TOOLKIT

FOR THE PRACTICAL USE OF SKILLS COMPETITIONS IN VOCATIONAL EDUCATION

Erasmus+

world **skills**
Netherlands

1. INTRODUCTION

The Erasmus + KA2 project "X-factors" was initiated and conducted as a 'strategic partnership for the exchange of best practices' with the participation of WorldSkills Netherlands, WorldSkills UK, Hame University of Applied Science of Finland and HAN University of Applied Science in The Netherlands. The project started September 2017 and completed July 2020. The project's aim was to generate and share knowledge and practices regarding the actual and potential use of Skills Competitions (SC)[1]. The project's ambition was to initiate activities and produce tools that can be used to stimulate and support the practical use of Skills Competitions and its methods and instruments in vocational education.

In most EU member states, Skills Competitions are strongly related to, yet organized besides the VET-systems. Competition activities for students are often regarded by teachers and VET institutes as extra-curricular activities[2]. Further growth and development of national and international SC in Europe depends very much on the willingness, capabilities and enthusiasm of VET providing colleges and their teachers, as they form an important channel to stimulate, support and guide students to competition activities. Helping colleges and teachers to have a better understanding of the perspectives, possibilities and added value of SC in the overall quality of VET will strengthen the competitions over Europe and accelerate the use of the power of skills. Not only for those who participate in the competitions, but also for 'regular' VET-students. This can be done by using SC methods and instruments 'within' VET-curricula, assessments and exams. Thus, extra contributions can be made in the structural development of talents and excellence in VET.

In the X-factors project, research and good practices have been shared and discussed to determine if, and how, SC instruments, content and methods can be more integrated in VET. The project team reported their preliminary results in the document 'Igniting Education', identifying four major topics in which SC can be supported and add value at the same time. As a result:

1. SC activities are embedded in VET providing colleges,
2. SC activities, test projects and challenges and assessments are used in the development of curricula and the creation of education,
3. SC activities are used to provide teachers and trainers with extra pedagogical and didactic skills and new teaching and learning strategies,
4. National and international SC are used as a hub for further professional development of teachers and trainers.

The partnership valued these four topics to be relevant in every EU member state, and other countries around the world. The document was presented and discussed during the 2018 GA of WorldSkills International in Amsterdam[3]. The relevance was affirmed in this GA during several round table discussions organized by the project partners. In the round table discussion, the participants representing several SC-organizations raised

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[1] The WorldSkills movement (WS) brings together 80 countries to organise the biennial 'skills olympics'. National Skills Competitions are conducted by national WS bodies, cooperating with the world of business and VET-institutions. The WS-bodies are member of WorldSkills International and compete with their national teams every two year in a WorldSkills event, organised by one of the members. European countries are also member of WorldSkills Europe and compete during the EuroSkills event, also every two year. The WorldSkills movement drives a collective skills agenda to create economic benefit for nations, and increased ability for young people to be able to make career choices. In this toolkit, the Skills Competitions are betokened by the abbreviation SC.

[2] In Europe, vocational education and training is provided by schools or colleges, dependent on the designation used in the various VET and TVET systems. In this document we refer to (T)VET providers with the denotation 'colleges' or VET-providers. In the denotation 'VET' we also comprehend the technical VET.

[3] This document is available: http://worldskillsnetherlands.nl/documenten/WSNL_igniting_education_WEB.pdf.

similar issues of the SC advantages e.g. developing both technical and soft skills in students' and teachers' competences and, not forgetting, the collaboration with the working life. Therefore, the partnership was stimulated to further explore these topics, aiming to provide practical tools and tips for VET-providers, teachers and trainers in order to help them integrate and apply SC in their daily work and responsibilities and profit the power of skills as much as possible. In the current COVID-19 crisis, the importance of this can only be felt more strongly. New and great challenges occur worldwide and we face the need for strong vocational skills to properly absorb the economic and social consequences.

With this ambition, a toolkit has been produced as a tangible output of the X-factors project. It is based on shared documents, the exchange of resources, research, country audits, discussed topics and presumptions and identified good practices[4]. This toolkit can be used by VET colleges and their stakeholders, to initiate their own 'igniting education', applying and optimizing SC activities in their VET programs on a structural basis.

The concept 'ignition education' refers to the stimulation of VET students to excite their pride and passion for their profession. The underlying thought is that the 'fire starting' characteristics of Skills Competitions can (and should) well be used to improve (T)VET systems furthermore.
[4] *The case studies and contacts during the project were correct at the time of preparing this outcome. Some specifications might have altered over the past few months due to the current situation. The partnership has tried to adjust the information collected as much as possible.*

1.1. Reading guide

This toolkit consists of four parts:

Toolkit Part 1: Developing and embedding SC and related activities in VET organizations.

This part includes suggestions, guidelines and tools to embed SC activities and make them part of the core business, addressing board members, school leaders and department managers.

Toolkit Part 2: Using SC in the development of curricula and the creation of education in VET.

In this part tips, tricks and tools for curriculum development are included with a focus on the integration of SC test-projects in curriculum for educational staff members, developers and teachers.

Toolkit Part 3: Using SC in the pedagogical and didactic practice.

This part contains practical guidelines for teachers how to develop and use SC (inc. test projects, class competitions and assessments) in their teaching and learning strategy.

Toolkit Part 4: Using the national and international SC events and activities as a hub for the professional development of teachers and trainers.

This part includes guidelines for the use of a specific competence framework for teachers and suggestions to set up national and international exchange visits and training programs (i.e. using mobility funds of the EU Erasmus+ program). It also contains references to training material in the partnership countries to prepare teachers and trainers for their roles in national skills competition (for instance as a developer of test projects, trainer/coach activities, workshop manager or assessor).

The toolkit has been produced as a free downloadable reader. The four parts are connected and are best used in combination. But they can be used 'standalone' as well.

Each part of the toolkit is built with four elements:

a) **Introduction:** a brief description of major topics to address
b) **Pre-assumptions and considerations:** a short presentation of the mindset to encounter these topics
c) **Good practices and examples:** short overviews of examples from Finland, UK and NL in which activities to encounter the topics are brought into practice. Each example is presented with a summary, in which is pointed out to what degree the practice contributes to the realization of igniting education, the period and location in which activities were initiated, the stakeholders and actors involved, the steps taken, related tips and tricks and sources and references.
d) **Tools and tips:** overall recommendations to start your own activities and tools you can use to start and implement specific activities, thus practicing 'igniting education'.

TOOLKIT PART 1
DEVELOPING AND EMBEDDING SKILLS COMPETITION ACTIVITIES

a) Introduction

Many VET providers throughout Europe use national and international competitions as positive and strong learning pathways for their students. In the WorldSkills network, positive learning outcomes are continuously reported by students, and their mentors (teachers, trainers and parents).

SC are a strong resource in the overall development of education and VET, the development of skills excellence and the professional and personal shaping of students. In establishing this, two interdependent pathways can be recognized:

- the development of talent of all students and teachers in VET by applying specific methods and instruments from SC,
- the development of top expertise and skills excellence by high-end competitions using innovative test projects and challenges (on regional, national, European -EuroSkills- and global –WorldSkills- level).

In every country competition, activities in both pathways demands a lot of extra time, efforts and (extra) funding. A lot of colleges tend to regard the SC activities as a special addition to the curriculum and as stand-alone events. As a result, on a college level, teachers are often concerned about the extra time needed for preparation, training and participation of their students. This makes it difficult to further develop SC quantitatively and qualitatively. It blocks, in a way, the use of all benefits and options for quality improvement of VET within the colleges, and therefore also on a regional and national level.

A simple solution is to regard SC not as stand-alone events but as a structural part of the VET programs. On an organizational level, all activities regarding SC then become part of the daily activities and the college's core business.

In this perspective, colleges who already participate in SC and meet such difficulties, should reconsider their efforts and embed them properly in their strategy and organization, to use the powerful resource potentials as much as possible.

Colleges that are not yet participating in SC should do well to properly fit all possibilities for a solid embedding from the start and to take also in account the added value of SC-activities.

An important starting point is the college's vision and mission, in which the benefits of SC resound and the added value is recognized. This added value of SC, of course, is the most important 'driver' in participating in SC and embedding SC activities in the college organization.

b) Pre-assumptions and considerations

In general, SC bridges local and regional VET institutions and the best national and global vocational practices. SC showcase vocational excellence and elevate the status of vocational education. They provide a unique opportunity to give businesses a competitive advantage through adding value to VET, including apprenticeship programs, leading to a stronger skills base of students and a strong connection of the world of business and work with VET providers.

SC can also transform learning outcomes, supporting innovations in teaching and assessment practices across the curriculum. By embedding competition activity into core teaching and learning activities, vocational education and training providers can ensure their apprentices, students and staff to raise standards, improve outcomes and enhance engagement.

Embedding SC activities is a matter of perception and recognition of added value for VET-providers in their students and stakeholders interest. By using SC test projects, special assignments and/or challenges in day-to-day education and using SC events effectively, every college can contribute to specific educational goals like:

- the implementation of 21st century skills,
- taking into account how Education 4.0 will also enable more personalised learning pathways to the students,
- effective career motivation, orientation and counselling,
- building continuous learning paths,
- optimizing alignment between education and labor market,
- using high quality means of assessment and examination, e.g. competence based assessment,
- professional development of teachers (for example by using training programs to become experts, assessors or counsellors during skills competitions and using the national and international events as a professional network).

Vocational education is an active actor in a society. It´s not an isolated institution, but instead it follows the global development closely and renews its working methods constantly. SC reflect this interaction and skills' development. Competitions in which VET-students can show their vocational and personal skills are a perfect platform to expose and benchmark learning outcomes, providing nations and colleges to improve their standards.

In this perspective, SC activities in VET directly contribute to the strengths and opportunities of national economies. Acquiring skills and achieving skills excellence is determined not just through delivering an adequate and developing skill-set, but it needs also the resilience, agility and creative mind-set that are vital for driving higher performance at work and the capability to meet rapid changes in technology and disruptive innovations. It also responds to crises like the 2008/2009 financial 'melt-down' and, as we mentioned in our introduction, the COVID 19 pandemic, characterized by the IMF as the Great Lockdown, as we are facing today.
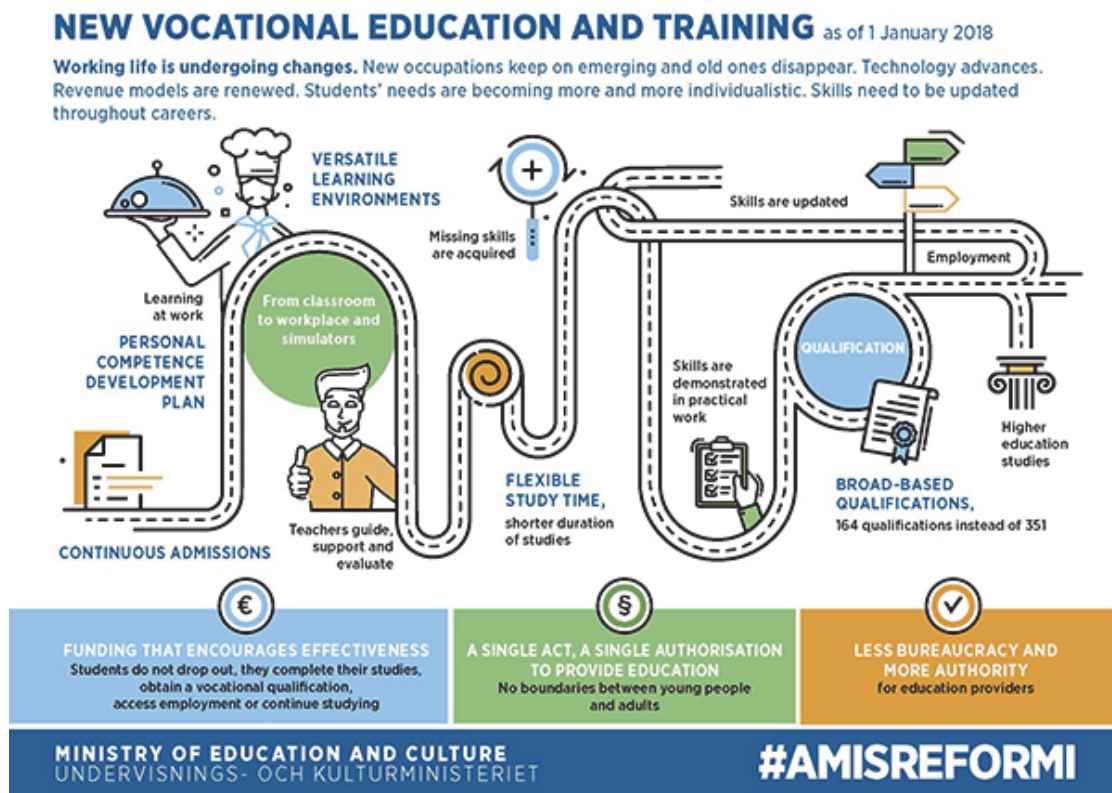
Neil Bentley-Gockmann, CEO of WorldSkills UK, recently pointed out the extra relevance for SC-activities in this special COVID 19 context. He highlights how young people's skills are vital to recovering from this recession. SC helps to continue to develop their skillset and mind-set to the highest possible levels so they can build their confidence and potential. They also help to provide advice and guidance for thousands of young people in colleges to help them make more informed choices about their next steps. Moreover, SC connect the expertise of established networks of colleges, training providers and employers, sector skills bodies and organisations. It joins forces and can be used to address specific challenges arising in the recovery of the COVID-19 crisis.

To promote all benefits of SC participation and activities among VET-providers who are not yet active, they should be put under a magnifying glass and promoted. Country audits by the X-factors´ project partners show that each country has a wide range of active VET-providers, who are supporting their students in individual

learning pathways through SC. At the same time there are a lot of VET-providers, who have no connection to skills competitions at all. In NL, the majority of the 56 VET-providers participate in SC and show growing interest to embed these activities. In Finland there are 123 VET-providers (statistics 2018) and out of these approximately 70 VET-providers are either actively or randomly sending students to skills competitions. In the UK there are approximately 400 organizations sending students to regional heats, but there remain a number of colleges and many independent training organizations and employers that do not, but who could benefit. One might say that the interest in SC and eager to participate varies in all countries. This seems to depend to the degree which vision and policy on a national level is expressed. To demonstrate this, we have a closer look in what perspective SC activities are conducted in Finland, UK and The Netherlands.

Finland
In Finland in vocational education and training all students will have their own personalization plan for own studies. This type of planning gives several options how to implement studies. One option is to choose skills competition as a learning pathway.

NEW VOCATIONAL EDUCATION AND TRAINING as of 1 January 2018

Working life is undergoing changes. New occupations keep on emerging and old ones disappear. Technology advances. Revenue models are renewed. Students' needs are becoming more and more individualistic. Skills need to be updated throughout careers.

VERSATILE LEARNING ENVIRONMENTS

Missing skills are acquired

Skills are updated

Employment

Learning at work

From classroom to workplace and simulators

PERSONAL COMPETENCE DEVELOPMENT PLAN

QUALIFICATION

Skills are demonstrated in practical work

Higher education studies

FLEXIBLE STUDY TIME, shorter duration of studies

BROAD-BASED QUALIFICATIONS, 164 qualifications instead of 351

CONTINUOUS ADMISSIONS

Teachers guide, support and evaluate

FUNDING THAT ENCOURAGES EFFECTIVENESS
Students do not drop out, they complete their studies, obtain a vocational qualification, access employment or continue studying

A SINGLE ACT, A SINGLE AUTHORISATION TO PROVIDE EDUCATION
No boundaries between young people and adults

LESS BUREAUCRACY AND MORE AUTHORITY
for education providers

MINISTRY OF EDUCATION AND CULTURE
UNDERVISNINGS- OCH KULTURMINISTERIET

#AMISREFORMI

The Ministry of Education and Culture publication Finnish education in a nutshell says following - Skills competitions encourage both the young and adults to consider VET as a viable, attractive option. They are also an important tool for developing and benchmarking VET. Finland participates in WorldSkills, EuroSkills and Abilympics. Also, a national skills competition called Taitaja is organised annually.

Participating in skills competitions is an excellent way to develop the expertise of the personnel of the education organizers, offer students individual learning paths and develop the operational activities of the entire organization.

Teachers at a vocational institution have a variety of possibilities for developing their work while making progress on their vocational career path. The focus of their interest may be either international or national activities. The aim, however, is to develop their competence through pursuing pedagogical training and

developing the content of teaching. This perspective of life-long learning is guiding a young student towards vocational skills competition activities. http://urn.fi/URN:ISBN:978-951-784-613-4%20(PDF)

As described in the table below how teachers themselves already recognize and describe the benefits of skills competition[5].
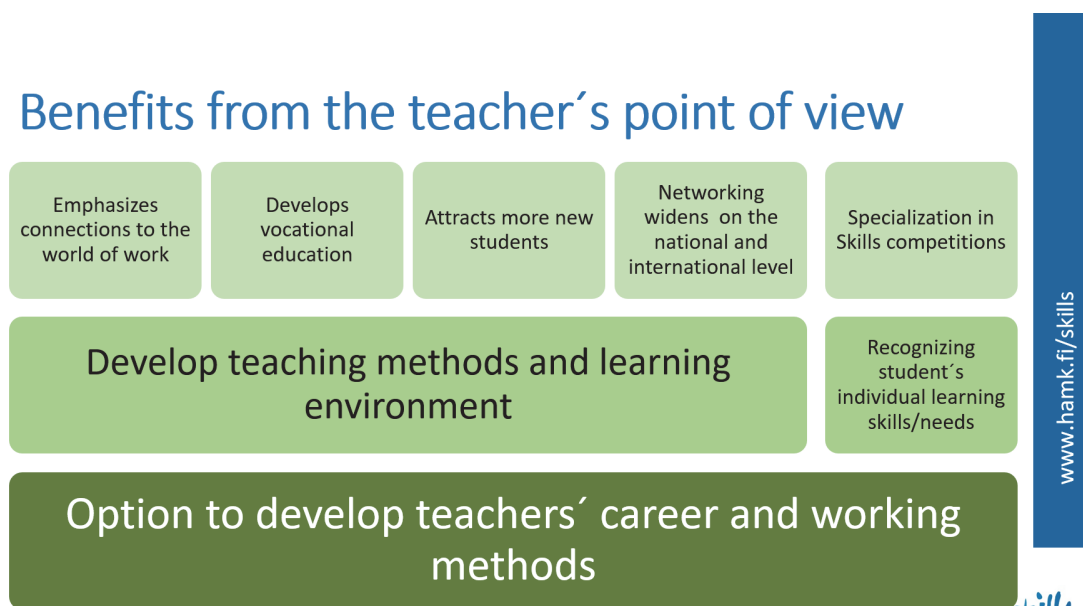
United Kingdom
In all four of the nations that make up the UK (England, Wales, Scotland, and Northern Ireland), skills are delivered through a range of organizations within the technical and vocational education and training (TVET) sector.

