

Impact Report

Work Package 2 – ELVETE



Executive Summary:

To find best practise examples for employer or industry driven curriculums for schools and VET centres, a number of case studies have been conducted. This report is based on 20 case studies from five different organisations/countries covering a wide variety of industries and sizes. The outcomes of these case studies has been compared using a number of criteria. The results have been documented and presented in a comparison matrix and a comparison chart.

1) Scope

The purpose of the Project is to highlight good practices in the 14 – 19 VET education where the curriculum has been influenced by industry or employers. For this purpose a total of 24 case studies have been carefully collected by the workgroup. The case studies highlight the influence that the engagement of the industry had on the delivery and design of the curriculum of the VET centres /Schools from the schools/VET Centres point of view. In this report we are now comparing the outputs of the different case studies using several criteria to identify the impact of the cases. The case studies are compared using several comparison criteria. For each criteria there have been 3 to 4 categories in order to fine tune the rating. In addition to those general criteria there is also the possibility for each partner to rate two of the cases as best practise. This adds an element of personal judgment to the otherwise standardised rating procedure.

2) Comparison Criteria

We have compared the case studies based on the set of categories below. The categories itself are chosen based on the aim of our project and the outcome of the case studies. Lower numbers indicate that the case study meets the expectation to a higher degree. Rating case studies is more of an art than an exact science, as there are no black and white cases but rather a lot of great and colorful activities in the world of VET education and training. If a case study has high marks this does not make it a bad study, but it does not fit the scope of our project as good as others.

a. Categories for Industry involvement:

Industry or employer involvement especially the involvement in the design of the curriculum is the most important criteria, as we are looking to build curricula which are employer driven.

Category 1: Involvement in Curriculum design

Category 2: Involvement in the process (specific Work placement)

Category 3: General Work placement or Anticipation of Industry needs

b. Categories for ICT Usage:

ICT usage is also an important property to look for in the case studies.

Category 1: ICT training and Usage as part of the curriculum

Category 2: ICT Usage for delivering of Curriculum

Category 3: General usage of ICT

c. **Size Categories:**

Impact and size of the studied school or VET center are often very close related although the size is sometimes not exactly known. The numbers that have been chosen for the single categories are arbitrarily chosen. A universal criteria could not be found or defined.

Category 1: above 300

Category 2: 50 – 300

Category 3: Below 50

d. **Categories of Portability:**

There is no way to categories this property based on facts, as there is no absolute criteria for finding out if a model is portable or not. In this paper we followed the judgment of the partners who did the case study.

Category 1: Easily portable also to different subjects and countries

Category 2: Portable with certain restraints (teacher education, political situation etc.)

Category 3: Limited Portability

e. **Impact/Relevance (From Impact Relevance Chart see Annex b):**

To compare the case studies we drew up a chart comparing Impact vs. Relevance and divided it in four quarters, hence there are four criteria in this category

Category 1: High Impact/High Relevance

Category 2: Low Impact/High Relevance

Category 3: High Impact/Low Relevance

Category 4: Low Impact/Low Relevance

f. **General (See Annex a):**

This criteria allows the partner to make two models their favorite model which they feel fits their criteria best, this adds an emotional criteria.

Number of first places awarded by the project partners.

3) **Short categorisation of the single Cases.**

Find below an overview of the case studies and a short explanation of the ratings in the property matrix in **Annex c**.

Case Study 1: Move It

- **Industry:** Veterinarian
- **Industry involvement** in work based activities/e-learning but only limited involvement in the curriculum
- **ICT Usage** very heavy in delivery, but not a vital part of the curriculum
- **Size:** High (potentially over 300 students per year)

- **Portability:** Portable for different courses and businesses, but e-learning platform requires additional involvement by teachers.

Case Study 2: Tamu

- **Industry:** 11 topics, address to youth at risk
- **Industry involvement** only indirect (simulation of business environment at the training center)
- **ICT Usage** General use of ICT
- **Size:** Medium (six times forty students per year)
- **Portability:** Limited portability as high investments and political will is required
- Excellent implementation and excellent success

Case Study 3: D Leonida College

- **Industry:** Low Voltage Electrician
- **Industry involvement** both in work practice and curriculum (limited by national regulations)
- **ICT Usage** General use of ICT
- **Size:** High (potentially over 300 students per year)
- **Portability:** Good portability if the environment is good.

