be serious about creating world-class systems we must rethink our traditional model and build one that can help every child reach his/her potential.

**Conclusion**

The examples of Notschool and RISC seem in remarkable agreement with the OECD’s publication Policy Brief – Ten Steps to Equity in Education, which recommends ten steps that would:

- reduce school failure and dropout rates
- make society fairer and
- avoid the large social costs of marginalised adults with few basic skills.

The ten steps are listed below:

**Design**

- Limit early tracking and streaming and postpone academic selection
- Manage school choice so as to contain the risks to equity.
- In upper secondary education, provide attractive alternatives, remove dead ends and prevent dropout.
- Offer second chances to gain from education.

**Practices**

- Identify and provide systematic help to those who fall behind at school and reduce year repetition.
- Strengthen the links between school and home to help disadvantaged parents help their children to learn.
- Respond to diversity and provide for the successful inclusion of migrants and minorities within mainstream education.

**Resourcing**

- Provide strong education for all, giving priority to early childhood provision and basic schooling.
- Direct resources to the students with the greatest needs.
- Set concrete targets for more equity, particularly related to low school attainment and dropouts.

In other words why wouldn’t we reflect on the OECD’s suggested steps, learn from and build upon the work of Notschool and RISC and work towards improving the productivity of education?

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**Additional sources**


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