These include:

- schools: deliver a range of core skills and vocational courses, particularly for learners aged 14 to 18, in addition to their provision of academic courses
- Further education colleges: these institutions are at the heart of the TVET sector in the UK. They deliver all kinds of skills to learners from the age of 14.
- Universities: alongside academic and higher-level vocational and technical skills, universities also deliver core skills and some have a focus on enterprise and employability. Learners usually start their university education from the age of 18.
- Private training providers: deliver a range of skills but usually with a focus on the vocationally specific elements, in particular through apprenticeships. They often deliver employability skills through this focus. These offer courses for learners over the age of 16.
- Employers: Many employers provide on and off the job training opportunities, often through apprenticeships. Training is normally directly related to the job role and the needs of the organisation. Good employers also provide their employees with the opportunity to update and enhance their skills as part of their job role.

In this UK skills system, SC in the UK are positioned as a way of improving retention, performance and progression of young people taking part in technical and vocational education, by increasing their levels of

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[5] This information is collected by FASE, Finland, in the yearly questionnaire to the teachers who bring their students to the national skills competition Taitaja.

technical skills and enabling them to develop a range of transferable employability skills. Competitions are also positioned as a valuable opportunity for CPD for staff and as a mechanism for cross organizational standards raising and quality improvement which can also benefit the external inspection regime ('Ofsted'). They are also a route to access educational funds (for example as part of apprenticeship programs). In addition they provide an opportunity for participating educational organizations and employers to build employability skills, raise organizations' profile, aid recruitment, to celebrate achievements and to network locally, nationally and internationally. Alongside this, Competitions are used to motivate and inform young people about technical and vocational skill and career pathways and to encourage take up of these.

The positioning above focusses on England, there are slight variations in Northern Ireland, Scotland and Wales as educational systems and processes differ.

WorldSkills UK is focused on improving the standards and prestige of apprenticeships and technical education, to inspire more young people to consider these as career routes and get off to a better start in work and life. This is practiced through experiential careers advice, role modelling and engaging thousands of young people in SC across the UK to the highest possible national standards. The best in the UK go into an accelerated development program to compete with the best in the rest of the world.

SC provide a unique opportunity to give businesses a competitive advantage through adding value to apprenticeship programs and leading to a stronger skills base. New apprenticeship policies and the move to standards with a greater focus on training and development provide an extra drive for the use of SC.

Competition activities in the UK currently includes:

- Local competitions, in which 400 organizations and c. 12,000 young people participate
- Registrations in regional heats, with 3250 registrations from over 320 organizations such as colleges, training providers and employers – about 65 competitions managed by 23 Competition Organizing Partners
- National finals with 500 finalists from 200 organizations such as colleges, independent training organizations, employers and other organizations – also in 65 competitions
- Squad UK – usually c. 100 young people who train for international competition and compete for a place in the Team of circa 35 young people who compete for the UK in 30 skill areas.

In conducting the SC activities, WSUK addresses key challenges in the UK:

- Strengthen the evidence base that demonstrates the far reaching impact of competition in education and skills development and provides evidence and a road map to mainstream competition activity within the UK education and skills system
- Improve the reach of competitions across and within organisations – e.g. by providing tested and standards based tools that will add value to education and skills curricula in colleges, employers and training providers
- Further strengthen the competition methodologies and so help raise the performance of learners and apprentices in technical and vocational learning
- Help demonstrate the difference competing makes e.g. data, benchmarking with other countries – highlighting the value of competitions, international and national, and making competition methodologies relevant and accessible
- Support policy developments by bringing wider experience and advisory base to discussions – raising the profile and reputation of competition activities
- Encourage European partnerships – bringing benchmarks and shared learning that can complement college and employer European (and wider) partnerships
- Ultimately support WSUK aims of changing the national conversation so that technical careers and apprenticeships are recognised as prestigious routes for all young people

The Netherlands

In The Netherlands, SC are conducted in prevocational secondary education (pupils aged 12-16, in total 220,000) and the senior secondary VET (students aged 16-20, in total 508,000).

The prevocational secondary education (650 schools) has several pathways and consists of:

VMBO-bb:	basic learning path (NLQF level 1)
Duration:	4 years (age 12-16)
Type of education:	preparatory vocational secondary education.
Diploma:	gives access to MBO 2.

VMBO-kb, VMBO-gl and VMBO-tl (VMBO-tl is more commonly referred to as VMBO-T): mixed learning path (more theoretical, NLQF level 2)

Duration:	4 years.
Type of education:	preparatory general and vocational secondary education.
Diploma:	access to employment and/or MBO or HAVO (VMBO T)

The senior secondary VET (MBO) which is provided by 65 colleges, has the following courses:

MBO 1:	entrance, NLQF level 1 (1 year, qualifies for access to MBO 2)
MBO 2:	basis qualification, NLQF level 2 (1-2 years, qualifies for employment)
MBO 3:	qualifying, NLQF level 3 (2-3 years, also for employment)
MBO 4:	qualifying, NLQF level 4 (4 years, qualifies for employment and/or access to Associate's Degree or HBO bachelor programs).

The MBO has 2 different learning paths:

BOL:	60% in college and 40% in internships (78% of all VET students)
BBL:	60% apprenticeship in company and 40 % in college (22% of all VET students)

The Dutch VET trains over 40% of the Dutch labour force.

In the prevocational secondary education, SC are conducted as 'Skills Talents' with the following characteristics:

- Pre-Vet students (14-16y) (enrolment '18/'19 10.000 pupils)
- 10 competitions based on pre-vet curricula
- Team competition; three persons per team
- Yearly updated test projects serving also as a practice for the practical exam
- School selection and provincial competitions leading to national finals
- National final in March with around 300 finalists
- 10 National Champions and one 'overall' winning province team

The SC-activities for VET-students (including apprentices) in level 3/4 are conducted as 'Skills Heroes'. The enrolments in 2018/2019 was 20,000 students. In short:

- Nearly all Dutch VET-colleges participate (56 schools).
- Approx. 60 different Competitions based on NQF.
- Mostly individual Competitions.
- Updated and relevant test projects.
- School rounds leading to qualifications for National final.
- National final in March; 500 finalists.
- Possibility continuation to World- or EuroSkills.

A substantial growth was achieved since 2014, with extra funding for VET Colleges in order to develop excellence programs. With this funding, VET colleges started or increased students' attendances to the Skills Heroes competition.

Skills Heroes competition structure

Participation on international level. Private/public partnership	WorldSkills / EuroSkills
Test project dev. & organisation of skills competitions by educational institutes supported by private sector.	National finals / Qualification for National finals
Coordination, production & quality control by Skills NL.	School competitions for all students

Subsequently and in addition to the regular SC-activities, in 2014 WSNL started to promote the structural use of SC in Dutch VET, with a recognition of two interdependent pathways:

- the development of talent of all students and teachers in VET by applying specific methods and instruments,
- the development of top expertise and skills excellence by high-end competitions using innovative assignments and challenges.

c) Good practices and examples

Good Practice 1: Business model SC in the UK for Centers of Excellence (UK)

Summary

WorldSkills UK has created a new business model that is taking learning and experience from international competitions and bring these back into the UK skills systems including Further Education colleges and other training organizations to raise standards and performance, working towards world-class excellence. This is being achieved through recruiting and developing UK experts, enabling them to deliver impactful and innovative Professional Workforce Development for college staff and trainers, who will then cascade the skills and knowledge across their organizations and networks. A number of key elements of the X-Factors project, including the Igniting Education analysis and report, are informing the pilot

Particular strengths to establish igniting education in this practice are:

- Framework for professional development of teaching staff
- Indications of good teaching methods and practice
- Approaches to consider in embedding competitions in the curriculum
- Advice on resource development e.g. assessments, assignments
- Building networks of excellence
- Using competitions to extend relationships with employers and industry
- Developing systems to support embedded competition practice
- Building organization wide strategies and support

Period/time, location

- 2020-23 (pilot period)
- England and further developments across UK

Stakeholders/actors involved

This practice has a funding co investor: NCFE

Steps taken

Background

WorldSkills UK's Productivity Lab's research in partnership with Oxford University ("Good people in a flawed system: the challenges of mainstreaming excellence in technical education"), highlighted that WorldSkills UK, with its knowledge and expertise, is in a unique position to enhance UK skills systems, and recommended the establishment of a Centre of Excellence related to technical and vocational skills.

This recommendation supports WorldSkills UK's ambition to mainstream excellence across the UK, creating a world-class education system and drive up standards. As a result, WorldSkills UK is partnering with a leading awarding body to develop and deliver the Centre of Excellence in 2020.

What is it?

Leveraging global platform and insights gained by WSUK's Experts, the Centre of Excellence will work with educational institutions across the UK over a three-year period, including those in hard to reach areas, to roll out world-class expertise to educators, work across the education sector to influence standards and train Team UK. This team comprises experts in technical skills, experienced in educational and industry practice, and in developing competitors to participate at the highest levels in WorldSkills competition.

Under the Centre of Excellence, WSUK will recruit Skills Coaches (UK experts) to deliver the program. WorldSkills UK have selected colleges to join the program, where they will benefit from a Skills Coach working with them to upskill tutors and teach to WorldSkills UK standards. This will equip staff to introduce WorldSkills techniques and standards in their curricula and teaching, so that their learners perform to a higher level. They will also be able to cascade their learning to other educators in their organization and networks.

Timescales

After a period of research and development, and identifying and securing an investment partner, Skills Coaches start work in summer 2020. The project roll-out will gain momentum in the autumn with CPD starting early in 2021 . The pilot will run to the end of the 2022-23 academic year. It will be fully evaluated and findings disseminated widely. An external evaluation partner is advising on the approach to assessing impact.

Proposed benefits to learners, employers and educational organizations (especially Further Education colleges) are:

- • Learners aspiring for excellence
- Increased attainment
- Increased confidence and aspiration
- Pathway into employment, with increased progression
- • World-class educators
- High quality development, world-class expertise and know-how
- High performing, industry-relevant skills
- Career progression/earning potential
- • Gold standard organisations
- Staff retention, satisfaction and performance
- Learner recruitment, retention and achievement
- Contribution to teaching quality and quality inspection rating

This project will also support many of WorldSkills UK's objectives, which include:

- • Mainstreaming world-class excellence
- • Creating a skilled, diverse pipeline of competitors
- • Raising WSUK's profile
- • Establishing WSUK as the organisation to improve skills systems
- • Supporting the diversification of income
- • Augmenting the development of Team UK

Resource and reference

https://www.worldskillsuk.org/accelerate/worldskills-uk-centre-of-excellence

Centreofexcellence@worldskillsuk.org

Summary

Each year, colleges from across Greater Manchester compete in over 50 skills to develop and celebrate the talent of young people studying in the region. The annual event sees over 700 students participate in competitions hosted by the 9 colleges involved.

Particular strengths in this practice are:

- • A regional hub to showcase the skills of students and their skills excellence
- • An instrument to facilitate dialogue in schools and with their stakeholders to encourage future skills and craftsmanship, resulting in adequate SC test pilots

Period/time, location

- • Since 2017
- • Greater Manchester, England

Stakeholders/actors involved

- • The Greater Manchester Colleges Group: a partnership of 9 Further Education colleges, covering all boroughs across Greater Manchester.
- • Greater Manchester Combined Authority: the umbrella organisation for the ten Greater Manchester councils and Mayor

Steps taken

The inter-college competitions were developed by the Greater Manchester principals' group and the Chief Executive of Trafford Council (acting as the skills lead for Greater Manchester Combined Authority) as a strategy to give students an outstanding learning experience.

Jackie Moores, principal at Tameside College, said: "Competitions are really important for students to take part in as it gives them experience outside the classroom and teaches them about working under pressure"

The competitions are a collaborative event which is managed by a steering group with representatives from the colleges involved and backed by the principals. Drawing on the WorldSkills model the competitions involve a time-focused task developed by WorldSkills or industry, a scoring framework, independent judges and a celebration of achievement.

Organization is the key in this practice. A steering group governs the activity across the colleges, chaired by Joan Scott, Assistant Principal at Trafford College, to drive the activity forward, ensure that messages are communicated, and the events are coordinated.

The steering group's role involves:

- • Identifying which skills should run in the competitions - only skills that are taught in most of the colleges are adopted into the event.
- • Providing advice and support to staff who have not been involved in competitions before to help them prepare or host an effective competition.
- • Identifying which colleges are best placed to host a competition based on factors such as how many times they have hosted before and facilities.

- Setting out the process and rules for the competition, including the arrangements to collect scores and provide prizes.
- Promoting the event, securing buy-in and helping to get suppliers to sponsor a competition.

The colleges' engagement with competitions have deepened over the years as more skills have come on board and more staff have witnessed the benefits of competition. A culture has emerged of an expectation of participation in competitions.

Tips and tricks related to this good practice

Lisa Radcliffe, Senior Lecturer at Trafford College, said: "The nature of qualification units means that they're easy to pick apart and embed competition activities into. When students are given realistic experiences, they can see their end goal and they're interested. Students learn additional workplace tasks not because they're being prepped for a competition but because they're important. I feel competitions covers all bases"

Resources/references

Joan Scott, Assistant Principal Trafford College (Joan.Scott@tcg.ac.uk)

Summary

This practice showcases the importance of leadership and management in the TVET system - views on what needs to be in place at leadership and management level to embed skills competitions in a TVET organization.

Establishing 'igniting education' and the effective use of SC depends very much of the right support and engagement of leaders and senior managers. This senior support, including personal commitment, is crucial for the embedding and anchoring skills competitions within educational practice and to challenging perceptions and approaches that may need to be overcome to maximize the value of skills competitions. This supports many of the assumptions in the X-factor's project for successful competition, especially the importance of anchoring competition/practice across an organization.

Period/time, location

Current

Stakeholders/actors involved

Advice from principals and college directors in the UK.

Steps taken

See below

Tips and tricks related to this good practice

Senior teams suggest that the following are in place so that competition practice can be embedded in an organization so that more teachers and learners can benefit and performance improvements secured.

- Senior teams suggest that the following are in place so that competition practice can be embedded in an organization so that more teachers and learners can benefit and performance improvements secured.
- Commitment from Principal/Chief Executive
- Links with the board, for example regular reports, allocation of a link governor/trustee
- Nominated senior manager role to lead skills competitions, with the time, experience and passion
- A clear strategy and plan, linked with the organization's strategic direction and with specific targets
- Competitions embedded within the organization's quality assurance framework and strategy – evidence collated, and included in inspection reports
- Expertise and advocacy to work across a sector and region/local area to promote and influence further interest and participation
- A discrete budget for skills competition activity
- A network of staff champions within the TVET organization such as leads at department level, to help build a collective ethos and culture
- Celebration and communication to raise profile and recognize success – with teachers and learners.
- Evidence promoted of how activities have supported learners and improved performance and outcomes.
- Competitions embedded in teacher induction and CPD, for example, included as a core element at each level of training and development
- Activity started with a few departments to develop a competition culture and achieve some quick wins; growth from there

- Resources developed used and shared, such as case studies and check lists.

Resources/references

https://www.worldskillsuk.org

JillGoddard@worldskillsuk.org

Summary

The Inspiring Skills Excellence project in Wales has worked since 2016 with employers to experience the benefits and get more involved in SC. It builds closer relationships between colleges and employers through competitions, supporting curriculum development to meet skills needs, enhancing professional development of teaching staff, enabling them to develop and deliver curricula to match workplaces and improving the management and leadership of competition related activities. It has shown how national and international competitions support cooperation between TVET and business. Successes have included oversubscription for places on the programme and past programme participants now having employees training for international competition.

Period/time, location

Annually, current

Stakeholders/actors involved

- Inspiring Skills Excellence project team in Wales
- FE colleges
- National and regional employers

Steps taken

The project involves colleges and training organisations bringing employers to join the program (Tata, Valero, GE Avionics, Magellan, NHS Wales and British Airways). The program has been refined over time and includes:

- Selection of employers by project staff who are skills professionalism, based on those considered likely to engage more in competitions as a result of taking part - places were oversubscribed.
- Presentations from colleges, employers and young people to develop an understanding of skills competitions.
- Tailored tours of the competition events, including meeting skills experts who explain how competitions work and the benefits gained
- Networking with other employers, skills experts, competition judges and trainers
- Follow up support for the employers to become actively involved
- Involvement of employers in celebration and awards events
- Recognition of employers who have become involved in the programme

Tips and tricks related to this good practice

- A high quality and well planned programme
- Including a mix of strategic and practical elements
- Engagement of experts and professionals
- Being open about the costs and benefits of being involved in competitions.

Resources/references

Paul Evans, ISEW Project Director, Paul2.Evans@colegsirgar.ac.uk

d) Tools and tips

Overall questions concerning the embedding of SC activities in the school's strategy are:

- In what way and with what purpose can Skills competitions be of added value?
- How can SC-activities be part of the schools strategy?
- How can management make their school agree in their vision and plans that it adds value for all students to up to excellence?

The following tools and tips may be of help answering such questions.