Case Study 4 : Gogerskolen

- **Industry:** Circus production school
- **Industry involvement** only indirect (simulation of business environment at the school)
- **ICT Usage** General use of ICT
- **Size:** Medium (approximately 100 students per year)
- **Portability:** : Limited portability as high investments and political will is required

Case Study 5: Building technology

- **Industry:** Building Industry
- **Industry involvement** High influence on Curriculum, limited by legal regulations.
- **ICT Usage** General use of ICT
- **Size:** Medium (approximately 200 students per year)
- **Portability:** : Limited portability as high investments and political will is required

Case Study 6: Industrial Design

- **Industry:** Mechanical Engineering
- **Industry involvement** High influence on Curriculum, limited by legal regulations.
- **ICT Usage** General use of ICT
- **Size:** Medium (approximately 150 students per year)
- **Portability:** : Limited portability as high investments and political will is required

Case Study 7: Logistics

Dieses Projekt wurde mit Unterstützung der Europäischen Kommission finanziert. Die Verantwortung für den Inhalt dieser Veröffentlichung (Mitteilung) trägt allein der Verfasser; die Kommission haftet nicht für die weitere Verwendung der darin enthaltenen Angaben.
 en funded with support from the European Commission. This publication [communication] reflects the views only of the nmission cannot be held responsible for any use which may be made of the information contained therein.

- **Industry:** Logistics
- **Industry involvement** High influence on Curriculum, limited by legal regulations.
- **ICT Usage** General use of ICT
- **Size:** Medium (approximately 200 students per year)
- **Portability:** : Limited portability as high investments and political will is required

Case Study 8: Material Science

- **Industry:** Material Science
- **Industry involvement** High influence on Curriculum, limited by legal regulations.
- **ICT Usage** General use of ICT
- **Size:** Currently about 120 Students in education, first graduates in 2 years
- **Portability:** : Limited portability as high investments and political will is required

Case Study 9: RSA

- **Industry:** Engineering and Product Design
- **Industry involvement** High influence on design of the Curriculum and its Delivery.
- **ICT Usage** High level of ICT Involvement
- **Size:** Small (approximately 30 students per year)
- **Portability:** : Portable but needs strong involvement of industry

Case Study 10: Wolverhampton Business Partnership

- **Industry:** Several
- **Industry involvement** Strong involvement in work placement and delivery, but very limited influence on design of Curriculum.
- **ICT Usage** General use of ICT
- **Size:** Not known, potentially High
- **Portability:** : Portability is highly possible, but a local political body is required to set up the model

Case Study 11: ACE

- **Industry:** Several
- **Industry involvement** Strong involvement in the activities and delivery, but very limited influence on design of Curriculum.
- **ICT Usage** General use of ICT
- **Size:** High (approximately 1400 students per year)
- **Portability:** : Portability is highly possible, but the staff needs to be capable to organize the activities.

Case Study 12: NEWA

- **Industry:** Several
- **Industry involvement** Strong involvement in work placement and delivery, but limited influence on design of Curriculum.
- **ICT Usage** General use of ICT
- **Size:** Not known, potentially High
- **Portability:** Some potential for replication, but not everywhere possible

Case Study 13: SCC - Electrician

- **Industry:** Electricity Industry
- **Industry involvement** Involvement in work placement and delivery, but very low influence on design of Curriculum.
- **ICT Usage** General use of ICT
- **Size:** Not known, potentially large
- **Portability:** Some possibility for replication

Case Study 14: SCC – Carpentry

- **Industry:** Carpentry
- **Industry involvement** Involvement in work placement and delivery, but very low influence on design of Curriculum.
- **ICT Usage** General use of ICT
- **Size:** Not known, potentially large
- **Portability:** Some possibility for replication

Case Study 15: Samnia

- **Industry:** Rehabilitation
- **Industry involvement** Low.
- **ICT Usage** General use of ICT
- **Size:** Small (about 50 students per year)
- **Portability:** Some possibility for replication

Case Study 16: ICF

- **Industry:** Fishing Industry
- **Industry involvement** High influence on Curriculum, the curriculum was made to fit the needs of the industry.
- **ICT Usage** General use of ICT
- **Size:** Small (about 30 students per year)
- **Portability:** Good possibility for replication could be also extended to different industries

Case study 17: BCUTC

- **Industry:** Mechanical Engineering
- **Industry involvement** High influence on Curriculum, the curriculum was made to fit the needs of the industry.
- **ICT Usage** Substantial use of ICT
- **Size:** Small, but with large potential
- **Portability:** Good possibility for replication could be also extended to different industries

Case Study 18: Salon and Spa Walsall College

- **Industry:** Hair Dressing and Wellness
- **Industry involvement** Large influence on Curriculum.
- **ICT Usage** General use of ICT
- **Size** Large (about 500+ students per year)

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- **Portability:** Good possibility for replication could be also extended to different industries

