



# Developing & Understanding Vocational Excellence: Final Report

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# 1 Introduction

The first *Skill Olympics*<sup>1</sup> were held between Portugal and Spain in 1950. The UK, along with five other European countries, joined this competition in 1953. These events became known as the WorldSkills Competition (WSC). The WSC is organised by WorldSkills International (WSI). WSI is a non-profit association that promotes Vocational Education and Training (VET) internationally in traditional trades and crafts as well as in multi-skilled vocations, such as Manufacturing Team Challenge, and those utilising newer technologies and innovative services. Currently, the competition brings together around 1000 contestants mostly aged 16-22<sup>2</sup> from 53 countries, who gather every two years to compete publicly and demonstrate excellence in 50 skill areas.<sup>3</sup> The skill areas are grouped into six skills sectors: Construction and Building Technology, Creative Arts and Fashion, Information and Communication Technology, Manufacturing and Engineering Technology, Social and Personal Services and Transportation and Logistics.

TeamUK, and the product range of WorldSkills UK (formerly UK Skills),<sup>4</sup> is managed by Find a Future, an organisation which brings together skills and careers experiences from across the UK (WorldSkills UK, 2014a). Find a Future runs skills competitions in partnership with industry and educational institutions (WorldSkills UK, 2014b). Find a Future works closely with the Association of Colleges (AoC), the Education and Training Foundation (ETF), the Association of Employment and Learning Providers (AELP) and Local Enterprise Partnerships (LEPs) to ensure that the work and message of skills competitions impact upon young people, the FE sector, employers, and training providers.

# 2 WorldSkills Competitions and Legacy

The WSC is recognised by many as the pinnacle of excellence in VET (AoC, 2009; EduCluster Finland, 2013). These competitions provide a benchmark for high performance and an objective way to assess vocational excellence. They also provide an opportunity to research the various dimensions of vocational excellence.

The 41<sup>st</sup> WSC was hosted in London<sup>5</sup> in 2011. Following the success of the London skills competition, in Spring 2012 five WorldSkills Legacy Projects were established. A report commissioned by Find a Future, *Gold Dust: using skills competitions to bring excellence to* 

<sup>1</sup> http://www.worldskills.org/

<sup>&</sup>lt;sup>2</sup> Competitors must have been at least 16 years of age on 1st September 2013 to be eligible to compete during the 2013/14 competition cycle. Some skill areas such as Manufacturing Team Challenge have an upper age limit of 25.

<sup>&</sup>lt;sup>3</sup> TeamUK does not compete in every skill area.

<sup>&</sup>lt;sup>4</sup> <u>http://worldskillsuk.org/</u>

<sup>&</sup>lt;sup>5</sup> The UK also hosted WSC in Glasgow in 1965 and in Birmingham in 1989.

*all,* synthesises the findings of the five legacy projects. These Legacy Projects directly aligned with a set of 'Legacy Goals':

- 1. To raise the profile of vocational skills
- 2. To recognize skills as critical to wider economic development
- 3. To increase levels of employer investment and commitment
- To encourage more young people to consider and enter vocational skills and careers
- 5. To generate standards of excellence in the teaching of vocational skills to support future economic development and growth.

# 3 Developing and Understanding Vocational Excellence

The *Developing and Understanding Vocational Excellence* (DuVE) suite of projects is one of these legacy projects.<sup>7</sup> They are managed by Find a Future, and demonstrate a clear intention to use evidence-based research to further develop and ground high quality WorldSkills skills competition practice. The DuVE suite of six projects are:

- Project 1: Modelling the characteristics of vocational excellence
- Project 2: Learning environments to develop vocational excellence
- Project 3: Benefits of developing vocational excellence<sup>8</sup>
- Project 4: FE college participation in skills competitions: costs and benefits
- Project 5: WorldSkills contestants and entrepreneurship
- Project 6: Training managers: benefits and barriers to WorldSkills UK participation<sup>9</sup>
   Each of these projects helps to address the following over-arching questions:
- What are the characteristics of individuals who excel?
- What kinds of support enable the development of high-level vocational skills?
- How can vocational education be structured to aim not just for minimum standards, but for high achievement that reflects world class standards?
- Can broader societal and organisational benefits to developing vocational excellence be identified?