Tool 1: The benefit summary

SC activities can benefit everyone: learners, tutors, providers and employers. By raising standards, improving outcomes and enhancing engagement. This first tool summarizes all those benefits, to show the added value of SC-activities in national or international competitions. It sums up the added value and you can use it for discussions within your college to get involved. It is a stepping stone to discuss further ideas:

- how to initiate SC-activities
- how to embed those activities in the college curricula
- how to make more use of it in the practice of vocational education

Benefits for learners:

- Improves personal, technical and employability skills
- More likely to complete their courses and achieve qualification goals
- Has a positive effect on their ambition and aspirations for their future career
- Inspires them to complete higher-level training
- Greater scope for creativity in teaching, training and learning

Benefits for tutors & trainers

- Greater scope for creativity in teaching, training and learning techniques
- Opportunities to benchmark and learn from others
- Great for continuing professional development by extending pedagogical skills and knowledge
- Personal recognition and development by great opportunities to become competition judges, coaches and experts

Benefits for colleges & training providers

- Supports the move from competence to excellence
- Provides evidence for inspections
- Delivering skills that underpin economic competitiveness
- National and international benchmarking and experience

Tool 2: The SC myth buster

Discussions regarding (the benefits of) SC activities usually evoke a lot of 'but's' and 'if's'. There are a lot of myths to overcome. This myth buster will help you to diminish objections and rejections and might convince your colleagues to support participation in and the use of SC activities.

Myth 1: Our staff will be involved in a lot of extra work

- Having competition activity within the curriculum and its delivery is not necessarily about doing anything extra. Many aspects of the curriculum can be delivered or enhanced by internal and external competitions.
- Setting up a test project, an assignment or SC-activity may take some time initially, but it may make the job easier in the longer term as learners' motivation and skills increase. Support from colleagues with competition experience helps to reduce the set-up time.
- Test projects and assignments may well be provided by your national WorldSkills organization.
- Test projects and assessments from competitions can be used as training material for formal exams and in some cases as an alternative for assessment- and examination programs.

Myth 2: Some of our learners are uncomfortable about competing

- Tutors need to be sensitive to learners who initially find competitions uncomfortable and be ready to provide support. The learners should be introduced to the concept gradually and taught to cope with the pressure and learn from their performance. Classroom competitions help hugely with confidence building.
- Take in consideration that many youngsters are used to competitiveness and feel an urge to distinguish.
- Competing should be approached as a provider of feedback and reflection and a possible road to success (which can be a medal, but actually is a solid route for development).
- Competition is in many ways part of society, not only in many talent contests we all like to watch on television but also in our careers.
- Competitiveness should be handled from the positive perspective of striving for the best. In this perspective participation and learning experiences are much more important than winning.
- A Level 3 BTEC IT Systems Support learner who entered a WorldSkills UK competition said "I used to be shy and didn't talk a lot. Now I feel free to talk to new people."

Myth 3: Competitions cost a lot: this is spending money on the few

- Informal or even formal use of competition activity as a teaching, training and learning tool should not require extra budget and can benefit all learners.
- Competition activity at higher levels does require more coaching, practice and equipment but some providers may fund this partly from existing resources if they judge it to be a good way of furthering the skills of learners and success rates. Others proactively seek extra sources of funding or support, notably from employers.
- It is better to focus on investments instead of 'costs', which will definitely has a solid 'return on investment' in acknowledgement of students, their teachers, the facilitating college, supporting enterprises and proud parents and bosses.
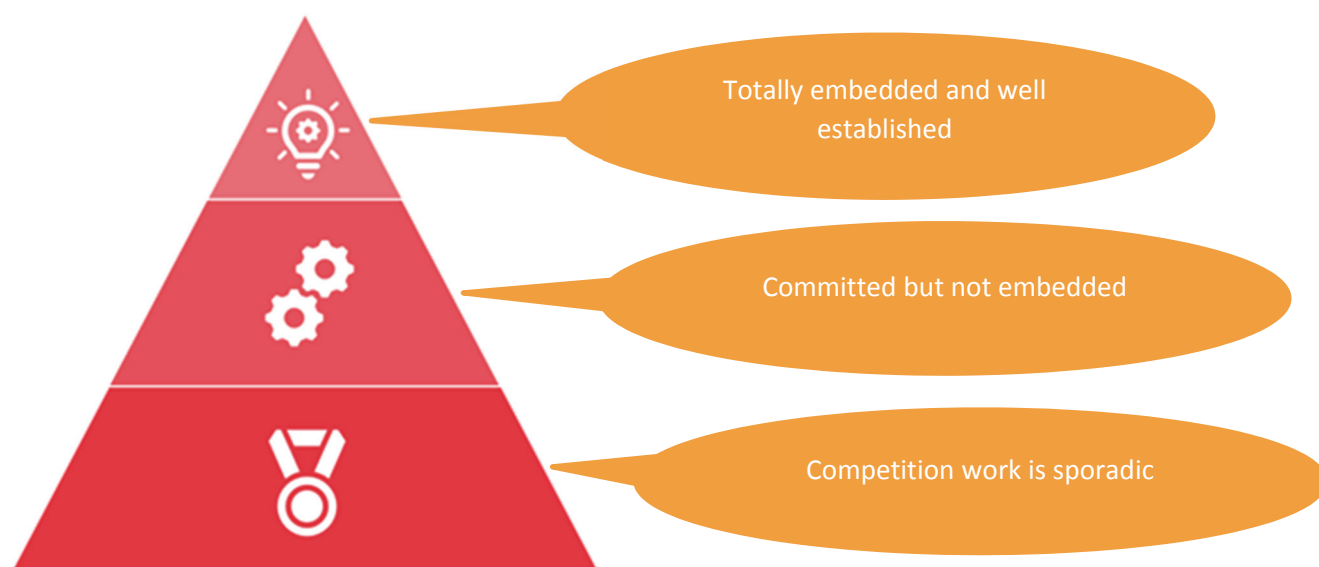
Myth 4: Competitions are elitist and damaging

- In informal and formal competition activity tutors need to develop learners' capacity to learn from their mistakes and critically evaluate what they need to do to improve and succeed and competitions can help them to do this.
- If handled properly, SC activities can promote equality and help to overcome differences between students. Teambuilding and peer learning should be regarded as part of SC activities.
- On the national and international level, finalists and members of participating national teams often stay close in the rest of their lives, having shared once in a lifetime common learning experiences and the glamour of great events. This sentiment can also be emphasized at class- and college level.
- Many colleges start running local competitions for foundation, minor level learners to help them gain confidence and encourage competition activity.

Tool 3: The SC embedding benchmark

In general, three models of embedding competitions can be found in further education and skills provider organizations in a process of sporadic activities to total embedded. Each model has its own key features. You can use this overview to benchmark your own college and determine what your position is, as a stepping stone to align a process of further development and embedding.

Totally embedded and established	Committed but not embedded	Competition work is sporadic
•There is leadership and active commitment from the chief executive/principal and governors. •Performance in competitions is used to inform the organization's benchmarking processes. •Quality improvement and self-assessment processes explicitly include competition activity. •Competition activity is inclusive and is a feature of all learning programmes for young people. •Commitment to skills competition activity is visible in mission and strategic plan, all relevant policy documents, schemes of work and marketing activity. •Competition activity is planned, and formal competition work is aligned with major competition cycles, such as WorldSkills.	•Commitment from principal/chief executive is periodic. •There is commitment to competition work in some policy documents, but it does not run through all documentation. •Big wins are celebrated but opportunities for publicity are not capitalized on. •Evidence of the impact of competition activity on learner performance is not routinely collected. •There is some scepticism among senior team and staff who find it hard to prioritize competition activity. •There is a small budget for competition activity but the system for gaining access to it is not clear.	•Competitions are brought to the attention of the principal/ chief executive just before a major competition or if a team or individual has been successful. •Activity is run by enthusiasts who spot likely winners and coach them exclusively in their own time. •Competition commitments often get in the way of routine duties. •There is no budget for competition activity and funds are sought on a 'special case' basis. •There is little dissemination of the practice developed through competition activity. •When an enthusiastic member of staff leaves all competition activity in that area ceases.

Tool 4: Roadmap for your SC strategy

Using SC as a strategic instrument in college should start with considerations and decisions to take part in SC-activities and/or to embed SC-activities that are already conducted. In doing so, this tool supports a roadmap to help you to outline and specify a competition policy and activities:

Step 1: Considerate (two alternatives)
1.1. Considerate (in case your organization has not yet any experience in SC-activities):
- Notice all benefits and potentials of SC-activities (for example, visit www.worldskills.org or www.worldskillseurope.org
- Get an impression of SC by consulting the WorldSkills organization in your country
- Take a closer look to existing activities in your country or region
- Visit some local heats or national finals
- Notice the learning experiences of participating students
- Assess the added value SC could have in your organization's vision and mission
- Explicit your ambitions and purposes:
    o would you like to participate in existing SC-activities?
    o do you prefer to set up your own (school) competition?
    o do you want to use specific elements in your organization's strategy?
    o do you like to apply all possibilities?
- Share your findings with the key actors in your organization

1.2 Considerate (in case your organization already participates in SC activities)
- Review your current activities in your organization's strategy perspective
- Explicit the noticeable added value for your students, teachers, management and stakeholders
- Check possible misfits in terms of investments (time, personnel, facilities)
- Assess possibilities to add value from special SC activities into learning strategies
- Search for improvements by embedding SC activities in regular school activities

Step 2: Getting started:
- Set up a working group to elaborate your strategy
- Clarify specific aims and objectives of your strategy
- Allocate resources and budget to support SC initiatives
- Draw up a multi-year budget to strengthen initiates and to plan growth in SC activities
- Establish clear accountability and reporting systems
- Establish competitions coordination roles

Step 3: Making progress:
- Review current SC activity
- Assess the extent of (or possibilities for) embedding SC activities in 'regular' teaching and learning
- Identify relevant competitions to match curriculum offer and gaps
- Secure buy-in from or alignment with all curriculum areas
- Encourage development of internal competitions (class level)

Step 4: Embedding an ethos of competition:
- Encourage staff to develop higher level skills
- Introduce benchmarks for competition engagement
- Align competition cycles to curriculum as far as possible

- Provide opportunities for staff, students and apprentices to experience competitions

Step 5: Moving forward:
- Use competition for marketing and showcasing the organisation
- Build inclusivity and equality opportunities into your quality improvement strategy
- Plan celebration of participation

Step 6: Moving on:
- Systematically collect competition participation data and align with KPIs
- Develop innovative practice using competition activities for ongoing improvements to the quality of teaching and learning

Step 7: Developing commitment:
- Be convinced of value of competitions as a tool for quality improvement in your teaching and learning strategy
- Clarify vision and role of WorldSkills UK Competition activity
- Embed in mission, corporate strategy and operational plans
- Communicate to all

This roadmap can be used cyclical each year to refine and update your SC strategy and policy, regardless the extent to which your organization already participates in SC activities. It helps to optimize your efforts and return on your investments.

Tool 5: The SC strategy checklist

To develop your (current or new) SC policy, you can use this tool to review your position and activities periodically, for example at the end of every school year. This will help you to get a clear sight upon the degree to which your SC strategy and activities are embedded in your school or college, and to what extent improvements could or should be initiated.

	In place:		
	Fully	Partly	Not
There is a clear vision upon the way our college should use competition activity			
There is explicit commitment to this vision on the part of the chief executive, governors and senior managers			
competition activity is reported on and discussed at governing body, SMT and departmental meetings			
Performance in national competition is used to inform benchmarking processes			
Quality improvement and self-assessment processes include competition activity			
Developing staff skills and training is linked to competition activity			
Commitment to competition activity is explicit in the mission, strategy and other policy documentation			
The budget for supporting involvement in competition is set at a realistic level			
Employers are involved in supporting learners' in competition activity			
Employers are involved in sponsoring (cash or VIK) our local competitions			
Competition activity is included at the early stages of learning programmes for young people			
Competition activity is planned within overall learning programmes			
Competition activity is aligned to major national and international competition cycles			
Support for competition activity is coordinated across the organisation			
Competition advocates and ambassadors are in place across all vocational areas			
Publicity relating to competition activity is capitalised upon			
Learners and staff are encouraged to participate in competition activities			
Evidence of the impact of participation on learner retention and achievement is routinely collected			
Mechanisms are in place for sharing good practice in embedding competition activity into teaching and learning			
Examples of competition-related delivery strategies are disseminated for others to incorporate into their delivery			
Specific reference to competition activity is included within stakeholder feedback for learners, employers, staff wellbeing surveys, etc.			

Tool 6: Design tool to build your own pre-competition activities

Based on your SC strategy you broadly can chose to act in a range of two pathways with different ambitions:

- Developing talents of all students and teachers in VET by using standards of vocational excellence and applying specific methods and instruments from SC
- Developing top expertise and skills excellence in participation in national SC –and possibly providing your students to enter international SC, such as EuroSkills and WorldSkills.

For both pathways, we recommend to establish and facilitate your own SC-activities as a kickstarter. This kickstarter will help you to outline special activities for developing top vocational expertise, it may lead to registering to enter apprentices and students to take part in official competitions, or, in case you aim for the two pathways at the same time, it will support both.

In doing so, it will be helpful to allow students to practice, test and challenge their technical and mental skills by establishing and using pre-competition activity. This could involve preparing apprentices or students for SC qualifying rounds and involving your wider organization. It can start as a small, and yet to expand to a bigger, competition within your college, training provider or business, or between multiple organizations. This is also a great way of involving the entire organization. It will activate students and teachers in class, from the start. In doing so, you build your own platform for outstanding learning experiences and a stepping stone for official SC activities or, in case you already participate in official SC activities, solid preparation and training paths for your competitors.

These steps guide you to your own SC-activities, focused on the two distinguished pathways:

A. *Focus on developing talents within your college, apprenticeships and region:*

1. Assess your current strategy and curricula and identify all elements you already use to empower your students to get the best out of themselves

2. Assess your schools learning goals and qualification requirements in comparison with performance standards and learning outcomes used in your country's SC, taking into consideration the entry criteria and stages of the competition

3. Partner with a local business, training providers and other colleges in your region to define specific needs in your regional labor market

4. Design your own standards of vocational excellence, in alignment with the articulated specific needs in your regional labor market

5. Think about how you can set up competition activities to meet these standards

6. Integrate available materials form existing SC in your country into your teaching, planning and delivery, for example, including competition activity in your curricula, assessment plans and schemes of works (see also Part 2 of this toolkit)

7. Consider the infrastructure and environment you will need to run the activity such as equipment, materials, people, space and time

8. Use the pre-competition activity to enhance your teaching by providing a fun and inclusive learning environment to engage and motivate staff and learners (see also Part 3 of this toolkit)

B. Focus on developing top expertise and participation in national SC:

1. Visit the website of your national WS-organization to view the full list of skills competitions that are scheduled in the SC

2. Select SC activities you are interested in entering your apprentices or students, review the information, taking into consideration the entry criteria and stages of the competition

3. Review the tools for each skills competition that are available in your country's WS-organization and download activity packs that are provided

4. Think about how you can integrate available materials into your teaching, planning and delivery, for example, including competition activity in your curricula, assessment plans and schemes of works (see also Part 2 of this toolkit)

5. Consider the infrastructure and environment you will need to run the activity such as equipment, materials, people, space and time

6. Partner with a local business, training provider or college to spread the resources you may need to run the activity

7. Use the pre-competition activity to enhance your teaching by providing a fun and inclusive learning environment to engage and motivate staff and learners (see also Part 3 of this toolkit)

TOOLKIT PART 2:
USING SKILLS COMPETITION IN CURRICULA AND EXAMS

a) Introduction

An important challenge in VET all over Europe and the world is to align curricula and VET programs with the demands of society, business and labor market. Most countries use a national qualification framework containing specific requirements for professional skills. Within these frameworks, specific qualification files are regularly the formal foundation for VET programs, executed by VET institutes and companies that offer apprenticeships and internships.

However, what makes good craftsmanship, and what level of performance is required, is hard to determine. Ideas of good craftsmanship often tend to stay implicit, resulting in professional standards as a guide to learning outcomes. Sometimes, this guiding leaves room for interpretation in the transformation of these standards in vocational programs. In this perspective, SC activities can be regarded as promising (and often untapped) resources. SC provide realistic and clear professional insight because specific test projects are based on widespread and thoughtful discussions around expected professional achievements and required levels of performance. In addition, SC create a strong experiential value because it is 'for real'.

There are always risks of presenting a profession or trade in a limited dimension or within a rigid set of knowledge and competencies. Each profession or trade has its own culture, specific moral and material principals and professional attitudes. These behaviors are important to identify the required and expected professional achievements and attitudes. In this respect, SC are a rich platform on which professional and personal attitudes and skills are articulated, fine-tuned and showed. This is potentially a valuable tool to explicit qualification standards and can be used as a source for clear instructions to schools and teachers for the learning outcomes and content of VET programs to meet these requirements.

On a global level, the WorldSkills Standards Specifications (WSS) reflect the occupations or work roles that are represented by the WorldSkills Competition events. Within a framework to ensure their validity, clarity and consistency, the specifications:

- cover the specialist, technical and generic skills that comprise intermediate work roles across the world
- set out what a capable practitioner must know, understand, and do
- are prepared, with guidance, by technical and vocational WorldSkills Experts
- are consulted upon and updated biennially with industry and business worldwide
- indicate the relative importance of each section of the standards, as advised by industry and business.

The prime value of the specifications is threefold:

- as the reference points for the WorldSkills Competition they establish the baseline from which to grow and reward authentic vocational performance
- for WorldSkills Members and more widely they provide a benchmark for national and regional standards
- as economies and markets become increasingly international, the specifications support young people and adults to survive and thrive in the modern world.

The WSS can be seen as an extra benchmark for countries to value their national qualifications and standards. National specifications, used in national competitions, can be regarded as an extra benchmark for colleges, to

value their achievements in VET. Both can also be used as a platform for VET teachers that provides additional information and that guides and directs the interpretation of the formal qualifications and as an extra source for curriculum development and examination.

b) Pre-assumptions and considerations

Using SC in curricula and exams in VET can be considered in two perspectives:

- Enriching the existing curricular content and learning outcomes
- Integrating 'standalone' (or extracurricular) SC activities within the curriculum

Enriching

The content of test projects and assessment criteria are usually a good addition to existing curricula and exams. They indicate not only solid specifications as to what is needed for good achievements, but they express the practical level of performance which is expected at a professional level. In most countries, test projects and their assessment criteria are the cooperative result of teachers' expertise and the practical knowledge of professionals. This means that most test projects, used in SC activities, provide a realistic interpretation as to what a specific profession and the skills needed is all about. Using this information directly in the curriculum results in better insights in the required learning outcomes and enables students to comprehend the profession they are learning for.