Case Study 19: Roland DG Academy

- **Industry:** Design
- **Industry involvement** High influence on Curriculum, the curriculum was made to fit the needs of the industry.
- **ICT Usage** Specific and substantial use of ICT
- **Size** Small (about 50 students per year)
- **Portability:** Good possibility for replication could be also extended to different industries

Case Study 20: Business and Sports Hub

- **Industry:** Sport
- **Industry involvement** large influence on Curriculum.
- **ICT Usage** Substantial use of ICT.
- **Size** Large (about 800+ students per year)
- **Portability:** Good possibility for replication could be also extended to different industries

Case Study 21: 1st EVENING VOCATIONAL LYCEUM OF AHARNES, ATTIKA

- **Industry:** Electronics/Electrical Engineering and Mechanical Engineering
- **Industry involvement** strong Influence on curriculum.
- **ICT Usage** General use of ICT.
- **Size** Large (about 250 students per year)
- **Portability:** Good possibility for replication could be also extended to different industries

Case Study 22: 1st VOCATIONAL LYCEUM OF GALATSI, ATTIKI

- **Industry:** Multiple, mainly technical (e.g. Electrical; Construction) but also Agronomics and Health
- **Industry involvement** only through training and study visits, only small influence on curriculum.
- **ICT Usage** General use of ICT.
- **Size** Large (about 1000 students per year)
- **Portability:** Some possibility for replication, dependent on certain requirements fulfilled

Case Study 23: 2nd VOCATIONAL LYCEUM OF HELION, ATTIKI

- **Industry:** Informatics; Agronomics, Health and Naval
- **Industry involvement** only through training and study visits, only small influence on curriculum.
- **ICT Usage** General use of ICT.
- **Size** Large (about 200 students per year)
- **Portability:** Some possibility for replication, dependent on certain requirements fulfilled

Case Study 24: 1st VOCATIONAL LYCEUM OF AMAROUSIO, ATTIKI

- **Industry:** Electronics, Constructions and Health
- **Industry involvement** only through training and study visits, only small influence on curriculum.
- **ICT Usage** General use of ICT.
- **Size** Large (about 250 students per year)
- **Portability:** Some possibility for replication, dependent on certain requirements fulfilled

4) Analysis and Conclusions

The case studies that are building the basis for this report cover a large area of VET schools and courses. The studies courses and schools range from the fishing industry to material sciences from schools for socially challenged students to very focused engineering courses.

Also the size of the activities we looked into ranges from a view students to over 1000 per year. The widespread data indicate that there is a large number of Schools and VET training centres that are in some way cooperating with the employers and the industry or industry groups.

We see some different ways of cooperation between Industry and employers with schools and VET centres.

One way is to offer work placement (also tailored to a certain curriculum), but do not directly (sometimes indirectly via boards etc.) influence the curriculum. The second way is to build a curriculum based on a request from a specific industry body, hence creating a special course or school. These approaches are very expensive and are often found in countries where curricula are decided by central (often political) bodies (e.g. Austria). The third approach is to tailor a curriculum towards the needs of a specific industry or a group of industries. Those approaches are often found in countries where schools or VET centres are in charge of their curriculum (e.g. UK).

Overall the diversity does make it difficult to categorise and compare the single cases, however it also offers a wide variety of models and activities that are linking industry and employers with curricula. This gives us building blocks that can be combined to allow us to meet our target to come up with a building plan for a truly employer led curriculum.

