WINSTON CHURCHILL MEMORIAL TRUST

2013 TRAVELLING FELLOWSHIP TO:

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BRAZIL (August),

EDUCATION AND TRAINING - Category

VOCATIONAL EDUCATION WITH ATTITUDE

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The empires of the future, are the empires of the mind.

Winston Churchill

1. Introduction

1.1 Why this is important to me

From a personal level, having myself arrived from a background of disadvantage, the vocational pathway that I initially experienced supported me in developing skills and attitudes that only made me hungry for more. That experience hooked me into the journey of learning. Today, participating in the Winston Churchill Fellowship has once again made me face the challenge of climbing my Annapurna and what a humbling experience, learning with a wide range of professionals across the globe, who all had something very special in common—a commitment to transform lives.

With twenty years of experience in education, throughout this time I have been part of a framework that places children on conveyor belts. Schools are filled with adults that are passionate about making a difference and yet I have many memories of young people who as they pass through and get closer to the "end at 16" and whom I asked: where to next? Many responses have made my heart sink. I have heard things like: Going on the dole miss; I'm too thick to carry on learning; Parents that were themselves benefit families and low education, holding their children back convincing them that the learning world is not for them.

Then of course there are many who continue with education, some because they are so clear what they want to achieve, some because it seems the thing to do and is expected - after all they might then get a job.

To spend eleven years in compulsory education and arrive then at a junction where choices, next steps seem to be difficult to navigate, lack of purpose only then serves to stunt personal growth. This is soul destroying. In the past five years schools have increasingly become creative in securing methods and strategies to hold onto pre 16 students and secure with them a minimum of five GCSEs, only to then experience this tail end then falling through the gaps at post 16. I will start by expanding on the context that we currently find ourselves both nationally and internationally when young people leave the school system. My ambition with my Fellowship is to develop a broader understanding of these issues in successful international contexts and ask the question – what is going wrong? After all if other countries can add significant value to a greater proportion of their young people and communities, then what needs to be different in the United Kingdom?

1.2 Report Format

This report is divided into key themes as opposed to using a chronological approach..

1.3 Aim of the Churchill Fellowship

Aim 1: To identify specific models that have aligned education output to the changing landscape of 21st century economies, meeting the needs of economic competitiveness and growth.

<u>Observations</u>: Finland – metacognition, student co-planning and all students kept in common mixed ability structure until the age of 16; Germany – communities, education and industry collaborate together; Brazil – close partnerships between schools and industry

Conclusion: Build collaboration between parents, schools, government and industry.

Aim 2: Identify successful international vocational models, where qualifications use capacity building and selfesteem to raise individual and community aspirations, supporting structural changes in our communities to "bust poverty". I believe we owe it to our young people to empower them with high quality progression routes that translate into empowering communities.

<u>Observations</u>: Finland – early intervention to support early years education which gets reduced over time; Germany – 60% of young people pursue work based learning routes; Brazil – Excellent examples of social economic revolution by investing in vocational learning

Conclusion: Improve the quality of advice and guidance offered to young people; Flexible and transparent pathways

Aim 3: Identify how to build trust and respect for vocational learning and qualifications which are industry recognised.

<u>Observations</u>: Finland – involvement of parents and students; Brazil – SENAI College– purposeful self-evaluation; Germany – strong links with industry, training provided by companies <u>Conclusion</u>: Build strong links to local businesses

1.4 Background

One of the fundamental requirements of our educational system is to prepare young people to lead productive and prosperous lives as adults. This means that young people need to have strong foundations of literacy, numeracy, thinking skills to enable them to be responsible citizens, and to support lifelong learning. Yet by March 2012 unemployment for 18-25 year olds in the UK reached 21.9%, an increase of 8.3% from December 2007. This is a stark contrast to countries like Germany and Switzerland, whose figures are 7.9% and 7.5% following increases of 3.5% and +1% respectively¹. The UK labour market and the position of young people started to deteriorate many years before the recession. A similar picture was seen across other European countries. The data shows that the relationship between youth unemployment and GDP growth was already weak. We need greater understanding on

¹BIS – Department for Business, Innovation and Skills, August 2013

where the skill base lies on which we base our economy, and how we move our wealth around. Wealth is about making things, creating things, doing things. What should people be doing in a way that builds their self-esteem, makes them positive contributors and gives them purpose?

To address this debate it is imperative that educational policy and labour market policy are closely interlinked. The current education system is not giving young people the right skills needed for all sections of society, and until we address the polarised debate between academic and work based learning, we will continue to increase the "lost generation", causing costly human challenges. Vocational education in the UK has thus far lacked currency and reliability, having quality issues with industry, teachers, parents and young people. This impacts negatively on social mobility, creating a disparity between the UK's economic needs and the preparation of young people for their future needs. Countries such as Finland, Germany, Australia and Brazil have created tightly interwoven educational models linked to the growth of their economy.