The findings of each of the projects can be found in the reports available on the Find a Future website (<a href="http://www.findafuture.org.uk/worldskills-uk-skills-competitions/research-">http://www.findafuture.org.uk/worldskills-uk-skills-competitions/research-</a>

<sup>&</sup>lt;sup>6</sup> The *Gold Dust* report can be found here: <a href="http://www.findafuture.org.uk/media/1822/gold-dust-report-v4">http://www.findafuture.org.uk/media/1822/gold-dust-report-v4</a> ndf

<sup>&</sup>lt;sup>7</sup> Please refer to <a href="http://www.aoc.co.uk/about-colleges/world-skills-uk-the-skills-show/worldskills-legacy-projects">http://www.aoc.co.uk/about-colleges/world-skills-uk-the-skills-show/worldskills-legacy-projects</a> for more information on the other four projects.

<sup>&</sup>lt;sup>8</sup> Projects 1, 2 and 3 build upon the MoVE research conducted at WSC London 2011.

<sup>&</sup>lt;sup>9</sup> Projects 4, 5, and 6 began in October 2013 and were conducted through the 2014/2015 competition cycle.

<u>and-development</u>) and at <u>www.vocationalexcellence.education.ox.ac.uk</u>. Although the DuVE projects mainly focused on national and international level skills competitions, the findings are transferable to local and regional level skills competitions.

What follows reports on the major themes in the findings across all six projects, addressing the questions above outlined above, and provides key recommendations at the end of each section.

# 4 Capacity building

WorldSkills Competitions involve many stakeholders. Their participation and involvement contributes to the capacity building of the wider VET system. Individuals develop vocational skill and knowledge in the workplace, school and/or college through the direct and indirect guidance of more experienced people; they are part of a community of practice influencing each other and the systems or communities of which they are a member. It is the attributes, attitudes and values of individuals and their interactions with others and with their environments that underpin the development of vocational excellence in these systems. The WorldSkills competitors sit at the centre of these communities and systems (Figure 1)<sup>10</sup> and are the main beneficiaries of participation in WSC. However, the Training Managers (TMs) who support competitors are strengthening the underpinning of the learning and development of team UK members through their own professional knowledge and expertise, and from drawing on the communities of which they are a member. For example, fellow TMs in the WorldSkills community share knowledge. Thus, the knowledge and skills of TMs working in an FE College can be reflected in the achievements of their colleges (identified in Project 4) and its curriculum development. The industry-employed TMs bring their industry experience to the training of the competitor. This real-world knowledge can help ensure that competitors, and FE College-based TMs, are at the cutting edge of new technologies and processes.

In addition, the young people who are selected to join Squad UK receive significant training in the lead up to team selection, and they return to their workplace or college with this skill and knowledge development, thereby introducing their employers to new techniques and/or products. In that sense, the 'reach' of the capacity building is wider than initially suspected - it extends beyond Team UK members. Employers in our research observed enhanced employee performance and enjoyed good publicity and higher prestige, with some companies even attracting more clients.

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<sup>&</sup>lt;sup>10</sup> Bronfenbrenner, 1963.