Annexes

ANNEX a: Rated Table of Case studies

See File: ANNEXa_Rated_Overview_Case_Studies_WP2_V1

ANNEX b: Comparison Chart Impact/Relevance

See also File: ANNEXb_Impact_Relevance_Chart_V1

Annex c: Property Matrix

See also File: ANNEXc_Categorised_Case_Studies_V1

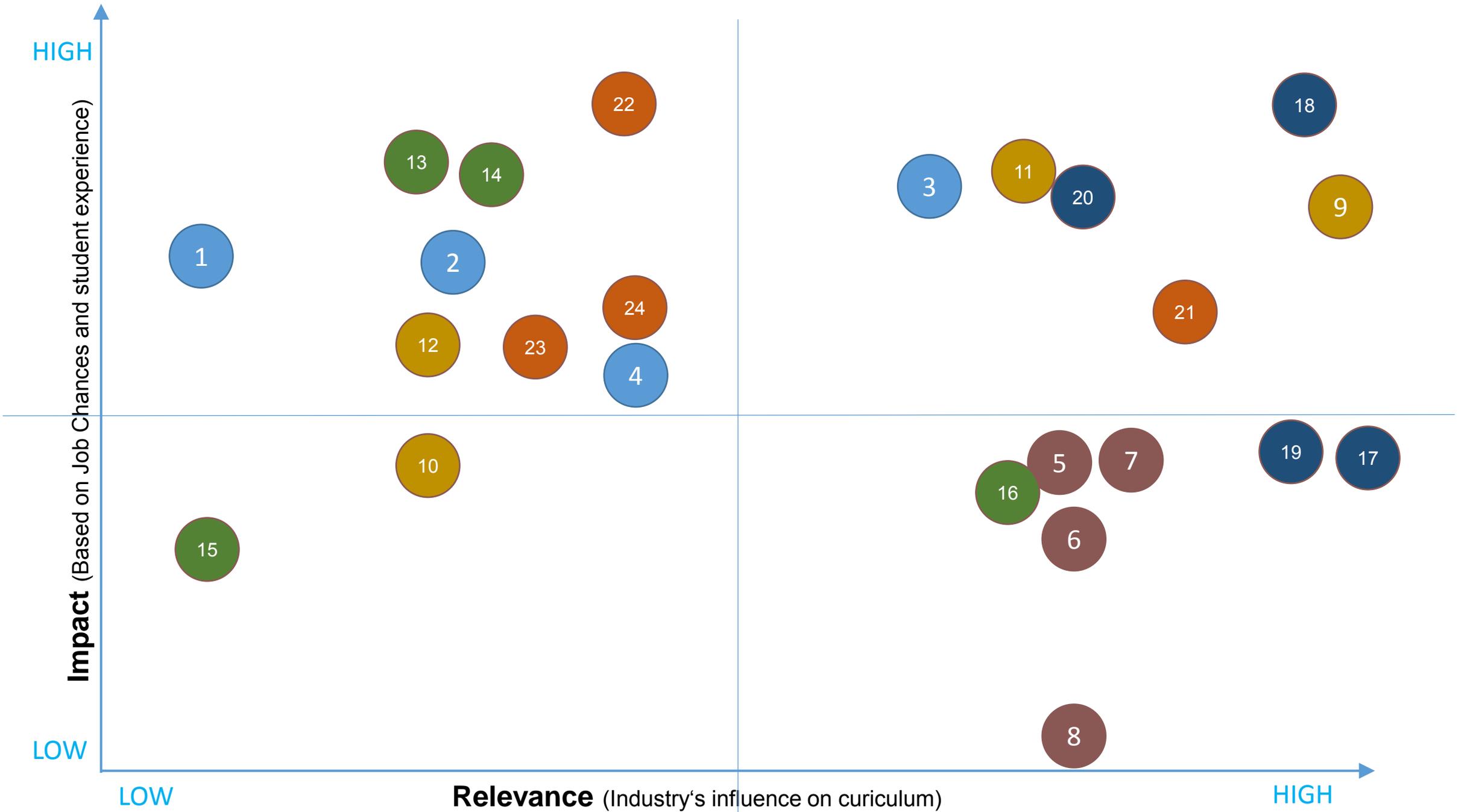
Annex d: Collection of Case Studies – Short descriptions

See Files: ANNEXd_WP2_Case_Studies_AIP
ANNEXd_WP2_Case_Studies_HTL
ANNEXd_WP2_Case_Studies_MSS
ANNEXd_WP2_Case_Studies_UoW
ANNEXd_WP2_Case_Studies_WALCOL
ANNEXd_WP2_Case_Studies_NTUA