There is currently a plethora of debate and documentation regarding this area, but this report will focus predominantly on developing strategies to raise the status of vocational education in the UK. The opportunities provided by this Fellowship have been extensive and I have been inspired by being able to broaden my thinking and consider how cultural attitudes and aspirations impact on the future of young people. Both in Finland and Germany, social and community structures are visibly interlinked to secure strong purposeful young people, who in turn become active and prosperous citizens. Brazil is interestingly different; it is currently better than the UK at football and partying but the Centre for Economics and Business Research anticipates that it will surpass both the UK and Germany by 2023 to become the world's fifth-largest economy². I spent time both at SENAI and Paulo Souza vocational colleges in Sao Paulo. These colleges are strategic partners in the communities they support and play a strong role in sub regional planning processes, enabling localised economic regeneration and wealth creation. What I observed in the outstanding vocational models in these three countries was that vocational education secured a strong bridge between adolescence and transition to adulthood.

1.5 Itinerary

During the five weeks of my fellowship I spent one week in Helsinki, Finland, one week in Bremen, Germany and three weeks in San Paulo, Brazil.

In Helsinki (May 2013), I visited Vikki Teacher Training School, University of Helsinki. During this time I spent a day with Adjunct Professor Jyrki Lorma, who as the current leading Principal at the training school also utilises this experience to support curriculum development and training across Finland, the US and the Far East.

I met with Minna Sandberg and Liisa Metsola who are both lead professionals in vocational education supporting vulnerable young people with transition and appropriate support. To gauge how new technologies are utilised to strengthen teaching and learning within vocational programmes, I met with Pete Stocksley, who is a mobile learning systems specialist at InnoOmmia in Espoo.

In Verden, Germany, with the kind help of a friend I stayed with Eckhart Lenk, a local secondary teacher, who was invaluable in facilitating communication and securing a tight and purposeful itinerary. Through Eckhart I was able to meet Wolfgang Reichelt, Managing Director of Block Transformatoren. Wolfgang is strongly affiliated to the International Electro technical Commission (IEC) and has spent considerable time with industry, trade associations and political bodies, promoting international standardization in industrial management. Wolfgang himself started his career doing an apprenticeship, going onto becoming a master craftsman in radio and television technology. He subsequently studied electro technical engineering, carrying out research and development in industry. Wolfgang is an excellent symbol of how an outstanding vocational progression programme can transform a young person's life experience.

²The Times – Power and glory come to Britain in 2030, Kathryn Hopkins 26 December 2013

In Verden, I also visited BBS Verden, a vocational school which has close working partnerships with local industry partners. The Headteacher Reinhard Witt works closely with the local Chamber of Commerce and is involved with regional planning. The school was able to arrange some valuable meetings at Mars and Focke to develop a sound and in depth understanding of the German dual system and vocational education across Germany.

In Brazil, I spent time at Centro Paula Souza federation where Headteacher Nivaldo Freire gave me invaluable guidance around state funded vocational education models. This federation has pioneered developments in technology qualifications, having built strong links with local partners in industry.

I am very grateful to the SENAI College of vocational education who arranged numerous meetings and visits to their schools. These were crucial in helping me to understand how government led targets translate into policy informing regional planning with industry and collaborative partnerships with SENAI.

2. MY LESSONS FROM Finland, Brazil and Germany

2.1 Finland:

My time in Finland was inspirational. As much as I can appreciate that Finland is small in scale in comparison to the UK, nevertheless the aspiration that the nation has for its young people is impressive. So impressive that the bar to enter teacher training in Finland is very high and the duration of this training is five years. After all, it is a society that believes investing in their most valuable resource; their children.

The basic principle of this education system is that all people must have equal access to high quality education and training. Equity and equality are key to improving quality and excellence. This means that a significant proportion of teacher training is spent on pedagogy, i.e. understanding and recognising children and their learning needs, so in essence supporting children with metacognition, and integration of prior knowledge with new knowledge. Their schools approach children's support as co-partners with parents. Intervention and support is collaborative and starts with early years and then over time is reduced as foundations are strengthened and improvements established.

The inclusion of parents in education is very strong, fundamentally it's about partnership, so goals are co-planned with children, parents and the school, with regular communication via virtual platforms. Students are regularly involved in self-evaluation, reviewing their progress towards these goals, and students own the process. The structure of these co planning meetings include:

- Talking about learning skills
- Developing happiness and well being
- Building understanding of the progression pathways that the child is working on, recognising schools prepare young people for jobs.

Jyrki Loima, Leading Principal at Viikki Teacher Training School in Helsinki, emphasises that underpinning education in Finland is trust.

"Underpinning this education setting TRUST, not control, there is this pre-contractual trust, which is irrespective of possible risks. Relational trust is developed through cooperation, communication and experiences and then there is structured trust which grows on the basis of close relations around the institute's structures. Trust and respect for teachers underpins this profession."