Thus, SC could add a lot of value and supply practical solutions for curricula and exams:

- Test projects come with valid assessment schemes set by teachers and experts
- Test projects are taken from authentic achievements that are expected in professional practice
- Competitions are held and monitored in controlled circumstances
- Test projects from Skills Competitions can be used in curricula and exams.

To optimize the curricula and exams, educational and teaching staff can identify specific elements to be used in development and preparation for qualification. This assessment supplements:

- theoretical learning outcomes, focused on knowledge and insights in the contexts of specific disciplines. To this purpose, students should present explanations and substantiations to the practical execution of test projects. These explanations can be included in the student's portfolio. A well completed assignment can be regarded as an objective proof of skills and knowledge.
- practical learning outcomes focused on the right output and specifications of the vocational discipline, confirming the test projects' judgment criteria.
- situational or integral learning outcomes focused on the right application of skills leading the test project. Specific elements like the quality of teamwork, proactivity and other general or 21st century skills can be assessed.

These forms of assessment related to specific test projects can be part of both well-adjusted collective assessment and individual assessment schemes. By doing so, more customization in the training or course can be established.

Integrating

As stated in the introduction of this toolkit, SC activities demands a lot of time, efforts and funding. A lot of schools tend to conduct SC activities in addition to curricular activities. As a result, on a school level, teachers often complain about the extra time needed for preparation, training and participation of their students. Deriving from a well-formulated policy as suggested in Part 1 of this toolkit, this extra burden can be avoided by

also integrating SC activities in the planning and programming of the curriculum. At the same time, by doing so, conditions will be better for students to prepare and train for their SC participation and for all other students to take part in the learning experiences SC provide.

Curriculum development: enriching design and development

The curriculum development process systematically organizes what will be taught, who will be taught, and how it will be taught. Each component affects and interacts with other components. For example, what will be taught is affected by who is being taught (e.g., their stage of development in age, maturity, and education). Methods of how content is taught are affected by who is being taught, their characteristics, and the setting. In considering the above three essential components, the following are widely held to be the most essential considerations in the design and development of curricula:

- issue/problem/need is identified (issue, or 'what'),
- characteristics and needs of learners (target audience, or 'who'),
- changes intended for learners (intended outcomes/objectives or 'what the learners will be able to do'),
- the important and relevant content (content, or 'what'),
- methods to accomplish intended outcomes (learning process or 'how'),
- evaluation strategies for methods, content, and intended outcomes (reflection or 'what works?').

The process of curriculum development can be illustrated in this simple scheme:
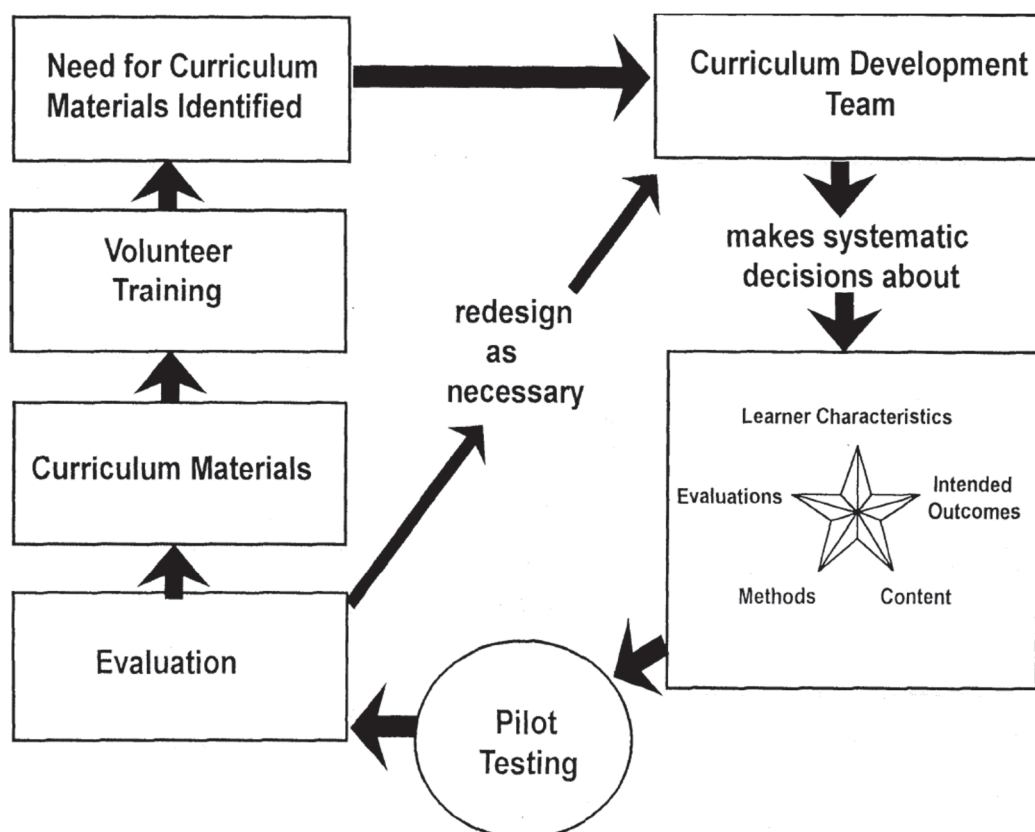
In the experience of most curriculum specialists, the following curriculum development steps are frequently omitted or slighted in the process of curriculum development. A number of steps are considered essential to successful curriculum development and need to be emphasized:

- Needs assessment:
  if not conducted, great curriculum could be developed, but the appropriate needs of the target audience may not be met

- Involving the right actors and stakeholders:
  the target audience and volunteers (or staff) who will be the implementers of the curriculum must be involved (i.e., they should participate as members or advisors of the curriculum development team)
- Recruiting and training teachers:
  competent and skilled curriculum implementers are critical, but the execution has to been done by professionals, and their feedback has to be taken in account to)
- Evaluating and reporting on the impact of the curriculum:
  evaluation is critical for securing support from policy decision makers and for assessing whether the curriculum has achieved the intended outcome.

In this process, and in the points of extra attention, SC activities can be used as extra input or benchmark, by using national and WorldSkills Standard Specifications and using actual experiences of students, teachers and schools and colleges in SC.

Curriculum development: integrating competition activities in design and development
Trends in designing curricula indicate a growing need for hybrid learning environments, to meet fast developments in technology and learners' needs for challenging and attracting learning circumstances. Especially in VET, there is an urge for optimal balances in theoretical and practical learning. By setting up and integrating competition activities in the curriculum, hybrid elements emerge at the same time.

This can be done either by integrating existing SC activities that are conducted in the perspective of national competition, by creating specific competitive elements and the use of test projects in the curriculum, or both.

Examination
VET programs are to be wrapped up by final assessments. This examination often has its own characteristics and quality standards, to secure objectivity and validity. In most formal examination in VET, two types of assessment are being used:

- Formative assessment
- Summative assessment

Formative assessment
The goal of formative assessment is to monitor student learning to provide ongoing feedback that can be used by instructors to improve their teaching and by students to improve their learning. More specifically, formative assessments:

- help students identify their strengths and weaknesses and target areas that need work
- help faculty recognize where students are struggling and address problems immediately
- formative assessments are generally low stakes, which means that they have low or no point value.

Examples of formative assessments include asking students to:

- draw a concept map in class to represent their understanding of a topic
- submit one or two sentences identifying the main point of a lecture
- turn in a research proposal for early feedback

Summative assessment
The goal of summative assessment is to evaluate student learning at the end of an instructional unit by comparing it against some standard or benchmark. Summative assessments are often high stakes, which means that they have a high point value. Examples of summative assessments include:

- a midterm exam
- a final project
- a paper

Information from summative assessments can be used formatively when students or faculty use it to guide their efforts and activities in subsequent courses.

In the conducting of SC, test projects provide both types of assessment. In most national SC, these projects are related with the formal requirements in the national qualification framework. This means that, theoretically, these projects can be used as good training material for final examinations, or even as a formal examination tool.

Formative elements in a SC test project are:

- reading and understanding the project
- reviewing and outlining one's approach for executing the project
- preparation and planning

Summative elements in a SC test project are:

- demonstrable results in performing the project's tasks
- delivering the product or service in line with the assessment scheme and criteria

c) Good practices and examples

Good practice 1: Optional degree module 'working as a top expert' (Finland)

Summary of the good practice

One supporting factor in Finland rises from the national vocational qualification requirements VET-curriculum. This curriculum offers an optional degree module for "Working as a top expert". It enables students to further develop their individual study path and supports the collaboration of VET providers with the world of work. It means that the students' achievements in SC are valued and rewarded in the context of SC participation and also gain formal credits in their formal learning pathway, proving they achieve as a top expert.

Working as a top expert (15 competence points) indicates that students know how to:

- Assess and develop their competence and their working environment
- Work in tasks requiring top expertise in their vocational field (see the example below)
- Take into account the quality requirements of top-class production, products or services
- Work in the networks of the vocational field and in cooperation with the customer.

The students demonstrate their competence by working in tasks requiring top expertise in their vocational field. The skills may also be demonstrated in national and international

competitions. To the extent that the vocational competence required in the unit cannot be assessed on the basis of the demonstration, the competence demonstration is to be supplemented in other ways on an individual basis.

The assessment scale that is being used in this practice is:

S1=   the student's level of competence meets the described standards (satisfactory, level 1)

S2 =   The student's level of competence is clearly higher than level S1, but not sufficient for level G3 (satisfactory, level 2)

G3 =   the student's level of competence meets the described standards (good, level 3)

G4 =   The student's level of competence is clearly higher than level G3, but not sufficient for level E5 (good, level 4)

E5 =   the student's level of competence meets the described standards (excellent, level 5)

Examples of credentials for Working as a top expert study (Module Theme 2)

Students work in tasks requiring top expertise in the vocational field: overall criteria	
Students	• use working methods, tools and materials with initiative • work carefully • show initiative, find and use knowledge needed in the work and ask for advice if necessary • work cost-effectively and productively, taking into account the time and other resources that are available • promote permanent customer relationships in their work
Assessment scale	*Criteria*
Satisfactory 1	• follow workplace rules and observe working hours • work responsibly and comply with the principles of occupational ethics in the field • take responsibility for the occupational safety of their activities and comply with occupational safety regulations and instructions • ensure the safety of customers and other users according to instructions • work ergonomically and keep their work environment tidy throughout the work process
Satisfactory 2	The student's level of competence is clearly higher than level S1, but not sufficient for level G3 (satisfactory, level 2)
Good 3	• with initiative, select working methods, tools and materials and use them in changing situations • work carefully, creatively and innovatively • showing initiative, find and apply knowledge needed in the work and are able to solve problems together with others • show initiative in working cost-effectively and productively, taking into account the time and other resources that are available and promoting the profitability of the company or organisation • actively promote the continuity of the operations and permanent customer relationships • follow workplace rules and observe working hours • act responsibly and with initiative, comply with the principles of vocational ethics in the field • take responsibility for the occupational safety of their activities, notice and report risks associated with their work, and comply with occupational safety regulations and instructions • independently ensure the safety of customers and other users • work ergonomically and keep their work environment tidy throughout the work process, also in challenging work situations
Good 4	The student's level of competence is clearly higher than level G3, but not sufficient for level E5 (good, level 4)
Excellent 5	• boldly select working methods, tools and materials, also new ones, and use them adeptly in changing situations • work systematically, accurately and confidently as well as creatively and innovatively • independently find and apply knowledge needed in the work in varying situations, justify their solutions by the information they have acquired • work with an entrepreneurial attitude, cost-effectively and taking into account the time and other resources that are available, promoting the profitability of the enterprise or organisation • independently promote the continuity of the operations and permanent customer relationships • follow workplace rules and observe working hours • are proud of their occupation and their competence, act responsibly and develop their work following the principles of vocational ethics in their field • take responsibility for the occupational safety of their own and the team's activities, comply with occupational safety regulations and instructions, and observe and report any risks associated with their work • work actively to ensure the safety of customers and other users in changing situations • work ergonomically and keep their work environment tidy throughout the work process, also in challenging work situations, and participate in developing the working conditions.

Period/time, location

Current.

Stakeholders/actors involved

This optional degree module has been initiated by the Finnish department of Education and is part of the legislation. So, government and VET-providers are the key-actors.

Steps taken

This offers a practical solution to many VET-students, who are preparing themselves to the national skills competitions. VET-stakeholders gives this option to all students. Teachers, who are the competition coaches at the same time, recommend this study Module to their students.

Tips and tricks related to this good practice

Students will show their competences in a real working life situation. Collaboration with the world of work has an important role in this situation. Work place tutor is an active partner to give guidance and opportunities for training towards SC. Students show their competences in skills demonstrations. Students have practised according to their learning objectives, which are linked to the SC Test projects from the previous competitions. It is relevant to the progress of a student's studies, that this study Module will be accepted as a part of qualification.

This practice shows that SC activities can be regarded, used and rewarded as regular learning activities within the learning patways of VET. In order to establish this, or a comparable approach, it is recommended to study the possibilities of setting up a formal credit system that can be fitted in in the regular VET system in your country, in cooperation with the national and local authorities (and top down).

But, in case VET Colleges in your country are free to set up their own credit systems within legislation and certification for their students, rewarding arrangements can also be build bottom up. This can be developed by starting to apply it as an instrument for assessment, using the scales presented in this practice (with specifications and modifications for the the different courses).

Resources/references

- https://eperusteet.opintopolku.fi/#/en/esitys/6728280/reformi/tutkinnonosat/6728384

A competitor's opinion:

- https://skillsfinland.fi/eng/News/news-and-press-releases/from-tinkling-wine-glasses-to-the-top-of-the-world

Summary of the good practice

Qualifications in Performance Excellence were originally designed to support competitors in the UK Squad and Team who took part in the WorldSkills 2011 skills competition in London. Now, in addition to skills competition, Achieving Excellence has wider relevance to work-related learning. In an increasingly competitive employment market, the ability of vocational learners, especially younger learners, to demonstrate excellence beyond competence in a job role is becoming more important. Feedback from the initial run of the original Performance Excellence qualifications in 2011 suggested that employers value the recognition of such achievement and see its relevance to improved performance in employment. Taking account of this, Achieving Excellence qualifications offer a route to achievement for learners who are not involved in skills competitions but who are still capable of demonstrating excellence in their vocational area. This route is supported with a handbook for the implementation and application of Excellence Qualifications, based on this structure:

Qualification structures

Award			Certificate		
Level	Unit	Credits	Level	Unit	Credits
2	Striving for excellence in a vocational skill	6	2	Learning through work	6
			2	Striving for excellence in a vocational skill	6
			2	Emotional intelligence in the work environment	3
			2	Self-directed learning	3
3	Striving for excellence in a work-related setting *or* Striving for excellence in a skills competition	6	3	Striving for excellence in a work-related setting *or* Striving for excellence in a skills competition	6
			3	Learning through work	6
			2 or 3	Emotional intelligence in the work environment	3
			2 or 3	Self-directed learning	3
4	Striving for excellence in a work-related setting *or* Striving for excellence in a skills competition	9	4	Striving for excellence in a work-related setting *or* Striving for excellence in a skills competition	9
			3	Self-directed learning	3
			3 or 4	Learning through work	6
			3 or 4	Emotional intelligence in the work environment	3 or 6

At Levels 3 and 4 there are 2 routes through the Achieving Excellence qualifications:

- skills competition route - candidates may demonstrate and be able to evidence performance excellence in a vocational skill through participation in skills competition. This participation could include preparation, training and practice prior to the competition, performance in the competition, and reflection following the competition.
- work-related setting route - candidates may be able to demonstrate and evidence excellence in a vocational skill through work-related activity. This activity could be in the actual workplace or in a work-related environment that realistically simulates the workplace. The candidate must be able to actually demonstrate excellence in the skill.

Period/time, location

During 2012-13, the development of the NCFE Achieving Excellence qualifications suite was taken forward.

Stakeholders/actors involved

The development of the NCFE Achieving Excellence qualifications suite was taken forward with North Warwickshire and Hinckley College (NW&HC) and NCFE. NCFE is a leading provider of educational services and as a not for profit organization at the forefront of technical and vocational education for over 170 years. NCFE designs, develops and certifies diverse, nationally recognized qualifications and awards.

Steps taken

- WS 2011 London: design of Qualifications in Performance Excellence
- significant increase in local, regional and national skills competitions after WS London, with more involvement of colleges, training providers and employers across the UK
- 2012-2013: revision and updating into the NCFE Achieving Excellence qualifications suite, which makes them relevant to any vocational learner who takes part in a skills competition.
- 2013: new Achieving Excellence qualifications have been developed to be an appropriate offer to learners within an Apprenticeship framework. The concept of Achieving Excellence directly addresses many of the concerns of government about improving the quality of apprenticeships. In addition, some of the qualifications in the Achieving Excellence suite were developed to enable people to demonstrate achievement of Personal Learning and Thinking Skills within an Apprenticeship framework.

Tips and tricks related to this good practice

This practice bridges SC achievements with qualification levels. It reflects the added value of SC, being used as a reference for awarding vocational excellence within (T)VET. Like practice 1, this results in extra facilities to award and credit students in their learning pathways. Of course, every country has rewarding bodies of its own, and schools and colleges may be very dependent on prevailing policy, national qualification standards and laws and regulation regarding examination and issuing diplomas. But even so, we assume that every school and college can, to a certain degree, develop their own policies within these frames. Awarding and crediting students who take part in SC, and using the standards used in SC to level up students' achievements in (T)VET, surely can be part of such (school and college) policies.

Summary of the good practice

In addition to the competition activities, WorldSkills Netherlands (WSNL) aims to support colleges and teachers to broaden the use of it. For example, by embedding competition activities in the curriculum and using test projects in day to day education. For that purpose, a Dutch version of Igniting Education was published in 2018 and brought to the attention of all VET colleges[6].

For dissemination purposes, WSNL provided presentations and Masterclasses for colleges' staff.