Nr.	Case Study	Short Description	Impact/Size	ICT Involvement	Portability	HTL	Walsall College	AIP	MSS	UoW	NUA	Total:
1	MOVE IT - work based Delivery	This case study investigates the application of a new work based delivery methodology, using the e-learning and mobile technologies, by the Agricultural High school Mihail Kogalniceanu based in Miroslava, Iasi county, Romania, by means of two courses aimed at VET students aged 16-19: • Semiology- animal clinical examinations – level 3 • General elements of Animal husbandry – level 3 The new work based delivery methodology is transferred and adapted from the original model of the Myerscough College, UK as part of the EU funded project MOVE-IT - Mobilizing Opportunities in Vocational Education with Innovative Technologies	Evaluation by students shows that they felt that the virtual learning environment helped them understand better. The specific methodology was tested with 48 students (but the college has over 300 students)	Crucial	High potential		5		5	5		15
2	TAMU - Centre	This case study presents a successful training model, the TAMU centre in Aarhus, Denmark. The TAMU centre is addressed to young people between 18 – 30 years old who have not completed secondary education and youth at risks who, because of personal or social problems, do not manage to integrate on the labour market. The TAMU training programme is available for 11 topics and consists in 34 weeks of training, with the aim for all students to immediately have a job after graduation. The 11 topics/disciplines are: building, gardening, agriculture, canteen, painting and installation, metal, cleaning, textiles, transportation, wood industry and laundry.	High success rate: 80% of the students graduating from TAMU Aarhus centre manage to find a job or to continue their education. The training centre has a capacity of maximum 40 students (but there are 6 such centres over the country)	Used Generally	High Potential		5					5
3	"D. Leonida" College	The case study will present the education and training path proposed by the "Dimitrie Leonida" Technical (VET) College in Iasi as regards the Low-voltage electricians profile. Although following the main national curriculum for this profile, the college in cooperation with the tutors at the company have developed several specific "local development curricula" aiming at certain knowledge and skills that have been proposed by the companies, being necessary for future employees as low-voltage electricians.	High rate of employment in the sector after graduation (over 50% students). Over 300 students in the college	Used Generally	Good Potential							0
4	Gøglerskolen	The case study will present the Gøglerskolen circus production school in Aarhus, Denmark which is a second change school open to all young people without higher education under 25 years old. Circus school/School of entertainment is one examples of the offer of Production Schools in the municipality of Aarhus and an offer to all young people not connected to labour market or formal education. The school's pedagogy is based on the fairground and craftsman philosophy of autonomy and focus on possibilities rather than limitations	Interviewed students reported full satisfaction with the pedagogy and subjects studied. are delivered to a small group of students (approx. 10), so in average 100 students in the school.	Used Generally	High potential							0
5	Energy and Building Technology College	It was initiated by the Austrian plumbing and building technology association because of a large amount of new skills which are required for future engineers. Subjects like control techniques, electronics and IT are strongly required from the engineers in the future. In cooperation with the Ministry of Education a curriculum for a 5 year long vocational education has been negotiated.	Excellent Job Chances for students. Approximately 200 -250 graduates per year.	Integral part of the curriculum	Limited						5	5
6	Industrial Design - HTL	The curriculum was initiated by the Industry Associations of Carinthia especially the Lightning industry, Weapon industry and mechanical industry. For technical products it became more and more important to not only have a perfect function, but also a modern and artistic Design to achieve a good price in the marketplaces. The basic requirements were to give the students an education in industrial engineering, Manufacturing technologies, mechanical engineering and Industrial Design	Excellent Job Chances for Students. Approximately 150 graduates per year.	Integral part of the curriculum	Limited							0
7	Logistics HTL	The Association of the steel Industry in Styria proposed a 5 Year HTL course for Industrial Logistics. Focusing on Material flow and Recycling. In 2003 it was established as a curriculum of Industrial engineering – Logistics.	Excellent Job Chances for Students. Approximately 150 graduates per year.	Integral part of the curriculum	Limited							0
8	Material Science and Mining HTL	Leoben is the centre of the Austrian mining and metallurgy industry and education. The Austrian Montanuniversität Leoben is a leading education centre for mining, metallurgy and material sciences worldwide and their graduates are working all over the world in all kind of engineering projects. However the mining industry is in need of good educated none academic engineers and therefore a new curriculum for HTLs was implemented at the HTL Leoben in the school year 2013/14.	Excellent Job Chances for Students. No graduates yet.	Integral part of the curriculum	Limited							0