These co-planning meetings take place at least three times a year and the nature of this collaborative approach promotes confidence, trust and belief that every child is significant. This culture of education is about transparency,

collaboration; teachers are strategists, and teachers have confidence in requesting support and challenging norms to establish what they need to improve outcomes for young people. It is important to also include that Finland keep all students in a common unstreamed comprehensive school up to the age of fifteen, at which point students and their families, not the school, decide which kind of pathway they will pursue.

2.2 Brazil:

At SENAI College in Sao Paulo (the biggest Latin American institute of vocational education) I spent a wonderful afternoon with Roberto Spada – SENAI Director of External Affairs. Roberto has invested forty five years at SENAI and currently plays a strategic role in world community building developments. His most recent successes being in Timor, notwithstanding his role in supporting World Skills. Roberto's knowledgability highlights SENAI's core principles which define social inclusion as one of the pillars for the sustainable development of Brazil, and this underpins the core values of SENAI's work.

SENAI College believes that fundamentally people, all people, want to grow and university is simply not for all. Its belief which underpins the college's values and its mission in its community is that vocational education supports people's survival. Roberto states that human transformation is wholly reliant on education. Education in Brazil is the hard currency to social transformation; SENAI's greatest strength is its partnership with local government, industry partners and community groups. SENAI's contribution to transforming social inequality is to take young people from low-income and low-education backgrounds between 14 and 18, build their self-esteem by professionalising them in a technical qualification and provide the opportunity to be part of a technical workforce. The Brazilian economy is growing at a very fast rate, so SENAI has a huge challenge to follow economic growth with skills developments and qualified labour.

An example of a challenge that SENAI is faced with when supporting the civil engineering industry:

Currently the city of Sao Paulo needs 20,000 civil engineers. SENAI currently trains about 4,000 yearly and demand is difficult to meet as mobility in this area is high as opportunities in other parts of the country are attractive. This work lends itself to self-employment, so industry is hungry for new applicants.

In addition SENAI places great emphasis on its staff's learning, in all aspects including its development of leadership. SENAI has created strong links with Nottingham University commissioning Prof Christopher Day to lead on developing MA accreditation for SENAI school leaders in Sao Paulo. These qualifications are provided for free to secure equity and quality of standards across all its campuses. To secure high quality training and outcomes, all of the SENAI colleges are equipped with current industry spec equipment, thus requiring highly skilled staff that are fluent in current industry skills. The partnership work between SENAI schools and industry is strongly interwoven as this working model secures a high calibre workforce that supports economic regeneration and people who are ready to be a positive citizen in their community. Employment rates for SENAI qualified students range from 75 to95% dependent on the course. Like Paulo Souza College, at SENAI young people start a vocational route at 14 with the difference being that SENAI opens up about 100,000 places for low income individuals. The selection process is managed by the municipalities where the college is located, on behalf of SENAI. SENAI takes the responsibility of training the young person, sparking an interest in youth work and in most cases young people receive financial support for transportation and food.

The following are models of excellence that I was able to identify at SENAI:

Building a new school

The starting point is to define the profile of the professionals you want to create. If we take for example a welder, traditionally a college would design the package of training delivery -today at SENAI its industry. Industry defines the need and a committee is formed between SENAI and industry professionals to design the desired package that will meet the professional profile identified. This package is also supported by industry standard equipment and knowledge and understanding of the ever evolving technology for ease of adaptation and up skilling.

When SENAI starts a new school it will have audited extensively the needs of the local area, working closely with industrial partners designing the profiles of technical skill required to meet their needs. Once this is established then they work at setting up appropriate learning environments. The school once again works closely with industry partners to establish the following:

- The types of equipment needed
- The right technology to support practical training as well as teaching and learning
- Availability of latest technologies
- What practical learning needs to be as close as possible to industry environments
- Spaces for theoretical group teaching
- Anticipate future changes so spaces need to be adaptable and flexible
- Build environments required to meet curriculum demands
- Learning space needs to be close to industrial specs
- All teachers are required to complete 120 hrs each on their professional development, in teaching and learning, as well as up skilling themselves with industry developments
- Strong links with scientific research institutes, to build a culture of collaborative research, product development, applied research and solving complex problems

This type of setting enables the student to understand that they are experiencing a strong professional programme.

Developing Young People

Included in all vocational programmes are Mathematics and Portuguese subjects, specifically designed to support vocational education. Both subjects are interwoven into the course and because it is contextualised it enables young people to make easier connection with the learning. This seems to be particularly successful with Maths. All content is heavily supported with the basics to secure good training and development in their learning. Industry also specify characteristics that they need in their technicians:

- Initiative
- Responsibility
- Critical thinking

This is supported by the curriculum, which also includes learning in entrepreneurship, workers' rights and the law and health and safety. All these strands are highly motivational for the aspiring technician.

Programmes are designed to run for about four hours per day, five days a week for two years. This turns out to be a long day for young people as they spend four hours at school and four hours in the workplace as part of their training.