A (private) publisher of learning materials (Savantis, www.savantis.nl) initiated the development and production of an additional course. In the Dutch VET system, students can take additional courses ('keuzedelen'). About 1000 optional courses are available, providing special contents, either general or specific. Colleges have the opportunity to develop these courses themselves, in cooperation with the world of work and other stakeholders in their region, for example to meet specific demands in that region. Proposals for courses are being assessed and - after formal approval- included in a special register, which is maintained by the Foundation for Cooperation on Vocational Education, Training and Labour Market (SBB).

For the optional course 'personal development – preparation of SC-', special content has been developed in cooperation with WSNL. This optional course provides a broadening and deepening training for students. It can be used to prepare and train for the skills competition and/or for the overall personal development, using SC-elements .

This course also enables colleges to organize their SC-activities as part of the VET program, thus facilitating teachers and students to conduct it in the formal teaching and training activities.

This optional course regards four occurring pathways in the student's journey:

1. One gets stranded in the preliminaries or decides not to participate in professional competitions at all
2. One passes the qualifying rounds, but fail in the qualifying match
3. One passes the qualifying rounds and the qualifying match, after which one ends up in the final
4. One goes through the preliminaries and the qualifying match, wins the final and finally also participates in the international competitions.

Each pathway routes practical assignments during course to facilitate the student's personal development, either to perform better in competition or to perform better as a future professional, and eventually both.

Period/time, location

These activities started in 2019. The course was published in March 2020.

Stakeholders/actors involved

-   Savantis, being the provider of learning material.
-   WSNL, being sparring partner during the development
-   College representatives (teachers), taking part in a review group.

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[6] *http://worldskillsnetherlands.nl/documenten/WSNL_aanstekelijk_onderwijs_WEB.pdf*

Steps taken

This initiative started with considerations and discussions with representatives from colleges, initially with the ambition to develop a special course for SC activities. Eventually, the decision was made to make use of an optional course that already existed, developing special SC content. The development itself was a private initiative of Savantis, in cooperation with WSNL and a group of teachers from several VET Colleges.

Tips and tricks related to this good practice

Main goal in this practice is to support schools and colleges and their teachers to build in SC activities within curricula, instead of conducting SC activities extra-curricular. To achieve this, it is recommended to check the degree to which the VET system in your country allows colleges to create special courses within the national qualification framework and the emerging laws and regulations.

Resources/references

https://www.savantis.nl/product/persoonlijk-profileren-voorbereiden-op-beroepenwedstrijden/

Summary

Based on the propositions in the document 'Igniting Education' and regarding the use and content of the Competition Registration System (CRS), WSNL has been searching for ways to promote the use of test projects for curriculum and examination purposes. Recently WSNL has taken the initiative to provide a full package in the CRS for VET colleges. In 35 disciplines this package can be used to conduct aptitude tests in the different VET programs and courses. Teachers will be able to download this package and use it in their day-to-day work.

Period/time, location

Starting June 2020, as a national spread activity.

Stakeholders/actors involved

The initiating organization is WSNL. Availability, usage and application of the packages will be discussed with representatives from VET Colleges. Practical results will be monitored.

Steps taken

The CRS is a closed and sophisticated system and used for competition purposes only. The system is optimized for registration, development of test projects, development of assessment schemes for qualifying heats and national finals, and in the execution of the competition cycles (publishing of the test projects and the judging of the contests). It is being used for both competition cycles in The Netherlands: Skills Talents in the prevocational secondary education (150 of 600 schools participating) and Skills Heroes in secondary VET (56 of 64 colleges participating). Participating schools and colleges have access to the CRS via their Skills Coordinators. To broaden the use of the CRS, adjustments were made in the CRS, to provide access to all teachers that want to use the test projects.

Tips and tricks related to this good practice

With a relatively long experience in SC, an innovative approach in conducting the SC and a rapid development in the period 2014-2020, WSNL was able to build an appropriate organization, in which CRS could be developed as a smart supporting system. The CRS turned out to be an expanding database, including hundreds of test projects in many different disciplines. It is recommended that such a database can be used not only for competition purposes, but for vocational education in general as well.

Resources/references

www.worldskillsnetherlands.nl

info@worldskillsnetherlands.nl

Summary

Alongside technical skills, competitions provide an opportunity to build critical mind-set skills. WorldSkills UK has developed a methodology to build these strengths amongst competitors and for wider application across TVET and at all levels of learning. A team of Performance Coaches review and refine the programme on an ongoing basis and deliver the programme to competitors and Training Managers/Experts involved in the UK international competition training programme.

Mind-set training builds key employability and personal skills, such as resilience and motivation, which alongside high technical performance, equips them to succeed and prosper in the changing jobs and economy of the future.

Period/time, location

Current – UK wide

Stakeholders/actors involved

- Training Managers
- Performance Coaches
- Squad/Team UK
- TVET providers

Steps taken

a) *Develop critical mind-set skills amongst competitors*

The UK programme focusses on building three main skills:

- *Focus:* the ability to minimise distractions and to concentrate on a specific task is key for high performance so that competitors can acknowledge limit the effects of what is going on around them, especially how other competitors are performing.
- Techniques to build this skill include goal setting, observation and feedback, such as through videos of performance, and enabling young people to self-reflect on their performance.
- *Stress responses:* the ability to manage anxiety, before and during competitions. Competitors need to build habitual responses to pressurised situations so they can respond quickly and positively.
- Building these skills includes exposing competitors to stressful situations which may be outside their comfort zones, training in difficult situations and practising in different scenarios to build a bank of tested and reliable response techniques.
- *Resilience:* the ability to overcome setbacks is critical in a competition environment. Competitors need to be able to rapidly recover when something goes wrong and find the best solution to problems. They need to learn that it is okay to fail and to learn from this.
- Building these skills involves training in different and unfamiliar ways and situations, training in more challenging tasks and through review and feedback.

Engage with the wider training team – beyond competitors

The program only succeeds where the wider training/teaching team is engaged. In the UK, this involves the Training Experts and other skills professionals involved in training programs, which can include college teachers and employers.

b) Apply mind-set training across wider TVET

The program has many applications across TVET. The approaches and techniques can help all learners build skills that improve performance and equip them for the workplace and working life.

Tips and tricks related to this good practice

- *Maintain progress* - introducing systems which track performance against a set of high performance attributes (using observation based judgements) and identify and implement interventions
- *Recognise the value of the program* – some young people and trainers, don't readily see the value of the program, so introduce the programme early in training and highlight the benefits
- *Enable access* – some of the program is based on theory, research, science etc, and make sure material is highly accessible, using everyday language, images and techniques.
- *Give lifestyle tips* – the program is most effective when individuals also recognise the importance of a healthy lifestyle, e.g. nutrition, activity levels and ways of living.

Resources/sources

WSUK

Summary

The Furniture Studies department at Chichester College has used skills competitions to drive up standards, enhance the curricula and better prepare students for the workplace.

Competitions have added value to curricula in a college, through using them to develop teachers' and instructors' pedagogical and didactic approaches and skills and as tools for learning and development and for assessment and examination of learners.

Period/time, location

Current

Stakeholders/actors involved

Departments at Chichester College and other colleges within the College Group.

Steps taken

The key elements of the programme were:

Build competitions into all levels of learning
Competitions are used in the Department at all levels, with adaptations to fit each level of the English education system, based on international and national WorldSkills tests which are mapped across the curriculum, e.g.:

- Level 1: competitions are used to develop important skills through peer assessments and competition tasks built into course specifications
- Level 2: competitions are used to introduce new and more advanced techniques
- Level 3: competitions used to enable advanced work on designing and developing plans and growing teamwork skills

Use competitions across the curriculum
The College is now looking at using competitions as an end of course assessment tool, linked with the formal accreditation systems as this use of competitions assists in building a wide range of skills, including the ability to acquire new skills and self-assessment of learning.

Identify where competitions add value to students' learning
Competitions can add specific benefits to learning that enhance employment and progression opportunities, as they can develop:

- Currency with industry needs - WorldSkills standards are regularly reviewed and updated, in line with the best in the world
- Higher standards - through stretching individuals and developing a stronger range of skills
- Specialisation and tailoring – can be used to introduce a greater range of techniques and activities.

Transfer learning to other departments
The College is now looking to transfer the use of competitions to other departments, such as joinery, landscape gardening and personal services. This work will focus on using competition tests and assessments to:

- Provide access to a bank of easily accessible and relevant resources
- Provide an assessment methodology

- Improve standards and higher performance
- Ensure currency within a curriculum, improving progression

Tips and tricks related to this practice

Transferring learning to a wider group of departments and campuses can be challenging. Tips include:

- Ensure an understanding of the wide benefits of taking part in competition, over and above those relating to winning
- Overcome concerns about comparisons through competition with other colleges
- Overcome challenges of teams/departments perceiving competition practice as being judged against one another
- Ensure competition activity adds value and is not seen as requiring additional time and resource; promote the with qualifications
- Gain senior staff/leaders commitment to competitions and their support for embedding

Resources/references

https://www.chichester.ac.uk/

d) Tools and tips

Tool 1: Setting up a curriculum (re)design

This tool can be used for the (re)design of curricula to build in SC-activities. On a smaller scale, teachers can use this method to (re)design their courses and adjust their lesson plans, integrating SC-activities.

Step 1:

Mapping the building blocks for (re)design and curriculum adjustments or new development.
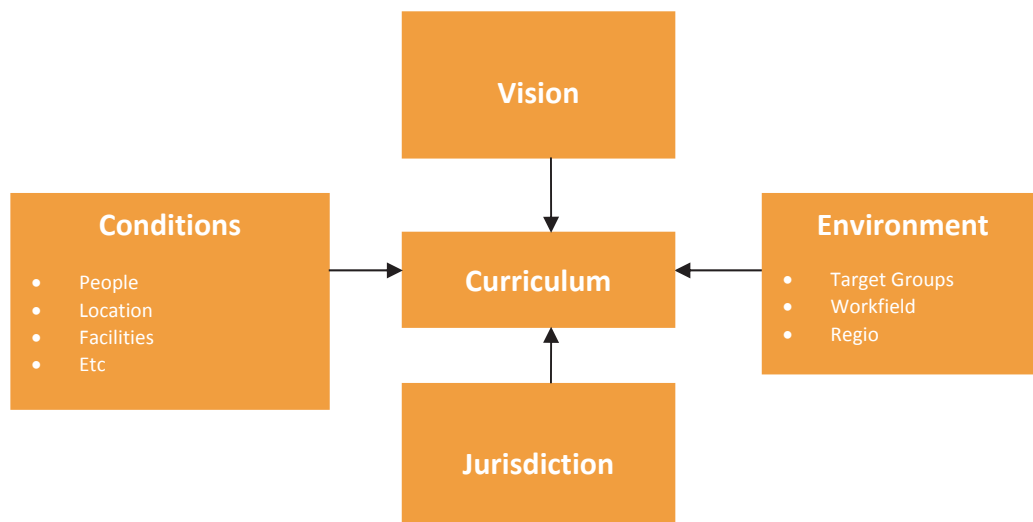
When developing a curriculum, one has to take in account the elements like vision and policy, jurisdiction, environment and conditions (available and needed). These elements can be used as design criteria, by answering questions like:

- What is your college's vision regarding learning strategies?
- What is your college's vision regarding SC activities (i.e. the results of part 1)?
- For which students could SC activities be worthwhile (on a class and college level)?
- In which discipline could SC activities be of added value?
- What is the character of your relationship with the world of work (is there cooperation with companies and businesses, and in what degree)?
- Is there any jurisdiction that obstructs the use of SC activities (and in what degree)?
- What are the current conditions one has to take in account (to what extend can colleagues be committed and activated in a team, what are the facilities that could be used in executing SC activities)?

This step can be regarded as 'scouting the possibilities'. It gives a solid basis to act on.

Step 2:

Articulating the context of redesign activities.

Based on the results of step 1, you and your team can set up a redesign project, in which SC activities will be part of the curriculum. To get a grip of the more detailed context in which such a project can be set up, you can use these questions:

- What is the context the target groups have to take in account (e.g. learning specifications, professional requirements etc.)?
- What starting point and assumptions have to be taken in account?
- What sources are available that can be used in the curriculum redesign?

Step 3:

Aligning your ambitions by 'backwards designing'.

To get a more detailed comprehension of the ambition of the redesign activities, you can use 'backwards designing' as a method:

- Determine what learning outcomes of the curriculum should be
- Draw up the educational and learning principles you are obliged or wish to use
- Affirm the added value of SC activities in these principles
- Indicate the mastery levels
- Decide what forms and methods of assessment will be used, and indicate the standards or cut-off scores

Step 4:

Setting up a rough (re)design.

Based on the answers in the preliminary steps, you and your team can set up a rough design or a prototype of the curriculum you wish to establish. By doing so, you will show the students' journey in the course:

- Outline the first contours of the course and it's curriculum
- Specify the vision, frames and sources to use
- Specify all assessment elements in the course
- Specify the elements of theoretical, practical and combined learning
- Indicate (periods of) internships or apprenticeship that will be part of the curriculum
- Allocate the application of SC activities
- Assemble all elements in the educational model you are going to built
- Indicate the time needed for every element and a planned time period in the course
- Indicate the main learning path and possible personalised learning paths of students (e.g. the extend of flexibility).

In addition, you can work out an appropriate substantive phasing of the curriculum and denominate learning contents and learning activities and (rough) specifications for guidance and teaching.

Tool 2: Using and developing test projects to integrate in curricula and lesson plans

All WorldSkills organizations develop test projects for their regional and national competitions. These test projects can be used in the curriculum. Consult your national WS-organization if test projects can be provided for your own use!

To optimise the curricula and exams, educational and teaching staff can identify available test projects or specific elements in these test projects to be used in development and preparation for qualification. This assessment supplements:

- theoretical learning outcomes, focused on knowledge and insights in the contexts of specific disciplines. To this purpose, students should present explanations and substantiations to the practical execution of the assignment. These explanations can be included in the student's portfolio. A well completed assignment can be regarded as an objective proof of skills and knowledge
- practical learning outcomes focused on the right output and specifications of the vocational discipline, confirming the assignment's judgment criteria
- situational or integral learning outcomes focused on the right application of skills leading the assignment. Specific elements like the quality of teamwork, proactivity and other general or 21st century skills can be assessed.

These forms of assessment related to specific assignments can be part of both well-adjusted collective assessment and individual assessment schemes. By doing so, more customisation in the training or course can be established.

Another way to use SC activities in your curriculum or lesson plans is to produce your own test projects, based on the learning outcomes of your curriculum or lesson plan. You can use your test pilots in a small scale class competition in two ways:

- as a learning resource and powerful form for learning experiences
- as a tool for assessment to judge and value your students' progress.

To create your own test projects, you can use the following 10 steps:

Step 1: Vision and ambition

Determine whether you want to use a test project in class, and make up your mind regarding the ambitions and goals you want to achieve.

In this step you can use questions like:

- Does a test project support the learning outcomes that you are aiming for?
- What will be the outcome of this project (a specified product, a students' plan of action, a description of a service or any other suitable outcome)?
- What will be the learning outcome of the test project?
- Do you consider a class competition to be suitable?
- How do you assess the usefulness and attractiveness for your students?
- How do you assess the conditions in your college, department or class that might be relevant for your test project (are there any blocks or stepping stones to consider)?

Write down your findings and a rough design of the project in a short plan of actions (in a memo or PowerPoint presentation).

Step 2: Brainstorm

Organize a kick off meeting with your colleagues and some students to discuss your ambition and plan of actions, to determine whether there is sufficient support and cooperation.

The questions can be used:
- How do you feel about my plan?
- Are there any supporting or rejecting arguments for this plan?
- Who can and will take part in the development and execution of the plan?
- What does it take to execute this plan successfully (what costs, means, people etc.)?
- How do we overcome possible blocks?

Step 3: Specify and validate the expected learning outcome of the project

Determine what the learning outcome should be in detail and try to formulate this in a student journey. Answer questions like:

- What is my definition of the expected learning outcome?
- How does it relate to formal qualification frames I work with?
- How and in when does this fit best in my lesson plan?
- What will be the outcome for my students?
- What will be the learning experience for my students?
- How can I use the outcome in the overall learning outcomes of my lesson plan?
- How can results be properly used by my students in their learning progress?

Step 4: Determine in what way the project should be assessed

Try to imagine the specifications to assess the outcomes of the project and on what level the assessment should take place:

- To what extent can the expected outcome be measured?
- What elements and specific assignments in the outcome can be exactly measured, to what standards?
- What elements and specific assignments should be judged by experts?
- What experts (and how many) do I need?
- How can be secured that the assessment will be as objective as possible?
- How can the assessment be of optimal benefit for your students (to use it in their learning progress)?
- What scores will be a result of the assessment?
- How will those scores be valued?
- In what way will the results be communicated with your students

You might take in account that, depending on the process being observed or the product/result being examined, the assessment will be by a combination of the following:

Measurement	Provides a precise result, and if the means of measurement has been determined in advance there should not be disagreement.	This is known as Objective	Objective assessment should be used whenever you can decide that a process or product is correct or incorrect, complete or incomplete, against a given benchmark that everyone can agree on. It is used whenever it is possible to take a measurement of some kind.
Opinion	Applied where opinion rather than measurement is involved.	This is known as Subjective	Subjective assessment is used where opinion rather than measurement is involved. So it predominates in majority of the creative skills. Judges in these sectors generally, but not always share a view of what is appropriate, fashionable or beautiful.
Judgment	Provides a greater proxy to mark against industry standards across a four point scale (0-3) against a given standard for each aspect of criteria.	This is known as Judgment	Judgment assessment can be used across a range of creative, functional, technical, and soft skills.

Step 5: Describe the project and assignments in detail

In this step, your creative process will be made concrete by a detailed description of your test project and the specific assignments for the students. Consider:

- The conditions in which the project will be executed
- The frames this project is related to
- The specific tasks and assignments you want your students to execute
- How the tasks have to be performed by each student (individually or in small groups/teams)
- The expected output (in terms of products, services or plans of action)
- The specified learning outcomes
- The assumptions for the assessment
- The semantic level (in line with the student's level and language proficiency)
- The degree of clarity of assignments in your test project.