Nr.	Case Study	Short Description	Impact/Size	ICT Involvement	Portability	HTL	Walsall College	AIP	MSS	UoW	NUA	Total:
9	RSA	Interaction between RSA Academy, an 11-18 Academy in Tipton, West Midlands and a large West Midlands based business, Caparo Industries. BTEC Level 3 Engineering. Post-16 vocational qualification Product Design Level 3	Impact positive from students perspective. BTEC Engineering has an average of 20 students per year. IBCC Product Design has an average of 2 to 10 students	Vital	Some potential			5		5		10
10	EBP	This case study focussed on the city-wide provision for education and business links within Wolverhampton and provides details of a model used by Wolverhampton EBP to assist the 17 schools with developing, planning and maintaining links with business.	Impact not known. All students (Years 7-13) across 17 secondary schools	Used General	Huge Potential	5	5	5	5			20
11	ACE	This case study focussed on ACE Academy, an 11-18 Academy in Tipton, West Midlands and the extensive, school-wide employer engagement activities it carries out for all year groups.	Activities are evaluated by students and their feedback is taken into account when planning and developing future activities. 1400 students in the school	Used General	Hugh potential							0
12	NEWA	This case study focused on North East Wolverhampton Academy (NEWA), an 11-18 Academy in Wolverhampton, West Midlands, and the work experience programme they organise for Year 10 students. Work experience takes place for 2 weeks towards the end of the summer term, usually in June.	Students reported very positive experiences Year 10 numbers	Used General and some specific usage	Potential if properly accredited	5						5
13	SCC - Electrician	The first case was collected at Sudurnes Comprehensive Collage, -a collage that offers formal education both traditional studies and certified trades. The trades include vocational training during a period of time. If there is an important change in method or mechanic the committees can be addressed to try to promote a change in the curriculum. Tómas Guðmundsson the owner of TG Electrician Contractors, the company interviewed, said: "the main changes in the curriculum during the last 15 years have been "natural changes" conducted to respond to technical changes, mostly computer related." There is no formal cooperation between the educational organisation and the VET business other than that the business signs the contract provided by the educational organisation of that the student has worked for the business for the required time that the educational authority has published in the curriculum for this exact trade.	Student felt he was expanding his knowledge a lot and knowing the basics would always be needed. SCC has in the recent years had about 1000 students	Used for handling and feedback.	High Potential							0
14	SCC - Carpentry	The second case was collected at Sudurnes Comprehensive Collage, -a collage that offers formal education both traditional studies and certified trades. The trades include vocational training during a period of time. The conclusions indicate that there is very limited collaboration between the educational organisations and the companies of the sector, and influences on curriculum are limited.	The experience of the student interviewed for this case is such that he felt very lucky to get a broad experience in the training program.	Used for handling and feedback.	High Potential							0
15	Samvinna	The third case was collected at Samvinna Rehabilitation Centre, -a rehabilitation centre for people that have for some reasons left the work force and are provided with courses and vocational training in order to find a way for them to re-engage. Most of the participants are offered to engage in the studies on the behalf of the unions they belong to, there is an office that handles matters of those that have left the workforce due to the above stated reasons and that office assigns the participants to this program. Also occasionally participants are assigned on the behalf of the municipals in the area. There are two main themes of studies, Education line and Employment line.	The student interviewed for this case study was thankful for the training period, which made it possible for her to change her field of work. Samvinna has the capacity to service 50 people at a time.	Used for handling and feedback.	Low potential						5	5
16	ICF	The fourth case was collected at Icelandic Collage of Fisheries, a young VET organisation that provides short vocational education (2 years). The Icelandic Collage of Fisheries built their initial curriculum in a very close collaboration of companies in the fishing industry sector. Most changes in curriculum are derived from advice from companies in the industry; -also new lines of studies have been created meeting the needs of the sector.	Students reported very positive to the teaching model. IDF has had around 15 people pr. semester, as the organisation is very new.	Used for handling and feedback.	Good potential							0
17	Black Country University Technical College	University Technical Colleges (UTCs) are an initiative of the UK Government. Initially established in 2010, UTCs offer a highly vocationally specialised general education for students aged 14 to 19. This case study (WC/UK/1) reports on the involvement of key employers in the production and the ongoing deployment of the UTC curriculum.	Success rates (jobs and progression) are high. The institution is young and the overall roll is still low.	High	Hugh Potential					5		5