Formal assessments are conducted and, for each project students are involved in, assessment is by a panel that is made up of teachers and appropriate industry professionals. These assessments are used to naturally evaluate students' competences and how they are meeting the course profile, but in addition this feedback is also used to evaluate the quality of training, resources and curriculum. This is used to make further adjustments where required.

SENAI has a robust mechanism for self-improvement. Two self-evaluation tools that I found really impressive:

- Independent assessors are engaged every two years whose remit is to evaluate the professional profile of each course. This entails evaluations of all internal assessments both theoretical and practical. In addition they spend time evaluating samples of projects and quality standards. This is used to support teaching and learning, staff professional development and securing purposeful partnerships with industry partners.
- Another external assessment takes place a year after the young person exits the course. This is in the form of a survey to the young person and the new employer, testing:
 - Adaptability to new work environment
 - Ability to meet professional requirements
 - o Pay
 - Professional capacity

This offers excellent feedback for SENAI to strengthen their curriculum offer. The SENAI strategy is very much driven by the management principles of "The Toyota Way", lessons from the world's greatest manufacturer.

2.3 Germany:

Germany has a strong reputation for its Vocational Education Training (VET) system, supported by the fact that it is a mainstream option within the further education system. It also offers a high degree of job security. My time in Germany was spent in Verden, Bremen where I had the opportunity to spend time with trainees, trainers both at the Berufsschule vocational college and in the workplace as well as talking to industry and political leader Wolfgang Reichelt, CEO of Bloc. All the people that I spoke to have a strong belief that this model of hands on learning is more than just a qualification, it's about developing a deep knowledge of their trade which is a combination of academic learning and working at a company.

Most young people complete secondary school between the age of 15 and 18, depending on the type of school they attend. I believe that this particular issue is divisive in Germany as streaming happens from an early stage. Nevertheless about 60% of young people take the VET road. The professional certificates awarded to students are well respected in their fields and more than half of the apprentices stay on as full-time employees at the business where they trained.

Wolfgang Reichelt tells me that the success of the Vocational Education Training (VET) programmes are very much dependent on how communities, education and business collaborate together. My conversations with various groups of people during my stay in Germany always highlighted a societal attitude whereby adults and thus communities have a deep sense of understanding about their contribution to developing young people, the next generations. Apprentices are paid throughout their training receiving between 600-750 Euros per month. I will shortly outline a case study to demonstrate what a training programme looks like. Once a young person takes the decision to pursue a VET route they also the enrol on the relevant course at a vocational school which can last between two to three and a half years. In Germany VET courses are accredited and certified by business and federal bodies who oversee the programmes. Certificates are awarded with their seal of quality.

It is the young person who is responsible for approaching companies to seek a trainee position. The likelihood of securing a placement is actually high. In 2013, the German Federal Employment agency showed more than 450000 available trainee positions. According to Ulriche Hooper, from the German Chamber of Commerce and Industry in London, about 70000 places in industry and commerce in 2012 could not be filled with students. Ulriche Hooper anticipates that the same will happen this year.

My visits to companies such as Bloc, Mars and Focke showed consistency in approach in developing young people to becoming highly skilled apprentices. These companies have all invested in in-house training centres, run by highly skilled craftsmen in their fields who themselves spend time updating their skills through various project developments within the organisation. This ensures that all training delivery is current and run using new technologies. It is entirely the young person responsibility to secure a trainee position (some are more competitive than others). The training programmes will then include opportunities toto spend three or four days a week working alongside professionals at the company, and one day a week taking classes at the vocational school. Saying this, the initial stages of any apprenticeship starts with the basics. The students I spoke both at the Berufsschule and out in industry acknowledged a common language of learning. Whilst at Focke I spent time with initial trainees in an engineering workshop, where young men took pride in showing me their work, both practical tasks and records of their portfolio. The portfolios that I looked at had evidence of working with various colleagues, personal responsibility in their environment and building precision into their work. All students kept a well documented portfolio, showing evidence of how their skills developed. Another student I spoke to at Mars who was in his second year, said that "I know where I'm going and what is expected of me because all my trainers and mostly all the professionals I deal here at Mars started where I am now, I want to be an engineer and I can see what I need to do. It

seems clear that the visibility of the various professional adults in the work environment as well as day to day access and input into work modules provides clarity of progression routes which serves to be highly motivational. This also builds a strong opportunity for young people to build understanding on what professional attitudes and behaviours are required in the workplace.

At BLOC, young people's starting salary is 30% of the end salary, with the company committed to employing that young person, provided they engage fully with the training and are subsequently successful in securing the relevant qualification. Once the young person completes this apprenticeship pathway, opportunities to continue their learning are flexible and supported by BLOC. This could include higher technician routes, engineering degrees with BLOC providing appropriate access to the young person to support their professional development, be it research or field developments. BLOC has successfully supported progression from apprenticeship level through to doctorate level in engineering. The company has a strong belief that its strength and success is dependent on an educated workforce, hence a wholehearted approach to building and contributing to their community which in turn secures their position in the world stage of engineering. Wolfgang Reichelt states that because his staff start at ground level in the workshop, they have greater prior understanding and knowledge of team expectations and pressures, so they learn to anticipate the diverse problems that occur. In essence staff develop a wider skill set within engineering. Apprentices are learning hands on daily, asking questions daily, whereas graduates start by thinking they have all the answers, and expect to know the answers and consequently cost the company more over time.