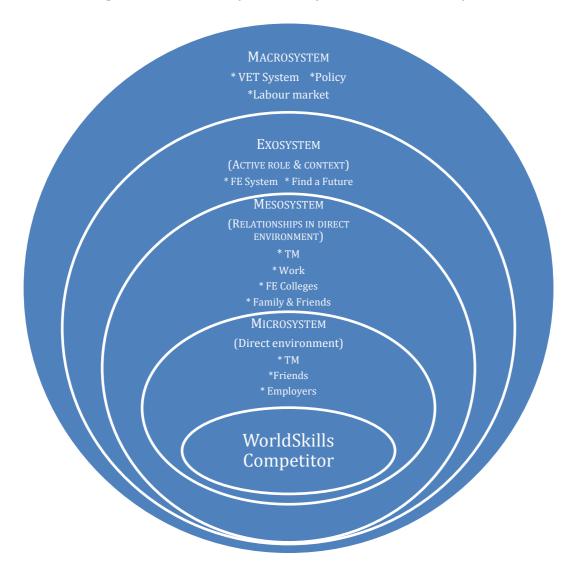


Figure 1: Communities of practice and systems of WorldSkills Competitors

### 4.1 Recommendations

- Employers gave many examples of positive experiences. These could be used to form case studies to show the benefits for other, non-participating employers.
- Competitors in skills competitions reported that their goals are oriented toward achieving mastery. This is a process that could be developed in young people rather than the pass or fail approach currently adopted in schools and colleges.
- Ensure TMs have the opportunity to share the expertise they develop and use their experience to showcase knowledge and skill development in the FE sector.
- Many of the findings of the projects relate to national and international level skills competitions. These findings could be transferred to regional and local level skills competitions and how this could be achieved would be a fruitful area for further investigation.

# 5 Infrastructure and support

The level of investment in Team UK is significant in terms of time and finances. This investment provides results. Table 1 shows the medal tally from the last three WorldSkills Competitions for the UK.

Table 1: Medal tally from WSC 2011, 2013, and 2015

Medals	2011	2013	2015
Total Average Points	512	513	513
Gold	4	2	3 <sup>11</sup>
Silver	2	1	4
Bronze	6	3	2
Medallion of Excellence	12	17	24

In addition, one 2015 Team UK member won the Albert Vidal Award, for the most points scored by any competitor in the competition.

Achieving these results stems from the involvement of people from all levels, illustrated in Figure 1 above. While the research showed that some aspects of the infrastructure and support still needed development, there are many areas where the infrastructure and support around skills competitions is having an impact on the wider system. For instance, many colleges have in-house competitions embedded in the curriculum, and some participate in local, regional and national competitions, which can lead to WSC participation. The mechanisms through which this participation occurs can form case studies from which other colleges could learn. Some employers are building on the knowledge and skills of competitors to deliver in-house training.

Within these competitions, networks are developed and knowledge and skill shared. One such example is the Vocational Masterclasses, which were led by people directly linked to Team UK. Participants in the classes were practitioners in the wider system. The programme focused on developing new skills and techniques around competition activity and bringing these into everyday teaching and learning practices. Another is the use of the social networks for future employment. There were examples of competitors starting their own businesses and emulating the training they had received for their new employees.

### **5.1 Recommendations**

Encourage senior leaders of colleges to attend competitions events in person. It
might be particularly helpful to encourage senior leaders who are new to
competitions and associated activities to attend with leaders from colleges who are
highly involved.

<sup>&</sup>lt;sup>11</sup> The medal results reported for 2015 are for individuals. For medals in each skill it would be 3 gold, 3 silver, 2 bronze and 21 Medallions of Excellence.

- Facilitate knowledge exchange between colleges regarding different ways of being involved in competitions as a way to support those colleges who are interested in becoming involved. The developing WorldSkills champions network could help facilitate this process.
- Facilitate knowledge exchange between colleges to learn how other colleges fund their participation. This exchange would be particularly valuable to colleges just embarking on more competition engagement, as this challenge is one all colleges face regardless of their relative levels of involvement.

# 6 World class standards

The vocational route is often compared to higher education, the so-called 'golden route', in terms of parity of esteem. WorldSkills Competitions show this comparison to be a red herring: Young people competing on the world stage need no comparators.