Nr.	Case Study	Short Description	Impact/Size	ICT Involvement	Portability	HTL	Walsall College	AIP	MSS	UoW	NUA	Total:
18	The Graduate Academy Salon and Spa at Walsall College	Walsall College is an English General Further Education College with a strong vocational offer to learners aged from 14. The College's current main campus is five years old and incorporates on the main site a Graduate Academy Salon and Spa. This development was designed with substantial and detailed input from a leading Hairdressing chain – the FrancESCO Group. Walsall College learners in Hair and Beauty complete their training in the Graduate Salon under conditions that are an exact facsimile of employment in the industry.	Success rates (jobs and progression) are high. in excess of 500 learners per year enrol on this curriculum	Medium	High Potential							0
19	The Roland DG Academy	Roland DG is a multinational print industry business, part of the Roland group based in Japan. Roland DG were instrumental in the development of the academy in a number of ways explored in this case study (WC/UK/3): the sponsorship of the centre, including capital equipment; the availability of industry expertise to support delivery, and also in the design of the well-respected national sign making qualifications that are undertaken by employed learners via Walsall College.	Success rates (jobs and progression) are high. under 50 learners	High	High Potential						5	5
20	The Business and Sports Hub	Construction work has just commenced on a new campus for Walsall College – the Business and Sports Hub. This building will be the focus for the College's broad business skills curriculum for years to come and is due to open to learners in September 2015. The physical aspects of the development are being informed by local employers and other sector stakeholders, but prior to this, employer/business involvement in the re-design of the current curriculum has been marked.	Success rates (jobs and progression) are high. in excess of 800 learners per year enrol in this area.	High	High Potential							0
21	1ST EVENING VOCATIONAL LYCEUM OF AHARNES, ATTIKA	The 1st Evening Vocational Lyceum of Acharnes was created in 1999 in order to cover the increased needs in demand for study in the Technical Education of students of municipality of Acharnes. The school emanated from the split of an afternoon technical school, the 4th TEE Acharnes. That is to say, the students of that afternoon school registered in the new evening school that was created, initially with schedule of teaching from 7:10 pm until 10:35 pm.	The experience of working with real enterprises has a very positive impact on the students. Approx. 250 Students are taking part in the courses.	Used General	Good potential for reproduction							0
22	1ST VOCATIONAL LYCEUM OF GALATSI, ATTIKI	The School have duration of study of 3 years and function in the morning, with a schedule of 7 hours of teaching per day. The big size of this school, with many professors and students, needs a very efficient management. It is more difficult to manage a big school, and, for this reason, all big schools need Directors specialized in administration and management of big units. In the morning schools, generally, does not occur situations of not attendance of students, either not registration of absent students. The Sector of Health - Welfare functions in this school until graduate all the students that remained in the speciality in the year 2013	The practical experience and the group work experience are very positive for the students. Approx. 1000 Students are taking part in the courses.	Used General	Portable under certain conditions							0
23	2nd VOCATIONAL LYCEUM OF HELION, ATTIKI	The 2nd EPAL Helion functions with morning schedule and the duration of study is three-years. The curriculum includes courses of general education, courses of direction, courses of sector and courses of speciality. The percent of admission of graduates from all EPALs to Higher Education, mainly to TEI, is 10% of all positions of TEI per country. As in the previous Case Study 2, and here the Sector Health-Welfare functions until graduate the students that remained in the speciality from year 2013	The practical experience and the group work experience are very positive for the students. Approx. 200 Students are taking part in the courses.	Used General	Portable under certain conditions							0
24	1st VOCATIONAL LYCEUM OF AMAROUSIO, ATTIKI	The 1st EPAL Amarousio functions with morning schedule and the duration of study is three-years. The programs of teaching include courses of general education, courses of direction, courses of sector and courses of speciality. The following subjects can be studied: Electronics; Electrotechnics; Constructin and Applied Arts and Helth.	The practical experience and the group work experience are very positive for the students. Approx. 250 Students are taking part in the courses.	Used General	Portable under certain conditions							0



Nr.	Case Study	Industry involvement	ICT Usage	Size	Portability	Impact/ Relevance	General
1	MOVE IT - work based Delivery	2	2	1	2	3	3
2	TAMU - Centre	3	3	3	3	3	1
3	"D. Leonida" College	1-2	3	1	2	1	-
4	Gøglerskolen	2-3	3	2	2-3	3	-
5	Energy and Building Technology College	1-2	3	2	2-3	2	1
6	Industrial Design - HTL	1-2	3	2	2-3	2	-
7	Logistics HTL	1-2	3	2	2-3	2	-
8	Material Science and Mining HTL	1-2	3	NA	3	2	-
9	RSA	1	1	3	2	1	2
10	EBP	2	3	NA	1	4	4
11	ACE	2	3	1	2-3	1	-
12	NEWA	1-2	2-3	NA	3	3	1
13	SCC - Electrician	3	3	1	3	3	-
14	SCC - Carpentry	3	3	1	3	3	-
15	Samvinna	2	2	3	2-3	4	1
16	ICF	1-2	3	3	2	2	-
17	Black Country University Technical College	1	2	NA	1	2	1
18	The Graduate Academy Salon and Spa at Walsall College	1	3	1	2	1	-
19	The Roland DG Academy	1	3	3	2	2	1

Nr.	Case Study	Industry involvement	ICT Usage	Size	Portability	Impact/ Relevance	General
20	The Business and Sports Hub	1-2	3	1	2	1	-
21	1st Evening Vocational Lyceum of Archanes	1	3	2	1	1	-
22	1st Vocational Lyceum of Galatsi	2-3	3	1	2	3	-
23	2nd Vocational Lyceum of Helion	2-3	3	2	2	3	-
24	1st Vocational Lyceum of Amalousio	2-3	3	2	2	3	-



Work Package 2 Summary Report UK

Executive Summary Needs to be translated to French

AIP, Romania has selected a variety of 4 case studies to show different good practices in 14 -19 VET education, both from within Romania as well as from Europe. For this purpose, 2 of case studies target Romanian VET colleges: one agricultural college and one energy college and present their way of addressing the work-based delivery with focus on the employers' engagement and transition from school to labour market, while the other 2 case studies present 2 Danish alternatives for the integration in VET education and further on employment of young people.

Regarding the Romanian perspective, the two case studies showed that employers are engaged and impact the curriculum, however this is limited by the national curriculum, as only a limited number of learning hours can be inserted at the request of the employers. On the other hand, the Danish practices show a totally different perspective where the focus is on each individual and his/her needs, simulating at the same time real working environments through the concept of "production schools".