BLOC also prides itself in a set of strong values within its community: childcare is available to support its workforce, it offers opportunities for 15-17 year olds wanting work experience to build their portfolio, their Employment policies are equitable and capacity building is focused.

ANALYSIS AND IMPLICATIONS FOR THE UK

The International Landscape: OECD Reports – "Learning For Jobs" and 2.4 "Jobs for Youth"

In 2010, OECD completed a study that reviewed the quality and impact of VET programmes across 17 countries. The review aims to bridge the gap between learning and jobs, providing direct evidence based correlation between how economic prosperity and community cohesion are dependent on an appropriately skilled workforce. The report notes that for VET to meet labour needs the disparate world of school learning and the world of work must engage more collaboratively, regardless of their "different goals, incentives and constraints"³. My Fellowship is able to exemplify excellent practices in vocational education: Germany and Brazil.

Within the same year, Jobs for Youth was released by the OECD Directorate for Employment, scrutinising transition from school to the workplace. The report postulates that "the current severe economic downturn is posing daunting challenges to young individuals in the OECD labour markets. The transition from school to work is going to be particularly difficult for the new generation of entrants in the labour market. Low-skilled youth who, even before the crisis erupted, already experienced multiple barriers in integrating into the labour market, are now at high risk of inactivity and potentially of exclusion"⁴. The models observed in my Fellowship identify how leaders are in a key position to address this unbalance. I emphasise leadership as I want to challenge the top down enforcements that have been imposed on British society. British policy makers must seriously consider how policies impact on society

³Learning for Jobs – OECD 2010

⁴ Off to a good start? Jobs for Youth – OECD 2010

over longer periods of time, not just the next five years. This is not a rehearsal - after all it is our society, our community, our future Britain.

2.5 LEADERSHIP solutions to support a "change agent" culture

In Dr John Hattie's influential book Visible Learning, he represents the single largest analysis of evidence-based research ever undertaken into what actually works in schools to improve learning. Hattie's findings showed that feedback is one of the most important factors in effective learning, followed by a student's expectations and the trust built by teachers with their students.

In this book Hattie presents eight "mind frames" or ways of thinking that together must underpin every action and decision in schools and systems – a highly recommended read. All the frames are interconnected but I want to expand on Mind Frame 2⁵: Teachers/leaders believe that success and failure in student learning are about what they as teachers or leaders did or did not do…we are change agents! And so it is incumbent on us to take on the mindset that we can effect change.

In this frame Hattie states "- our job as teachers is to effect change – the school leader's job is to effect change in a school". This is not about change for the sake of change, but rather we need to work out what change is important. That is the skill of teaching and leading. Hattie goes onto saying that "this is not the belief that we are facilitators, that students are going to learn anyway and that it's all discovering about where they are at – NO! Teaching requires knowledge of what students bring into the classroom. This prior knowledge – understanding what students bring into the classroom – has turned out to be far more important than what we do with them, and what lessons we give them. This requires a deliberate intent on the part of teachers to know a tremendous amount about their students." Creating this culture of trust and respect for teachers' and school leaders' professionalism is a priority to secure high aspirations and to close socio-economic gaps. In Finland I was able to identify examples of this type of pedagogical leadership.

Miina Metsola, Development Director at Keskuspuisto Vocational Colleges, has been a policy developer within educational government groups. It is common practice in Finland to include school leaders in curriculum and reform discussions at ministerial level. Head teachers are highly valued so have a strong voice across government. Miina states she feels the distance between government and school is small so leaders across schools drive directives and needs to maximise on outcomes. This model of leadership secures real, contextualised improvements in teaching and learning because teachers participate in driving change. Teachers are trusted and their professional judgements are valued. This works within schools and across partnerships as division and competition is not prevalent within the Finnish educational model. Schools and local institutions collaborate to ensure that they learn together in common areas and through a cooperative local system (funding facilitated by government) all maximise their potential and their capabilities.

In the United Kingdom our educational system is still at a point where it encourages poor leadership practices, as it is very much predicated on the model of carrot and stick as a way to drive improvement. I want to draw parallels with Daniel Pink's work with business. In his book Drive he identifies: The Seven Deadly Flaws:

- 1. Extinguishing motivation
- 2. Diminishing performance
- 3. Crushing creativity
- 4. Crowding out good behaviour
- 5. Encouraging cheating, shortcuts and unethical behaviour
- 6. Becoming addictive or obsessive
- 7. Fostering short-term thinking

This approach encourages control and standardisation, with Ousted and league tables squeezing out intrinsic motivation, leaving schools "playing the system", resulting in the selfs of improvement and meeting young learners needs to be constantly compromised.