Step 6: Describe the assessment

Draw up a specified assessment plan, in which it will be clear what elements in what way and by whom will be judged, and how the results of the assessment can be presented to your students. Notice that your students are the ones to benefit most from the test project as a solid learning experience.

Step 7: Draw up an inventory list

Set up a list of all materials and resources your students will need to execute the project. Take into account:

- Materials
- Tools
- Equipment
- Products
- Furniture

Step 8: Validate and enrich your design by asking feedback from your colleagues

Whit the results of step 5, 6 and 7 you have a solid design of the test project. You can now submit it to your colleagues in your team to check whether all conditions for a successful test project have been met. With the feedback you can now finalize the plan.

Step 9: Set up a plan for execution of the test project

Make a detailed script to plan and execute your test pilot. Communicate this in time with your students for preparation and commitment. Set a date and make sure that on this date all conditions are met, your students will be ready and eager to join, and experts will be present.

Step 10: Execute your test project and start the follow up

Now is the time! Let the test project begin! Your project will be even of much greater value for your students if you plan a good follow up. Plan feedback sessions in which you can discuss results with your students and give them the right feedback on their team- of individual achievements. This follow up will be important for the actual learning value for each student: feedback is a way of learning. And also during the execution of the test project feedback can be given to the students. Informal feedback can happen as the task during the test project proceeds, more formal feedback (the scores and judging) should be planned. Feedback is a way of learning

This feedback should always be:
- Supportive and given with positive intentions
- Based upon fact or behavior
- Constructive and beneficial

TOOLKIT PART 3:
USING SKILLS COMPETITION ACTIVITY IN THE PEDAGOGICAL AND DIDACTIC PRACTICE

a) Introduction

A fundamental part of successful teaching in education in general, and in vocational education specifically, is the ability to observe and reflect. Teachers and trainers should be willing and capable of seeing and judging their students properly. This involves a good look and feel and adequate empathic and reflective abilities.

In a good didactic performance, professional knowledge, adequate educational interventions and good personal interaction are of the upmost importance. Without professional knowledge there can be no vocational education. Without the right educational interventions students cannot be reached and stimulated to learn. Without good personal interaction, enforcement problems and exclusion of students are a risk.

b) Pre-assumptions and considerations

It is evident that practice learning and hybrid learning (i.e. practical and theoretical learning at the same time) are essential elements of vocational education. By using SC test projects and/or test projects that can be developed and applied in college, special assignments and/or class challenges, teachers will strengthen this process of learning in college, internships and apprenticeships. It will challenge students to perform on levels that are expected in professional practice. Integration of competition creates a hybrid learning environment in which theoretical and practical instructions can be linked properly. An adequate pedagogical and didactic approach will secure an ongoing and effective reflection of students on their performances.

c) Good practices and examples

Good practice 1: Usage of Test Projects banks (Fi)

Summary

Best practices for educational institutions for competitions publication Seija Rasku,the chairman of the Board at Skills Finland and Counsellor of Education at the Ministry of Education and Culture says that in Finland vocational skills competitions increase the appeal of and appreciation for vocational education. Through the competitions, everyone can see what types of professions people graduate for in vocational education and what types of skills and career opportunities the graduates have. At the same time, competitions help shape vocational education and training and are a good way of highlighting needed reforms in vocational education.

http://skillsfinland.fi/download_file/view/412

"Test Project Bank" organized and updated by Skills Finland ry

https://www.dropbox.com/sh/nr55ckfsp9qi6jf/AAB1Nrkt7KDX40sYkjeVytfNa?dl=0

This Test Project Bank is open to be used in teaching to all teachers, coaches or other who are interested in the Test Projects which are used in the national skills competitions in Finland. The assessment criteria is formed according to the qualification criteria on its highest, excellent level. In case the student participates to the semifinals or finals in skills competition her/his performance will be accepted as a part of the studies.

Example from the Test Project bank

Finals 2018

Competition task structure and central task module components

The total score of the finals task is distributed as follows:

- Excel 40%
- Word 25%
- PowerPoint 20%
- Utilizing external databases 15%

Task scope and time allotted

The scope of the tasks varies from short 20min quick tasks to 1.5-hour tasks. The total competition time is 14 hours.

Competition task assessment criteria

The competition tasks are based on the basic qualification in Business and in Information and Telecommunication technology. The required skill level is in line with the Excellent (K3) grade of the qualification.

Description of the assessment process

Objective assessment is used in all tasks.

Materials, equipment and work phases used and the competition area

Laptops are used in the competition. The software is Microsoft Office 2016, the Windows10 operating system and the Adobe Acrobat Reader for PDF files, all in English.

What the competitor brings to the competition venue

The competitor may bring along personal headphones if he or she wishes to listen to music during work.

Sample task and assessment as a whole

There is a maritime theme to the tasks.

The competitors will perform the tasks using office software (Word, Excel and PowerPoint). In the finals tasks, the competitor must also know how to seek and process external database information (the database is a local SQL Server Express database), which is done by PowerPivot and Word and/or Excel. The competitor must know how to read and interpret an ER model and database table definitions. Designing an ER model is not included in the competition description.

The competitor must have a good command of English. The software is in English, and the files processed in the tasks are also in English.

Summary

The Electronics Department at Gower College in Wales uses competitions to support wider TVET teaching and learning, in particular as a tool for CPD, helping keep staff up to date with best practice, enhancing career route ways and providing new learning and assessment tools and contexts.

Period/time, location

Current

Stakeholders/actors involved

Electronics Department, Gower College

Steps taken

a. Making embedding competitions in the curriculum accessible

Competitions are mainly used as part of the Level 3 programmes, both technical college courses and apprenticeships, through matching and adapting the tests used in WorldSkills international and national competitions with the curricula.

b. Preparing the trainers

The staff training program has been successfully piloted which includes:

- Explaining the benefits of competitions, focusing on the skills improvements that can result;
- Setting out the factual evidence of the value of competitions, such as promotions achieved by previous competitors and the improvements in marks;
- Creating and explaining resources and to apply them, such as the terminology used and how resources fit with course materials;
- Running a competition for lecturers, to understand competitors' perspectives, such as pressures, challenges and benefits;
- Supporting lecturers to develop competition activities as natural parts of college courses; and
- Showing how smart working can be used to run competitions, without taking additional time/work.

c. Using mini competitions throughout the curriculum

Students who have previously achieved highly in national WorldSkills competitions have written and prepared competition tests. This means competitions are developed with a strong understanding of how competitions work and what will be encourage other students to benefit and learn. The role gives the competition designers evidence that contributes to their qualifications.

Competitions are based on practical tests that are set by one of the awarding bodies meaning that there are direct links with qualifications. This helps ensure they work for a wide group of learners, including those who have special educational or learning needs and disabilities.

Scores achieved in the competitions are recorded on students' personal reports, enabling them to track their performance and work to beat their personal bests.

d. Supporting learners

Learners who take part in competitions enjoy they experience as they see these as practical and accessible and that they fit well with their preferred learning styles, often learning by doing. They realize that higher performance can be achieved through competition activities, that they can help them build better employability prospects and appreciate the high level of support from staff.

Tips and tricks related to this good practice

You may need to change the perceptions of teachers and build an interest in changing and updating teaching methods. Many assume competitions take additional time and work and are of limited value. You may need to show that competitions:

- Through working in a different way can be more effective and use no more time.
- Increases the currency of teaching, ensuring they are up to date with teaching techniques and industry needs/standards;
- Develops a talent pipeline through establishing links with businesses
- Provides a refreshed curriculum and new approaches that can help raise performance of learners;
- Gives access to many resources available to support their effective use;
- Can be integrated easily into schemes of work and lesson plans, e.g. as extensions to existing tasks and exercises already in the curriculum;
- Can give courses and programs a competitive edge.

Resources/references

https://www.gcs.ac.uk/

Summary

New College Durham has been involved in inclusive skills competitions since 2015. Using the WorldSkills UK method and structure, the college has created in-classroom competitions that reflect the curriculum and needs of learners with special educational needs and disabilities – from ironing to IT. This approach showcases the skills of students and their skills excellence, provides a tool to assess and examine students and aids the professional development of teachers and trainers.

Period/time, location

- 2015-to present
- Durham, England

Stakeholders/actors involved

- Natspec: the membership association for organizations which offer specialist further education and training for students with learning difficulties and/or disabilities.
- FE colleges

Steps taken

a) The college principal supported the creation of an ethos of competition across the college, including a competition model for SEND students that would help students with individual growth and support lower-level learners into the workplace.

b) A competition model was mapped to different areas of the curriculum and was used as the base for introducing competitions in catering, hairdressing and IT. There was also a focus on areas of transferable skills gained from competitions would benefit learners, such as preparing for independence.

c) Competitions were used as a method of assessment to support different ways of teaching key aspects. Ensuring the competition tasks and standards were appropriate for the curriculum was important.

d) A workbook of standards and off-the-shelf training was created to help support tutors to deliver competitions. These were made readily available and communicated extensively, which has enabled them to be expanded.

e) The college has shared information and tools with colleges across the UK to support others to develop inclusive competitions. This has included running inter-college competitions to that SEND learners can meet other learners and test their skills

"As each student is different, there are plenty of tips and techniques that teachers can adapt to their needs. We encourage teachers to share their experiences and resources too, so we can grow these tools and help even more young learners to succeed" – college lead

Tips and tricks

"Have a go – don't be frightened by the word competition!"

Resources/references

Colin Galley
Vocational Access lecturer
New College Durham
Colin.Galley@newdur.ac.uk

d) Tools and tips

Tool 1: Using SC as a means to motivate and challenge students to achieve excellence

To support teachers in the use of SC and their efforts to guide students in their professional and personal development to get the best of their selves, we present some practical approaches and methods. These approaches and methods can be regarded as tools and tips to refine excellence in skills pedagogy with the students. It also helps teachers to extend their understanding of skills competitions and to revitalize pedagogical methods in the SC- context.

Tip 1: recognize the talents of students and his/her needs as a starting point
In this step, as a teacher, you can notice and recognizes the talents of students and their motivation to participate in SC-activities.

Use the following questions to help you to make up your mind and to prepare a dialogue with your students:

- o   What do you yourself know about SC-activities?
- o   Who can you consult to get a good image?
- o   What benefits of SC-activities do you recognize in your ambitions to guide and support your students?
- o   What sources are available to help you to inform your students properly?
- o   What is the actual understanding of your students of SC-activities?
- o   What does it take for a student to participate in SC-activities?
    - o   Which special requirements can you think of that students need to participate in SC-activities (in terms of ambition and attitude)?
    - o   What can be the expected added value for your students of SC-activities in their learning pathways?
- o   What does it take for you as a teacher?
    - o   What kind of characteristics should you have to execute your role in guiding students to strive for the best?
    - o   What added value can you expect for being a better teachers?
- o   Are there relations with the world of work that you can use?

To set up a dialogue after having answered this questions you could use the World café method:

http://www.theworldcafe.com/key-concepts-resources/world-cafe-method/

The World Café methodology is a simple, effective, and flexible format for hosting a group dialogue. Each element of the method has a specific purpose and corresponds to one or more of the design principles.

World Café can be modified to meet a wide variety of needs. Specifics of context, numbers, purpose, location, and other circumstances are factored into each event's unique invitation, design, and question choice, but the following five components comprise the basic model:

1) Setting:
Create a "special" environment (most often modelled after a café with small round tables). There should be four chairs at each table (optimally) – and no more than five. For a structured dialogue there should be a 'talking stick' item. Regarding the SC context of your dialogue, you could use a specific environment like the practice rooms in your college, or (in case your college already act in SC-activities on a college level) the venue or competition floor. You might even consider using the gymnastics room as a reference to competitiveness.

2) Welcome and Introduction:
The host begins with a warm welcome and an introduction to the World Café process, setting the context, sharing the Cafe Etiquette, and putting participants at ease.

3) Small-Group Rounds:
The process begins with the first of three or more twenty-minute rounds of conversation for small groups of four (five maximum) people seated around a table. At the end of the twenty minutes, each member of the group moves to a different new table. They may or may not choose to leave one person as the "table host" for the next round, who welcomes the next group and briefly fills them in on what happened in the previous round.

4) Questions:
Each round is prefaced with a question specially crafted for the specific context and desired purpose of the World Café. The same questions can be used for more than one round, or they may build upon each other to focus the conversation or guide its direction. You can use a selection of questions as presented above for your preparation.

5) Harvest:
After the small groups (and/or in between rounds, as needed), individuals are invited to share insights or other results from their conversations with the rest of the large group. These results are reflected visually in a variety of ways, most often using graphic recording in the front of the room.

You can use this method in multiple sessions around the year, working to detailed learning outcomes. An overall learning outcome can be:

'Me and my students have a good understanding of the benefits that we can experience in and around SC-activities and are aware of the added value it can bring in personal learning pathways'.

To reflect the results of your World café-sessions you can use the information of publication: 'What Contributes to Vocational Excellence? Characteristics and experiences of Competitors and Experts in

World Skills London 2011. A report to the WorldSkills Foundation on the MoVE International research project conducted at WorldSkills London 2011'

(https://worldskills.org/files/legacy_wsf/downloads/WSF_MoVE_Global_report_WSC2011.pdf).

Tip 2: Working with the students to clarify their understanding of their own strengths
The use of picture cards helps the students to verbalize if and how they recognize their own strengths. It´s a playful method but it gives a lot of information to the teacher/coach as well to the young students who are not so sure of their own strengths.

card, image or object and explain their choice. You can also conduct your session in smaller groups and let the dialogue take place in these groups and then collect the results in class afterwards. You can use this input and combine it with your own perception of your student's qualities.

You might use this method as a starting point for your students to keep a log of their progress during their learning pathways. When conducting SC-activities in class or in college, this will also be a perfect method to raise and monitor your students awareness of their progress and growth in their professional and personal development.

Tip 3: SWOT-analyses in peer learning
SC activities support the development of students by presenting new and achievable goals. Everyone can be the best, and to strive for it is the best way to discover and stimulate personal and professional ambitions. It is not a question of 'the winner takes it all' but it is merely a matter of 'all have special qualities'. Invite your students to think big and support them in making their dreams come through and push their limits.

To help students to recognize and value these limits you can present the method of SWOT-analysis to them. This is a practical tool for students to analyze their position and situation regarding their ambitions. It opens the current situation and probably gives support to find some positive solutions to the issues which might be threatening and support the issues which are promising. Inviting your students to share their findings and results can cause a new the team spirit in class and make way for positive peer learning. You can also use the individual results to get a more comprehensive understanding of your students, and use results to initiate peer learning processes in combining certain strengths of students that might be useful to diminish certain threats of others and the other way around. In any case, to realize that the students could share similar problems, supports you to act on it properly. This promotes understanding that others are in the same situation and share the same challenges.

Tip 4: Imagining the future
A qualitative study of Rahkamo states that the development of exceptional expertise in sports is a cumulative cyclical spiral that has six factors linked to each other:
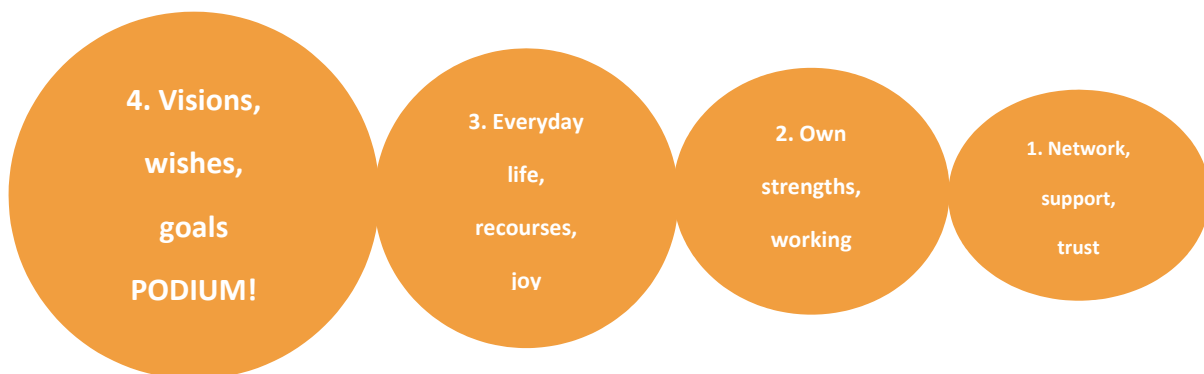
> 1) questioning and playing with the thought
> 2) insight
> 3) systemic applications
> 4) faith in self
> 5) inner drive
> 6) persistent work.

In the system of building excellence, the athlete, the coach and significant other people, as well as the culture, the environment, the equipment and the surroundings are in dynamic interaction. From the effect of these interactions, new opportunities emerge as activities evolve. Little sparks of insights appear little by little through collaboration, seeing, probing and reflecting, affecting an exclusive perspective, understanding, view and allowing holistic insights to develop. Therefore, building excellence is a collective activity merging many peoples' knowing together and this requires creative agency from the athlete as well as from others. As a result of collaboration several expert growing processes often develop side by side, reinforcing each other.

('The Road to Exceptional Expertise and Success - A Study of the Collective Creativity of Five Multiple Olympic Gold Medalists' (Rahkamo, S., https://aaltodoc.aalto.fi/handle/123456789/23560)

To challenge students to play with the thoughts of achieving, you can use a simple method, based on this study.

It is a dialog-based method to give a structure to the future visions, e.g. being at the podium at the competition. What it takes from me, to reach my goal? Analyzing and taking into account these steps seriously gives feedback of the motivation and willingness to strive for the best and offer time in training and development.

4. Visions, wishes, goals PODIUM!

3. Everyday life, recourses, joy

2. Own strengths, working

1. Network, support, trust

In a perception that training paths to win gold medals can be compared with vocational development and gaining vocational excellence in terms of process and motivation, the method can be used to help students building the right environment in which their strives for excellence can be rooted.

Dreaming of the podium in a SC-event, students should take in account the way everyday life, resources and, of course joy, could support their efforts, also using their own strengths and working (and training) methods and an appropriate network to help and provide trust. You can challenge your students by submitting the following questions, just to get a clear image of what could be:

1. Imagine being rewarded with a medal on the podium of any great skills event (i.e. National Finals, EuroSkills, WorldSkills) and being applauded by a lot of people
2. Imagine working every day towards that awarding moment, try to determine what mindset you had, which recourses you used and what joy you experienced in you, striving for the best
3. Imagine the personal strengths that supported you and the working and training methods and programs you used to get better and better
4. Imagine the network you relied on and the believe and trust that was given to you to make your dream come true.