The vocational arena and the route from which these competitors have developed their knowledge and skill provide a solid base from which to progress to Team UK. There is much good practice evident. Those young people who came from positive, supportive work environments and were given a wide variety of tasks to complete during their training in the workplace were more likely to make the final team selection. In addition, there was evidence that some learning providers were using world class standards, derived from the WSC, and deploying these via competition scenarios and spaces to replicate WSC-type learning. This offered positive experiences for students across different levels, i.e. from Level 1 through to young people vying for a place on Team UK.

## **6.1 Recommendations**

- Communicate the potential benefits of competitions to colleges more effectively, in particular how involvement can be used as evidence of excellence for Ofsted inspections.
- The WorldSkills champions network could also be used to provide colleges with clear examples of how competition participation can contribute to excellence in teaching and learning. Offering this information could stimulate greater interest in participation.
- Encourage curriculum development that incorporates WSC standards.

### 7 Benefits

Many benefits of participating in skills competitions, from local through to international, were identified in the research projects. It is clear that the main beneficiary in WSC is the competitor. The majority of competitors reported enhanced confidence, and the development of communication skills and time management capabilities. Career

development and progression opportunities, particularly those related to self-employment, networking and professional reputation, were also identified as important benefits.

The main gain from supporting the WSC for employers and industry related to exposure to new techniques or products, teamwork-related benefits, enhanced employee performance, good publicity and higher prestige, attracting more business clients and improvements in recruiting new talent.

The benefits to FE colleges revolved around Continuing Professional Development (CPD) opportunities for teaching staff, enhancing the quality of teaching and learning, contributing to positive publicity and reputation, accessing new equipment, networking and opening doors to other opportunities.

Importantly, Skills competitions have the potential to contribute to improving the attractiveness of VET by raising awareness about vocational occupations and helping young people understand that the vocational route can lead to a rewarding career. Skills Competitions, and the Skills Show in particular, show young people the possibilities available through the vocational route, and the opportunities on offer.

### 7.1 Recommendations

- There is publicity around WSC and The Skills Show in the lead up to and whilst these events are occurring. However, this publicity ebbs and flows and a more consistent approach is needed to make sustainable efforts to showcase the attractiveness of VET for young people. This is publicity not only for WorldSkills competitions but national, regional and local competitions, and The Skills Show. This could enhance the benefits of WorldSkills for all.
- Find a Future is working hard to promote the visits of school children and young people to the Skills Show in order to raise awareness of vocational occupations. Encouraging schools to visit their local FE college when local and regional competitions are occurring could also help to raise awareness not only amongst school children and young people but also amongst their teachers and parents.
- Encourage more regional competitions to reduce the 'high stakes' notion of skills competitions allowing the idea of mastery to develop, rather than pass or fail attitudes in young people.

# 8 The way forward: Research capacity

WSI has a long history of promoting and staging competitions and European Commission policy encourages skills competitions as a way to enhance the image of vocational education (for example, Bruges Communique, 2010). However, there has been little research on

WorldSkills competitions, and skills competitions in general. This suite of projects provides an actual research base to increase theoretical and practical understanding of vocational knowledge and skills development. It allows for an understanding of what does and does not work, and provides a platform for practical application of the research findings, for example, in terms of creating high quality workplace learning provision or how to ensure the benefits of WSC are more widely understood. The young people competing in WSC are high achieving, they can inspire and teach and be role models. Understanding their knowledge and skills development, and the people involved in this development, through high quality research allows us to begin to understand better how the aims of the Legacy projects can be achieved. These studies provide a research baseline for future research development.

More information on the DuVE suite of projects can be found here:

http://vocationalexcellence.education.ox.ac.uk

http://www.findafuture.org.uk/worldskills-uk-skills-competitions/research-and-development

Information on each project can be found using the following links:

Project 1: Modelling the Characteristics of Vocational Excellence

Project 2: Learning Environments to Develop Vocational Excellence

Project 3: Benefits of Developing Vocational Excellence

Project 4: FE College participation in WorldSkills

Project 5: WorldSkills Competitors and Entrepreneurship

Project 6: Training managers: benefits and barriers to WorldSkills UK participation