⁵Visible Learning – Dr John Hattie

During my Finnish experience and my time at SENAI College, I saw teachers thrive working in environments where they own their own learning. There was a strong culture of ongoing learning opportunities. Schools have a strong affiliation to research centres, Universities, industry where collaboration is supported, building a strong ethos of self-improvement and being effective change agents. In all the settings that I managed to visit, the approach to leadership instilled autonomy, mastery and purpose, creating healthy and motivational environments.

The Finnish educational system works along the principles of sharing resources and collaborating, teachers and leaders having strong voices in their school's improvement to achieve the best outcomes for their young people. This high performing school system has a very small attainment gap and there is very little correlation between students' achievements and their cultural capital.

2.6 Lessons to take forward

When comparing the UK secondary education system with that of countries like Germany, Switzerland and the Netherlands, the status and disconnectedness of vocational pathways in the UK seem severely flawed. We are currently faced with an epidemic of technical skills shortages. John Cridland, CBI Director General, said:

"We need to boost our skills base urgently before the UK loses more ground. It's time to stop looking on enviously at Germany and build a system that works." John Cridland urges the government to invest in skills to secure long term growth. "On school reform, business want rigour, as well as young people to be rounded, grounded and ready for working life."

The CBI/Pearson education and skills survey in 2013 identifies⁶:

- Almost half of business lack confidence in getting high-skilled workers in future overall, particularly in areas such as manufacturing, construction and engineering
- 55% say school leavers lack the right work experience and key attributes that set them up for success, including self-management (54%), problem solving (41%), attitude to work (35%), stressing the need for school reform to produce people who are rounded and grounded, as well as stretched academically.

In the UK, low skilled 16-24 year olds perform below the OECD average, with almost a million young people in the UK being unemployed – "the size of this group was rising even during times of economic growth"⁷. It doesn't have to be this way as countries such as Germany, Netherlands and Switzerland have maintained low and stable proportions of young people out of work remained throughout the economic crises. In the UK, we need to learn from best practice elsewhere. I don't mean directly copying practices and policies but I feel that there are excellent models across the world that challenge our current strategies and would support developments to empower our young people, supporting transition from education to work. "Learning for Jobs" highlights the need to seriously consider work based learning as a means to raise aspirations and interlink the academic world with work. It states that the workplace "provides a good place to learn both hard skills on modern equipment and soft skills in terms of working with people in a real-world context. Workplaces improve transition from school to work by allowing employers to get to know one another, trainees contribute useful work, and workplace training within vocational programs provides a lever to link the mix of vocational provision to employer needs."⁸

I recently carried out a survey with ex students who are currently studying in 6th form colleges or at University and this is their feedback:

- You can get all the education in the world that you like, but lack of real life work experience can hold you back.
- Schools themselves lack clarity regards vocational options and get caught up in the A level euphoria, and promote these as must haves.

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⁶CBI/Pearson education and skills survey in 2013- Changing the pace

⁷Youth unemployment across the OECD: How does the UK compare?

⁸Learning for Jobs – OECD 2010

- There is significant prejudice about vocational learning as this is perceived to be less smart. This thinking in many instances encourages young people to go out and find jobs that lead to a stalemate situation.
- Concerns that when you are out of education system, clarity of learning options and progression routes are difficult to

It is challenging when working in a system that is driven by negative competition, micro management and league tables. Headteacher, inspectors and governors are chasing targets and ticking boxes. There is a disconnection between what school produce and what industry needs. In a recent report by McKinsey⁹, 70% of educators in the UK believe that young people are well prepared for work, whereas only 50% of employers and young people feel that this is the case. Education and employers are still working in silos and until we start connecting these two, young people will continue to be lost and they simply deserve better. School leaders need to develop a culture that when a young person is placed successfully in the world of work that this represents a school success. We fundamentally need all hands on deck – across employers, education providers, government and parents.

3. Conclusion, recommendations and next steps

3.1 I will summarise my Winston Churchill Research Fellowship in Education with the following recommendations:

I think that the answer needs to start with Einstein who warned that "we cannot solve our problems with the same thinking we used when we created them". This naturally needs to include the recognition that we cannot view education in isolation to the economic, social and political culture that we fit into. There is significant evidence that other countries are addressing their market and skills needs without big groups of young people being left out and caught in a pit of poverty. Roberto Spada, Director of External affairs at SENAI, and vice-chair of World Skills, evidences within his work that the best socio-economic revolution is investing in vocational education. In the UK the current progression routes do not tackle the scale of economic inequality and lack ambition and purpose to secure long term employment and prosperity for all our citizens. It's important to also acknowledge that in order to succeed with quality transition programs into adulthood, we need to look at what is happening earlier on in a child's educational experience; after all, planting the seeds of all possibilities, developing dreams is essential to enable a smoother transition from adolescence to adulthood.