This imagination can be used by your students to get a realistic insight in what is needed to excel. But is also a method that helps students to build their own learning paths to any achievement: successfully overcoming a future assessment during course, obtaining a diploma, growing to great vocational expertise or, perhaps, achieving excellence. Whatever the dream for each student may be, it helps very much to sort out what is needed to make that dream actually come true.

Tool 2: Content for Careers advice

An important role of teachers in VET is to develop the learner's self-awareness, self-determination and self-improvement, instructing them how these elements can underpin their aspiration, ambition and achievement in careers, their own learning and, eventually, the world of work. Career planning and employability skills are increasing in importance, since the world changes rapidly, due to economic and technological developments. In general, SC activities raise the awareness that the need for continue development (Lifelong Learning and Development) is growing. So, even with solid choices for a specific profession, further development of personal and professional skills and a high awareness to stay employable is needed. A good comprehension of career possibilities or even career switches is ever so important.

WorldSkills UK developed a readymade toolkit for colleges and VET-providers, matching the framework of the Career Development Institute in the UK. This toolkit can be downloaded at https://www.worldskillsuk.org/directions/careers-advice-resources/worldskills-uk-careers-advice-toolkit. The toolkit contains several elements which are specific for the UK, but can be used as a source of inspiration for teachers in other countries as well.

A starting element in the toolbox is 'thinking about your future', including a 20 minutes Lesson Plan to assemble students activities in order to develop themselves through careers, employability and enterprise education.

Learning Outcomes of this lesson plan are:

- Students will understand there are lots of opportunities
- Students will understand that they can develop skills even when they don't know what career they want
- Students can identify how their skills and values could help them connect to careers
- Students will understand that it's okay not to know what career but always better to be exploring and developing

The toolkit provides good resources:

- 'Thinking About Your Future' assembly PowerPoint
- 'Thinking About Your Future' video (www.youtube.com/watch?v=k21Zkri4aWI)
- Reflection sheet.

The lesson plan follows the PowerPoint:

Slide	Minutes	Key teaching points
2	1	Introduce yourself, what has been your education-work journey, why are you there today (you want to help other young people, etc.)
3	5	Play the start of the video. Be prepared to pause the video at 3m 16s so that you STOP here and share what it was you wanted to be and why and how this changed as you went through life.
3	5	Return to the video and continue to play it. Be prepared to pause the video at 6m 49s so that you STOP here and share what your key strengths are, how have they helped you, how do you use them in work?
3	5	Return to the video and continue to play it. Be prepared to pause the video at 10m 17s so that you STOP here and share what it was you were looking for and why this was important to you, have you found it?
3	2	Complete watching the last of the video.
4	2	What next? Explain that students have a choice, their futures can be so exciting with so many possibilities. It is up to them how they prepare and if they put in some effort now to build their skills, experiences and explore what their options could be, they will have even more choice and opportunity when.
5	1	Wash-up – ask students to complete the reflection sheet

Tool 3: Using SC to support your lesson plans and careers advice

An additional value in conducting your curriculum and lesson plans can be found in the national and international SC activities. There are several possibilities to integrate this in your pedagogical and didactic practice.

Possibility 1: Visit SC-events

Around the year, there are several opportunities to visit SC-events with your students. The large events, such as the national finals, often provide special programs for career advice, which you can attend. Also, companies are present at the competition venue to inform their future employees about career prospects and opportunities.

On a smaller scale you might visit regional events, the stepping stones to the national finals. Perhaps students of your own college participate: make your students support their college fellows and facilitate them in experiencing the thrill and joy of competition.

Possibility 2: Invite former participants or champions.

It's great to hear something firsthand. A great way to stimulate your students is to invite (former) participants in SC-activities to let them tell their story. It could well be an alumnus from your own college, of somebody from another college nearby. Contact your national WS-organization!

Possibility 3: organize Masterclasses with former champions

Last, but not least you might consider to organize Masterclasses for your students by (former) Skills Champions.
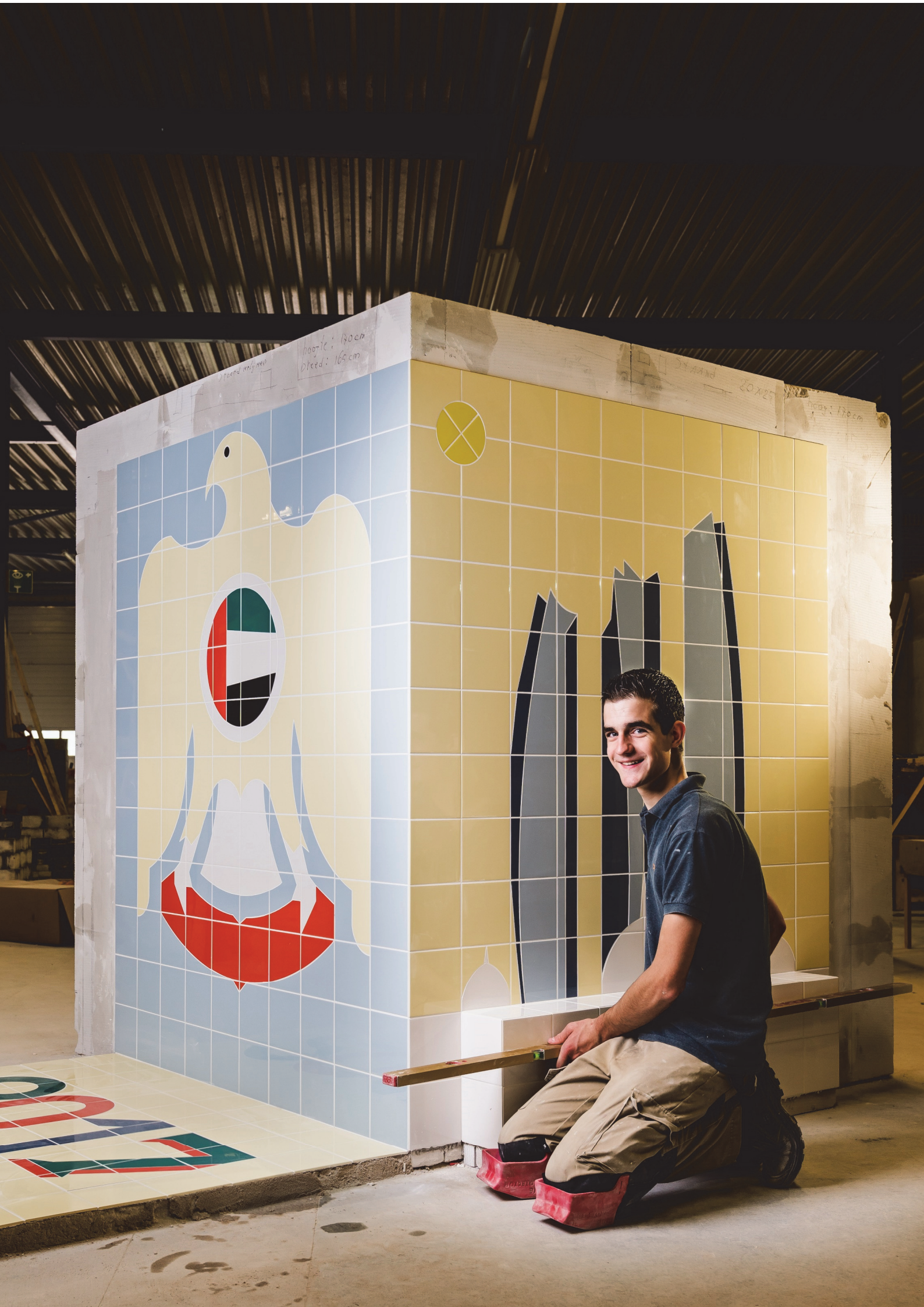
TOOLKIT PART 4:
HOW TO USE SKILLS COMPETITION AS A HUB FOR THE PROFESSIONAL DEVELOPMENT OF TEACHERS AND TRAINERS

a) Introduction

National and international skills competitions offer solid opportunities for teachers for their professional development. Being a college manager, member of the board or staff member for human resource management (HRM) or human resource development (HRD), by visiting national and international SC events, the contesting students' energy, enthusiasm and skills performances can be experienced. But also, the numerous vocational and educational professionals, working as supervisors, workshop managers (organizers of the competition), members of the jury or student coaches can be perceived. They embed and share their skills and knowledge during competitions that benefit (inter)national cooperation. Held during these events are conferences and workshops that encourage visitors to share, discuss and develop themes like skills for the future, lifelong professional development, make connections between education and the labor market and the quality of vocational educational systems. In this respect skills competitions are a goldmine for professional development.

b) Pre-assumptions and considerations

Teachers' influence on the quality of students' learning and achievement is well researched. Teacher quality has a stronger effect on pupil learning than other in-school factors like learning environment, resources, or leadership (Aaronson et al., 2007; Nye et al., 2004; Rivkin et al., 2005) and effective continuing professional development (CPD) is the principal strategy for improving teachers' knowledge, skills, and practices. Lloyd et al (2012) show how access to CPD is important, as well as how having time, resources and support allows colleagues to work with each other. Teachers that work as a training manager in colleges helping students in their SC activities are finding that introducing CPD for colleagues based on SC experience is proving fruitful.

Compared to teachers in general education, there is a lot to consider around specific competencies of teachers in vocational education. Most countries use a general profile for teaching competence but it is each country's own responsibility to identify and formalise specific competencies for vocational education. For example, because of a radical reform of the Finnish VET system, new challenges arise for the teachers. The reform will affect the learning and completion of qualifications, workplace relationships and staff's job descriptions. Anticipating these changes, and in line with the development of the pedagogy of vocational expertise, including the links to and use of skills competitions, a frame of reference has been developed for vocational teachers' expertise. This frame of reference provides clear competence areas and learning outcomes of teachers' performances in (inter)national skills competitions, and can easily be linked to the goals and aims of Igniting Education. With small modifications, this framework regards the application of these competencies in day-to-day vocational education. VET providers could use this framework to establish their own levels of excellence for their teachers, using the facilities of skills competitions for better vocational education and to help teachers perform special tasks in these competitions.

The use of SC in teaching work is a pedagogical and methodological solution, whose goal is not only to promote the excellence student pathway, but also to promote the teacher's own professional growth. The teacher ponders how he or she can contribute to coaching work as part of teaching. At the same time, the teacher

recognizes the development challenges of coaching and the work community's work from the point of view of professional competitions.

Learning and development is part of being a teacher. Not only to 'practice what you preach' and be a role model and inspiration for their students, but also as an indispensable element of the teacher's profession.

Acting in SC activities, a new series of responsibilities are added:

- acting as an ambassador for SC-activities
- generating through partnership and collaboration, investment from education and/or industry to secure the participation in a given skill competition
- working with WorldSkills organizations and its partners to enhance benefits of preparation programs
- making a major contribution to the design, development and delivery of an enhanced training program to secure world-beating performances in skills competitions
- supporting and fostering individual learning progress of young people in training and assessment activity, progressing to European and/or international competition
- supporting the transfer of global best practice across education and industry
- participating in WorldSkills Competition as designated expert
- taking opportunities to demonstrate a welcome and openness to other nations, cultures and social groups
- helping develop and maintain the WorldSkills Competition in a particular skill.

In the UK, research has been done to understand the impact Training Managers from WorldSkills UK have on the pedagogical leadership in their further education college, private trainer provider or

higher education institution[7]. The research shows that quality teaching and learning underpins good education and training, and building upon the WorldSkills expertise of Training Managers is key to ensuring international standards are mainstreamed, helping to raise standards overall. In turn, this will help to raise the esteem of vocational qualifications. There is much potential already built into the system but it can be strengthened by a strategy to drive it forward. Previous research revealed the 'blockages' individual tutors felt with regard to the leadership and transfer of pedagogical thinking for the development of high level skills within their organizations (Messenger et al, 2014). The research also identified the professional development required to grow and support tutors, many of whom had personally experienced the competence-based, pass/fail assessment model of UK VET. They provide quality teaching and learning to their competitors. The research conclude that SC training managers need to be given the opportunity to mainstream their expertise into the wider system.

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[7] *'Good people in a flawed system; the challenges of mainstreaming excellence in technical education', Dr Susan James Relly, SKOPE, University of Oxford*

c) Good practices and examples

Summary

Mahlamäki-Kultanen has designed a framework for the professional teachers´ excellence for those teachers who are engaged in vocational skills competition. For that framework, she has exploited the results of the research "Vocational education and training - teachers´ competences in year 2025" (Mäki et al. 2015) which was done in co-operation with the professional teacher education institutions. Beside that publication, she also exploited another academic thesis done by Paaso (2010) in which Paaso explains her findings with an action model of the recommendations concerning the quality management of vocational education.

Reference framework for the vocational teacher's excellence (Mahlamäki-Kultanen 2016):

Competence area of an actor in European/international vocational skills competitions and the target of evaluation	Criterion for the level of "excellent" The individual
Pedagogical competence	is able to plan, implement, evaluate and develop personalised coaching processes for a young person participating in European/international competitions at the top level of his/her vocational skills is able to support a competitor and a team of competitors during their preparation for and participation in a competition through methods of interaction and mental training
Building a teacher's identity	has the ability to communicate, as part of his/her teaching work, in his/her work organization, regionally and internationally, about vocational skills competitions and prepare for them in a way that will strengthen the positive image of Finnish teachers and Finnish teacher identities is able to motivate and activate new teachers and representatives from the world of work in European/international vocational skills competitions
Management and leadership of teaching and competence	knows how to build learning environments (physical, virtual, social, psychological) for the coaching process, optimizing the expenses and benefits of the process with regard to learning and success in European/international vocational skills competitions is able to work as part of a competing team at the European/international level
Facilitating personalised solutions	is able to utilize nonformal, informal and formal learning possibilities in the coaching process cost-effectively in a manner that best supports an individual's needs and skills has the ability to promote his or her personal learning in European/international competition activities in a goal-oriented and documented manner
Workplace competence	is able to recognize, innovate and implement solutions for competition activities and the related coaching that will create a competitive edge for companies and educational institutions
Multicultural competence	is able to take part in European/international vocational skills competition activities, identifying vocational skills concepts and the importance of cultural differences with regard to them
	is able to take part in European/international vocational skills competitions using the English language, and has a command of the English terminology used in competition activities

	has sufficient command of the basics of the language spoken in the country organizing the competition so as to be able to communicate on matters related to the competition
Building learning communities	has the ability to use competition activities to build a learning community that will support Finnish competitors and that is based on improved competition rules and operating models
Optimisation of learning resources	is able to identify and create alternative forms of funding for coaching activities, justify the need of funding to different actors and implement coaching activities so that they meet the profit expectations of financiers is able to plan, implement, evaluate and develop coaching so that it is linked as effectively as possible to the education provider's other processes (student recruitment, guidance, vocational skills demonstrations) and to the entire student group's studies has the ability to share his/her own competence with other competition actors and to learn from others while at the same time renewing and developing activities
Substance-related competence	is able to compile and analyse information in connection with competition activities (online content and services produced by EuroSkills and World Skills, competition-related activities and presentations) on the European/international development of his/her vocational field to support his/her own teaching and vocational development
Other objectives of an international organization	

Period/time, location

The framework has been designed and developed in 2016, Hame University of Applied Sciences.

Stakeholders/actors involved

- Hame
- professional teacher education institutions

Steps taken

- Exploitation of the results of the research "Vocational education and training - teachers´ competences in year 2025", conducted in 2015
- Design and development of the competence framework

Tips and tricks

This reference framework for the vocational teacher's excellence- table has been a bridge between the expert/coach and his/her supervisor. The idea is that the expert/coach goes thorough the table´s content and recognizes one´s strengths and the needs for support. She/he fills in the table and then there is a discussion with the supervisor. Discussion has been an eye-opening to many of the supervisors because it explains experts/coaches extensive competences.

Resources/references

- Hame University of Applied Sciences
- seija.mahlamaki-kultanen@hamk

Summary

The Finnish Academy for Skills Excellence (FASE) collects ongoing qualitative data as a method to showcase teachers experiences and competences during their performance as SC coaches, who have supported their competitor to the podium (either on a national or international level).

The ongoing survey includes qualitative interviews with coaches who have supported their competitor/students to the podium at national or at international skills competition. During the interview they are highlighting their best coaching methods.

Preliminary results are:

Workplace competences:

Long collaboration program strengthens the trust of benefits on both sides. Businesses are willing to support competitors because they understand the global significance. Businesses are willing to offer training possibilities to the international skill competitors

Building learning communities:

International skills competitions widens experts network possibilities. It gives opportunities to the VET-students in their exchange programs.

According to the preliminary survey results of active teachers are:

- Collaboration with the world of work is a crucial factor
- Skills competitions are an effective tool to increase collaboration
- Skills competitions are also for companies a tool to develop their staff
- Companies do not have enough information and experiences about SC

"Top coach" Mikko Martikainen in CNC-Milling reminds us that to keep up one´s curiosity you´ll give space to the creative thinking. Using various training methods and activities is the best way to reach the competitors´ trust.

In CNC-Milling skill and profession the worker has to think out of the box but sometimes need to stay inside the box to reassess the situation. Like Nokelainen (2018) explains in his study that self-regulative processes is necessary to understand why WSC competitors engage in their required training and wish to become experts in their field.

Competitors in general should have continuous possibility to train their skills in a real working life environment and test their competences in an authentic work process. A hybrid learning environment is for developing an individual student´s innovativeness and supporting their self-regulative skills.

Period/time, location

Annually, aligned with the annual Finish National SC (Taitaja).

Stakeholders/actors involved

FASE and teachers.

Resources/references

https://www.facebook.com/skillsexcellence/

d) Tools and tips

Tool 1: Using a competence framework in the teacher's professional development.