Partnerships between education, industry and government

- Firstly we need to be clear what we want to achieve for our society, not just for the next 5 or 10 years, but where do we want to be in fifty years' time...do we know? So how are we going to get there? How are we going to support communities in building this vision with us? Building partnerships of collaboration with education, government bodies and industry partners is key to secure a prosperous and thriving economy. Simply put we need to understand each other and work together.

Advice and Guidance

- Young people's aspirations are seriously compromised by the poor quality of advice and guidance on how to access the various routes, and to understand the demands of these routes. The quality of this advice needs to include an understanding of the career advantages that strong quantitative skills will provide as STEM industries are central to economic growth and jobs for tomorrow.

Appropriate literacy and numeracy programmes

- Progression routes at post 16 must include appropriate and relevant numeracy and literacy developments to strengthen vocational education, rather than just more re-takes and re-enforcing the negativity towards certain subjects.

Clear progression routes in education and work experience

- A clear visible map of progression routes is required which includes a clear outline of pathways, qualifications, access, and interconnection. This is important as the current system is too focused on single pathways; students need to understand that changes are possible when a need for a direction change is identified. Equally importantly young people need to see that there are no dead ends.

⁹ McKinsey & Company report 2013 - Education to employment: Designing a system that works

Collaborative curriculum projects with local employers

- Schools need to open their doors to collaborate in curriculum projects and developments with localized employers. Removing the disconnectedness between industry and school builds young people's understanding of transition between the learning world and the world of work, including accessing different professionals and their world.

Community engagement in workplace opportunities

- Greater community engagement is required to create opportunities for young people to access work experience opportunities, work shadowing, voluntary work, particularly during weekends and holiday periods.

Guidance training for all subject teachers

- Every school should be providing young people with high quality advice and guidance from the early stages. It is important to have high quality careers support for young people, but it is equally important that schools invest in advice and guidance training for all teachers particularly in developing an understanding on how their subject adds value through the various progression routes, and grade requirements across the various pathways. After all, teachers spend a lot of time with young people.

Every school needs to be able to answer the following questions:

- Does the school help you discover who you are?
- Does the school help you discover what you want in your life?
- School can't prepare you for a particular job; it's more about helping you develop complex skills. Does the school help you to achieve these?
- Does your school bring the world of work and school together?
- Is learning student centred with teachers providing opportunities for enquiry-based learning, modelling characteristics desired in a changing economy: critical thinking, collaboration, communication, risk-taking, creativity?

If we are to find any of these answers, we need to address the quality of how we prepare our teachers and how we work collaboratively with parents and communities to support the fast changing landscape that today's children are facing.

My next steps....and my final thoughts

This travelling fellowship has given me an opportunity to re-evaluate my own leadership mindset about partnerships and collaborations in 21st century Britain. I started off with an idea of what I was going to experience and learn, but actually came away with an ability to reflect clearly on what Desmond Tutu often refers to as "Ubuntu". This African word is difficult to translate but means that you can't exist as a human being in isolation. It speaks about our interconnectedness. We think of ourselves far too frequently as just individuals, separated from one another, whereas you are connected and what you do affects the whole community. When you do well, it spreads out, it is for the whole community. In modern Britain, we too need to ensure that Ubuntu lives in our communities as this is how we can prepare and support our young people for their future, addressing our socio-economic challenges and building equity within our society.

I will expand on my conclusions set out in 1.3, and I will demonstrate the action that I will take to build parental voice and confidence, thus enabling parents to lead effectively on choices with their children in the community of Henley. This pilot will in time be scaled out to other communities.

Aim 1: To identify specific models that have aligned education output to the changing landscape of 21st century economies, meeting the needs of economic competitiveness and growth.

"We cannot solve our problems with the same thinking we used when we created them"

Preparing our young people for Britain's future requires a re-build and a re-think of the structures that guide and support our young people into adulthood. The pace of change as well as the complexities of growing up in our modern British society is leaving far too many young people behind and creating disconnections in our communities. We cannot ignore facts such as one million young people are not learning or earning, mental health trends are alarming, family structures have changed, social media, marketing and socialising dominate young people's lives in ways that we never imagined – this is what we are faced with. My visit to Finland (please see section 2.1),crystallised how important and essential it is that our society's ambition needs to be about investing in our most valuable resource – our children. When I started my Winston Churchill journey and visits to various settings, my initial focus was primarily on exploring high quality vocational educational routes, what I soon realised was that in modern first world societies, we need to go back to the beginning. The plethora of what is available for a young child/person is challenging to access, leaving parents, children and communities disconnected and in far too many cases, children are left behind. To prepare for 21st century economies, we need to prepare parents for the greatest challenge they will encounter - bringing up their child in their community. My ambition is to create within the Henley community a re-structure of collaboration, securing high quality advice and guidance in all spheres that a family will face. My aim is to empower parental voice and choice thus enabling parents to guide and plan for their child, with their child and with the community – Ubuntu.

Using 21st century tools to re-structure collaborations in our communities

The priority will be to create a service in which families can thrive under their own steam. This service will be about valuing the pressures on family life, not least the squeeze on family living standards, thus its primary focus will be on nurturing the capacities and strengths found within the voices of families, promoting the critical role and voice that parents have in raising their children. Using 21st century tools I want to develop a social media forum/website that builds capacity to localise solutions for parents bespoke to my community. This website will build opportunities to collaborate community best practice of the full range of services for young people aged between 0-25. This service will address the full needs of young people, supporting parental understanding and access to knowledge in all areas that include the full spectrum of education and varying pathways and opportunities, work-experience opportunities in their community, local extra-curricular clubs and activities, available parenting support and specialist interventions for SEN and disability needs, understanding and support for the Wellbeing agenda.

The website will enable parents and young people in their local community to maximise on local knowledge, both from other parents and professionals but also to enable a greater opportunity to collaborate and enable greater connections with local private and public services. All services both public and private will be reviewed by local community users (and others) to feedback on quality, value for money and effectiveness of experience. A *trip advisor* type rating facility will facilitate this communication.

My strategy invests on "pro-family", enabling families to knowledgeably lead on protecting and planning for their most valuable commodity – their children. Signposting will facilitate early engagement of needs for families and young people reducing the burden of isolation, disempowerment and disconnection that so many parents experience when trying to meet the needs of their children.

The website will include articles of current issues that impact on 0-25 year olds written by appropriate professionals, as well as easy to follow guidance to support navigation through plethora of services – key feature will be quick easy contacts and access to appropriate and accessible sections of services websites.

Aim 2: Identify successful international vocational models, where qualifications use capacity building and self-esteem to raise individual and community aspirations, supporting structural changes in our communities to "bust poverty". I believe we owe it to our young people to empower them with high quality progression routes that translate into empowering communities.

Aim 3: Identify how to build trust and respect for vocational learning and qualifications which are industry recognised.

My experience both at a professional and personal level is that there is a lot of confusion about what vocational education actually means. I have experienced conversations with various people where they will refer to having to call out an engineer to "fix their washing machine". There seems to be a lack of understanding in Britain as to what the world of engineering and manufacturing actually looks like and that in fact there are various routes and training levels, qualifications and opportunities within engineering and manufacturing. It's not an engineer that fixes a washing machine, it would be a technician, and it certainly is not about getting your hands dirty - this is an image from the past, which is still stuck in people's minds and outdated. Also as many as five people are being trained for each job in hairdressing, sports and leisure, hospitality thus creating a negative reputation in vocational routes, when what employers are crying out for are electricians, plumbers, engineers and other technical fields. My visits to vocational colleges in Germany and Brazil showcased schools that mimicked the work force, using top of the range and current industry specifications, with young people dressing the part. In this country we already have excellent apprenticeship models such as at BMW in Reading, where apprentices work with state of the art clean technology - in suits! Interestingly when I spoke to BMW they explained that they do struggle to encourage state schools to participate in their career showcase days, and that interest is predominantly from the private sector! Training in high tech school environments makes transition into the workplace seamless; it is motivational and provides greater clarity of the next steps and future opportunities.

Empower parents

In Britain we have started making inroads by opening up UTCs and developing stronger apprenticeship routes, but we need to help parents understand what this means and what this can do for their children. What do the progression routes look like? Convince parents that vocational learning is not about dead ends, it's different and opportunities are extensive. What are the varying options and opportunities? What do the actual jobs and salaries look like in comparison to other academic routes? We actually have it all in this country, but it has yet to be understood and translated to parents and to young people to then be valued and recognised.

Ubuntu website

Building on from aim 1; my website will facilitate understanding of the quality and opportunities of the different localised educational establishments with examples of progressions routes and how they link into various industries both locally and nationally. To achieve this agenda, I will work closely with the various community groups in the Henley partnership to build on existing partnerships and collaborations.

This will be partnered up with local employers to support developing opportunities in work shadowing and work experience as a commitment to young people and the future of their community. My website will enable quick and easy communication to young people and families about new government developments, and what these options would mean to them – what do those opportunities look like in my community. An example would be Vince Cable's recent apprenticeship campaign "Get in, Go Far".

I see it as essential that we invest time to build parental and young people confidence in the varying choices available, understanding local offers, opportunities and funding streams to support families making knowledgeable decisions when planning for their future.

The practices I experienced that made a positive impact on young people, communities and society as a whole had a very common thought process – there was real ambition for their society, now and in the future. Finland, Germany and the practices that I observed at Paulo Souza and SENAI were rigorous, relentless and empowered people. Industry, communities, education were joined up learning entities with a clear long term philosophy of continuous development and collaboration.

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⁴ Off to a good start? Jobs for Youth – OECD 2010 (Organisation of Co-operative and Economic Development)

⁵Visible Learning – Dr John Hattie

⁶CBI/Pearson education and skills survey in 2013- Changing the pace

⁷Youth unemployment across the OECD: How does the UK compare?

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