Most countries use a general profile for teaching competence but it is each country's own responsibility to identify and formalize specific competencies for vocational education. In Finland, a frame of reference has been developed for vocational teachers' expertise (Mahlamäki-Kukltanen, 2016, also mentioned as good practice in this part). This frame of reference provides clear competence areas and learning outcomes of teachers' performances and is being used in the training programs for teachers that take part in SC. With small modifications this framework can be useful in the professional development of teachers in VET in day-to-day vocational education. The framework can also be used by VET institutions to establish their own levels of excellence for their teachers.

The framework can be used as a two-way cutting knives: to use as a framework in existing training programs for teachers that are of will be involved in SC-activities, and to use as a framework to help teachers become better teachers in VET.

Competence area	Learning outcomes
Pedagogical competencies	Is able to plan, implement, evaluate and develop personalised coaching processes for their students in vocational courses or performance in national and international skills competitions, at the top level of their vocational skills. Is able to support students in their vocational courses and competitors in skills competitions, using contest assignments and assessments in their courses and using methods of interaction and mental training.
Building a specific vocational teacher's identity	Has the ability to communicate, as part of their teaching work in their organisation, regionally, nationally and internationally, about vocational skills and skills competitions and their contributions, in order to specify and positively showcase a 'vocational identity'. Is able to motivate and activate new teachers and representatives from the world of work and business to add value to vocational education in general, and skills competitions specifically, in order to create Igniting Education.
Management and leadership of teaching and competence	Knows how to build learning environments (physical, virtual, social and psychological) and apply skills contests and assignments for an effective coaching process, optimising the expenses and benefits of the process of learning and talent development, and inspiring students to become the best of themselves. Is able to perform in numerous roles in vocational education and in skills competitions, such as a developer of assignments, team counsellor, skills technician and assessor.
Facilitating personalised solutions	Is able to utilise informal and formal learning and development possibilities in the teaching and coaching process in a cost-effective manner that best supports the student's individual needs and skills, inspiring students and themselves to keep on learning and developing. Has the ability to promote and document personal learning in teaching and coaching.

Workplace and challenge competencies	Is able to recognise, innovate and implement challenges and solutions for learning and competition activities to create added value and a competitive edge for companies and schools, contributing to the development of skills in specific disciplines.
Multicultural competencies	Is able to identify (national and international) cultural influences and characteristics in craftmanship, professional attitudes and behaviours, and performance orientation and is able to use this in counselling and coaching of students.
Building learning communities	Has the ability to use and implement competition activities in VET programmes to build an effective learning community for students and skills competitors. Is able to apply experience, insights and learning outcomes of competition activities to their educational practice and to contribute to improved rules and operating models of national competitions.
Optimisation of learning resources	Is able and active in the exchange of knowledge and information in national and international skills competition networks and uses this knowledge and information in VET programmes.

This framework can be used, and modified, by school management and HRD staff members to express and determine:

- the school's ambitions and expectations in developing and implementing Igniting Education (or the best vocational education)
- the professional standards teachers have to meet to realise these ambitions
- the practical use of skills competitions as a means for the professional development of teachers
- the use of practical experiences and learning outcomes of competitors, in order to modify and improve VET programmes.

Tool 2: using teachers SC experience in professional development

Competition activity is proven to accelerate a young person's apprenticeship or training program. This not only concerns students that participate. In every SC-activity, teachers who are involved by coaching and guiding their students, act as experts or as judge, testify that they encounter solid learning experiences that they can profit from in their competence development, and the SKOPE-report as mentioned before, gives many arguments to use those experiences and special competences in system-wide approaches. To progress to such system-wide approaches, some recommendations were offered. To use it as a tool, we altered these recommendations in 3 simple tips:

1. Time
It takes time for new initiatives in curriculum development to embed. Allowing teachers that are involved in SC activities ('SC teachers') time in their college to write curricula which incorporates SC-activities and standards is imperative.

Tip 1: incorporate some specific time to curricula development and team planning to utilize the expertise, experiences and insights of SC-teachers to utilize their expertise.

2. Resources
Funding and physical resources are fundamental to ensuring the mainstreaming of SC knowledge and expertise into the day-to-day teaching and learning in further education.

Tip 2: allocate specific budgets for SC-teachers in VET colleges to allow them to exercise their expertise.

3. Support of senior management
Senior Management support is critical to the successful implementation of WS pedagogical leadership.

Tip 3: Ensure that there is good understanding and support in management of the added value of working as a SC teacher.

APPENDIX 1: COUNTRY AUDIT CONCLUSIONS

1. Introduction

In vocational education and training there is a need for personalized learning pathways. Individual learning processes are responding to the needs of the world of work. Different teaching methods and tools are needed to respond to the customized learning paths. Students are more self-directed, and to keep their motivation high they ask for more challenges in their studies. For those students who want more challenges one beneficial opportunity is participation to the vocational skill competitions. According to the project application "The focus in the project is to make more and better use of Skills Competitions as a means and not only as a goal, based on shared experiences in the alliance."

In this country audit the three project partners from three countries (NL, FI, UK) are sharing their findings of mapping out the situation of skills competitions attractiveness, student's participation to the skills competition and the teachers interest to use skills competition as a pedagogical tool in their teaching. Sampling is limited and it won't tell the whole picture of each country's situation, just a glimpse of this topic. However, it is important to pay attention to the similarities between the project partners findings concerning the skills competition as a pedagogical tool. This tentative survey might be a stepping stone for the future projects on that sense how to develop pedagogical methods supporting skills competition attractiveness.

2. Methodology

Three project partners collected data based on the questionnaire prepared by the lead organization WSNL. This Country Audit survey has been divided in two main topics. In the first part – Engagement and participation VET-institutes in skills competitions - the main interest is to find out how widespread skills competitions are in each country´s VET and among the VET-students. The second part - Appearance and characteristics- describes more detailed way about the pedagogical approach and skills competition as a tool to develop education.

3. Survey results

A: ENGAGEMENT AND PARTICIPATION VET-INSTITUTES IN SKILLS COMPETITIONS

1. Which skills competitions are executed every year in your country?
There seems to be a common understanding that skills competition gives more opportunities to the VET-students when there are alternative forms of competition. The students can choose how

demanding competitions they want to participate in and show their competences. Partner from NL wrote that "Skills competitions are used as an instrument in developing excellence." What connects all partners is that there are local and regional and national level skills competitions. Like UK describes how "Local heats" reaches a huge number of young students and in NL they organise "Skill Heros" for VET-students and in Finland "Taitaja-skills competition" invites students to show their competences. It´s hard to say whether the national skills competitions are the straight stepping stone to the international skills competitions. There are national needs and competences which will give the framework for national skills competition and those competences are not in all cases reflecting the WSC standards.

2. What is the (estimated) annual total amount of vet-institutes participating in national skills competitions?

Vocational education is an active actor in a society. It´s not an isolated institution, but instead it follows the global development closely and renews it´s working methods. This offers potential opportunity to the VET-students to participate in several competitions where they show their skills, e.g. mathematics, art, sports, skills competitions, etc. Compared to the population (in these three countries) it´s difficult to estimate the real number of skills competitors compared to the total number of VET-students. Some VET-providers are so specialised that for their students there won´t be any opportunity in any skill in which they could participate. For example, it´s useful to consider that in Finland the trend is to unite VET-providers to combine recourses when organising semi-finals or finals.

To promote benefits of skills competition participation among VET-providers who are not active, they should be put under a magnifying glass. This seems to connect the project partners so that in each country has active VET-providers, who are supporting their students individual learning pathways thorough skills competitions. On the other hand, there are VET-providers, who have no connection to skills competitions at all. For example, in Finland there were 123 VET-providers (statistics 2018) and out of these approximately 70 VET-providers are either actively or randomly sending students to skills competitions. Compared to the amount in the UK, where there are approximately 400 organizations sending students to the Local heats. In NL a growing interest towards skills competition seems to be trending in VET-institutions.

3. What is annually the (estimated) number of VET-students participating in skills competitions?

When looking at this question, we face the situation that it is not relevant to compare the numbers, instead we should look at the bigger picture in this case. We are not able to compare the UK's 15 000

skills competition students to 1800 VET-student's participating in Finland and participation in NL falling somewhere between these two. Instead of the number of participants, we should pay attention to the student's motivation and how competition activates student's future life.

However, the number of students participating tells us about the trend towards skills competition attractiveness. On the other hand, it might reflect how the VET-recourses are shared in each country.
All partners agreed that the participation trend should be increasing. There should be more possibilities for the learners to show and assess their own core competences. NL model of using preliminary rounds to students give a good understanding of where they stand in their professional development. This seems to be one practical model towards a positive approach to skills competition.

4. **What is annually the (estimated) number of VET-teachers participating in skills competitions (in training, teaching, coaching, assessing and judgement)?**

This varies and it is very difficult to estimate the real number. Some teachers are in several roles e.g. coach, judge, and trainer. For example, in some cases it´s difficult to find out who has been coaching and what is the world of work representative´s role. Usually coaching is linked through all studies and there are several people and a variety of learning environments where the training takes place.
But it is useful to stop every now and then to look at the teacher's participation and follow how often they bring their students to skills competitions. This is seen also at NL´s report that the number of VET-teacher's participation is increasing.

B: APPEARANCE AND CHARACTERISTICS

5. **What are at this moment the main characteristics of the application of skills competitions in the VET-system?**

There are many possibilities to benefit from skills competition event before, during and after skills competition. Before the actual skills competition it would be a great opportunity to the VET-providers to offer several preparatory tasks of the competition to be done with the students. This kind of participation should be included in the student's studies. During the competition VET-students could fulfill many assistant tasks but unfortunately, it´s not included in to the qualification requirements in many cases. In case the national qualification requirements are written in competence-based form it is possible to apply this.
This procedure makes it possible in the Finnish case that the students acquire competence points to fulfill their studies if they participate to the skills competitions. "Test projects" seem to be inspiring material among VET-teacher's pedagogical materials. In NL the database of old and new assignments offered by WSNL seem to become more and more popular among teachers. "Test project bank" assignments maintained by SkillsFinland are a part of regular teaching materials among Finnish VET-teachers.
Common conclusions among the project partners is that skills assignments are used for tests, exams or other forms of formal assessments. This has a straight link to national skills competitions. Those teachers who bring their students to skills competitions are aware of possibility to the use the previous competition assignments and assessment. At the same time, they are also actively involving all students not only their competitors. UK-partner wrote that paying attention on "Mind set - the state

of mind that supports higher performance in a career - a blend of employability and personal skills that build ambition and competence", is reflecting the needs of future skills.

6. In what way are skills competitions facilitated within the VET-institutes?

In The Netherlands
WorldSkills Netherlands is a non-profit organization with public funding.
SC are conducted in prevocational secondary education (pupils aged 12-16, in total 220.000) and the senior secondary VET (students aged 16-20, in total 508.000).

The prevocational secondary education (650 schools) has several pathways and consists of:
VMBO-bb: basic learning path (NLQF level 1)
Duration: 4 years (age 12-16)
Type of education: preparatory vocational secondary education.
Diploma: gives access to MBO 2.

VMBO-kb, VMBO-gl and VMBO-tl (VMBO-tl is more commonly referred to as VMBO-T): mixed learning path (more theoretical, NLQF level 2)
Duration: 4 years.
Type of education: preparatory general and vocational secondary education.
Diploma: access to employment and/or MBO or HAVO (VMBO T)

The senior secondary VET (MBO) which is provided by 65 colleges, has the following courses:
MBO 1:   entrance, NLQF level 1 (1 year, qualifies for access to MBO 2)
MBO 2:   basis qualification, NLQF level 2 (1-2 years, qualifies for employment)
MBO 3:   qualifying, NLQF level 3 (2-3 years, also for employment)
MBO 4:   qualifying, NLQF level 4 (4 years, qualifies for employment and/or access to Associate's Degree or HBO bachelor programs).

The MBO has 2 different learning paths:
BOL: 60% in college and 40% in internships (78% of all VET students)
BBL: 60% apprenticeship in company and 40 % in college (22% of all VET students)

The Dutch VET trains over 40% of the Dutch labour force.

In the prevocational secondary education, SC are conducted as 'Skills Talents' with the following characteristics:
• Pre-Vet students (14-16y) (enrolment '18/'19 10.000 pupils)
• 10 competitions based on pre-vet curricula
• Team competition; three persons per team
• Yearly updated test projects serving also as a practice for the practical exam
• School selection and provincial competitions leading to national finals
• National final in March with around 300 finalists
• 10 National Champions and one 'overall' winning province team

The SC-activities for VET-students (including apprentices) in level 3/4 are conducted as 'Skills Heroes'. The enrolments in 2018/2019 was 20.000 students. In short:
• Nearly all Dutch VET-colleges participate (56 schools).

- Approx. 60 different Competitions based on NQF.
- Mostly individual Competitions.
- Updated and relevant test projects.
- School rounds leading to qualifications for National final.
- National final in March; 500 finalists.
- Possibility continuation to World- or EuroSkills.

A substantial growth was achieved since 2014, with extra funding for VET Colleges in order to develop excellence programs. With this funding, VET colleges started or increased students' attendances to the Skills Heroes competition.

Subsequently and in addition to the regular SC-activities, in 2014 WSNL started to promote the structural use of SC in Dutch VET, with a recognition of two interdependent pathways:
- the development of talent of all students and teachers in VET by applying specific methods and instruments,
- the development of top expertise and skills excellence by high-end competitions using innovative assignments and challenges.

In Finland

Skills Finland is a non-profit organization. Skills Finland promotes the appreciation of Finnish vocational education and skills both in Finland and abroad. The association, founded in 1993, works together with partners who share similar values and goals and an interest in promoting craftsmanship. The national Taitaja competition, held each year, attracts the most attention towards the association's activities. It is through the Taitaja competition, for instance, that students at vocational institutions can move on to training for international skills competitions. (https://skillsfinland.fi/application/files/2315/1671/3656/SKILLS_FINLAND_Strategy_2020_EN.pdf)

For many years there were open calls for the VET-institutions to organize the national skills competition. To make the process smoother, Skills Finland has launched so called "Formula model" for the VET-institutions to organize the national skills competitions. It saves resources and eases planning, when the organizer is known at least three to four years ahead. So called "tacit knowledge" is supporting the VET-institutions in their implementations. Recourses, whether financial or other type, are always under review. The responsibility of organizing competitions is shared with many VET-institutions. It could be called a "coalition of VET-institutions", which are usually located close to each other. The Taitaja-concept consists in three sections: Taitaja, TaitajaPlus for students with special needs, and Taitaja9 to comprehensive students (grades from six to nine). The Ministry of Education and Culture is responsible for a part of skills competitions' financial budget. Local

financial support is needed, and companies are offering financial or material support as well as assistance during the actual competition.

In some cases, local VET-institutions are organizing small and local "Mini skills competitions" to raise awareness and publicity towards vocational education studies

VET organisations in UK
- Take part in intra college competitions to encourage performance and higher standards
- Take part in inter college competitions where several colleges in an area compete against each other in a variety of skill areas
- Take part in competitions run by industry to help students raise their skills in line with employer needs and engage with employers
- Embed skills competitions in the technical curriculum to improve performance and develop students' skills
- Train up and encourage staff to deliver competition activity as part of their curriculum and to take part in WorldSkills competitions
- Report competitions activity in quality assessment reports which are used by the national inspection organization, Ofsted (competition activity is one of the criteria of high-quality performance)
- Deliver competitions as part of apprenticeship programs that can attract funding support
- Take part in project activity that extend the use of competitions such as running competitions with schools (younger aged students),
- Take part in exchange networks to share good practice between staff
- Encourage skills competitions to feature in leadership discussions to position them strategically in the technical education plans for organizations

WSUK role

- Manage and deliver the WSUK national competition cycle, working with a range of "Competition Organising Partners"
- Develop and promote resources to support the use of competitions across the technical education curriculum, covering both technical skills and mindset related skills
- Develop and deliver CPD to enable further education teachers to engage with competition activity, both WorldSkills competitions and within technical education and apprenticeships. This can include developing and training staff to become WorldSkills experts/training managers

- Raise the profile of skills competitions as a route to improving standards and performance
- Deliver events and activities in vert institutions which showcases technical skills encouraging Showcasing e.g. Team Selection
- Support inter and intra college professional network activities
- Carry out research that supports college delivery of competition activity

7. VET-institutes use skills competitions (including the development of skills-assignments) to establish and strengthen cooperation with business and enterprises:

Tailored learning pathways, which are supporting skills competition participation do not exist without networking with the world of work. Partner from NL wrote that connection to the world of work should be tighter. There is a need for deeper dialog between VET-providers and the world of work representatives. VET-institutions have their own agenda for the given recourses. There are examples how much teachers are doing and putting effort to skills competitions with barely any recourses. The other issue is how the managers or supervisors are supporting and inspiring their teachers to guide their students to skills competitions. UK-partner raised up an issue about the evidence of the skills competition's benefits. If the profile and reputation of skills competitions are clearer it raises the interest overall.

There are many options to include coaching in VET-student´s studies. One practical option is to offer a study module to the students (in Finland study Module - Working as a top expert). It could be implemented in a VET-institution or even better, in a real work place environment and collaboration with the world of work. This as a one option in the future is also introduced by NL-partner.

One issue what NL-partner raised up that the world of work and their representatives are not so familiar with the skills competitions. That seems to connect all partners and the support from the world of work is essential when we think about the skills needed in the future job markets.

In addition, in those VET-institutions, which are organizing national skills competitions, the staff is actively participating but also the students have been activated to implement several preparatory tasks according and fulfilling to their studies.

8. **We recognize added value in doing more with skills competitions and assignments within our VET-system, such as:**

There is still a huge need to improve and develop the collaboration between the VET-institutions and as the UK-partner wrote about the benefits of benchmarking other countries way to implement skills competition. Many of the international skills competition experts have good and fruitful methods and models how the collaboration could be implemented. Those examples are more that welcome to be shared with others.

"Igniting Education" publication done by NL-partner is a good example how skills competition could be rooted in VET-institutions and one tool of sharing awareness of skills competitions benefits to the world of work. The future working life is asking the VET-teachers to be in the continuous learning process. They are in the key role in increasing their students' abilities towards competences needed in the professions. A motivated and encouraging teacher is a coach whose mindset is open to the coming challenges in education and the changes in the world of work.

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