ICT seems to be a present element in all case studies in terms of generic activities, but especially in the first case study dealing with e-learning.

All four case studies have a good potential of replication, with the necessary adaptations for each context.

Case Study Summaries

Case Study 1 – *MOVE-IT work based delivery methodology*

This case study investigates the application of a new work based delivery methodology, using the e-learning and mobile technologies, by the Agricultural High school Mihail Kogalniceanu based in Miroslava, Iasi county, Romania, by means of two courses aimed at VET students aged 16-19:

- Semiology- animal clinical examinations – level 3
- General elements of Animal husbandry – level 3

The new work based delivery methodology is transferred and adapted from the original model of the Myerscough College, UK as part of the EU funded project MOVE-IT - Mobilizing Opportunities in Vocational Education with Innovative Technologies (Leonardo da Vinci – Transfer of Innovation, Ref. no. UK/12/LLP-LdV/TOI-520).

The two courses are part of the general curricula of the VET high school "Mihail Kogalniceanu" for the profile veterinary technician.

As part of their involvement in the EU funded project MOVE-IT, the two courses were chosen in order to be transformed into e-learning environment and tested with groups of students, trainers and employers, according to an innovative work based delivery methodology, incorporating e-learning and mobile technology.

Thus, the 2 courses were re-developed as interactive learning packages, using different materials such as presentations, images, videos etc in order to make the learning online more attractive and easy to understand for the students. The learning packages were uploaded onto the Virtual Learning Environment (VLE) of the project and delivered to 48 students aged 16-19 from February until May 2014.

In order for students to perform their work-based activities, the VET school has signed 13 collaboration contracts with veterinarian offices, public offices of sanitary-veterinary control, veterinary companies.

Also, the 13 employers had direct access to the platform materials, so they were able to see what the students are studying.

Case Study 2 – The TAMU Centre, Denmark

This case study presents a successful training model, the TAMU centre in Aarhus, Denmark.

The TAMU centre is addressed to young people between 18 – 30 years old who have not completed secondary education and youth at risks who, because of personal or social problems, do not manage to integrate on the labour market.

The TAMU training programme is available for 11 topics and consists in 34 weeks of training, with the aim for all students to immediately have a job after graduation.

The 11 topics/disciplines are: building, gardening, agriculture, canteen, painting and installation, metal, cleaning, textiles, transportation, wood industry and laundry.

Within the TAMU training centre, the focus is both on the practical subjects, as well as on the social skills needed in working life.

TAMU has 6 training centres all over Denmark.

The visited TAMU centre making the object of this case study is the one located in Aarhus, that has a capacity of 40 students and provides 4 topics: building, canteen, cleaning and wood industry.

The reasons why the TAMU training centre was chosen as a best practice for this case study reside in their innovative training programme proposed to students, the pedagogy used (*pedagogy of consequences*) and the high success rate: 80% of the students graduating from TAMU Aarhus centre manage to find a job or to continue their education.

Case Study 3 – : Successful path for Low-voltage electricians at the “Dimitrie Leonida” Technical College in Iasi

The case study will present the education and training path proposed by the “Dimitrie Leonida” Technical (VET) College in Iasi as regards the Low-voltage electricians profile.

Due to a good combination of the theoretical part with the practical activities in the companies, the college succeeds to have over 50% of the graduating students employed as electricians.

Although following the main national curriculum for this profile, the college in cooperation with the tutors at the company have developed several specific “local development curricula” aiming at certain knowledge and skills that have been proposed by the companies, being necessary for future employees as low-voltage electricians.

The training path is composed of: theoretical study and practical work/practises both in the technological laboratories as well as in the profile companies that cooperate with the VET school. The practical activities consist of: an average number of 3 hours weekly (either in the laboratory or in the company) and a full period of 6 weeks of practical work in the company (that is usually organized at the end of the school year).

The example of “Dimitrie Leonida” Technical (VET) College proves that success can be obtained even if the work-based period in the company is short (6 weeks/annually), as long as it is well organized, targeting the specific skills needed by students, and as long as there is good cooperation between the school and the company.

Case Study 4 – Gøglerskolen circus production school in Aarhus, Denmark

The case study will present the Gøglerskolen circus production school in Aarhus, Denmark which is a second change school open to all young people without higher education under 25 years old.

Circus school/School of entertainment is one examples of the offer of Production Schools in the municipality of Aarhus and an offer to all young people not connected to labor marked or formal education. The school's pedagogy is based on the fairground and craftsman philosophy of autonomy and focus on possibilities rather than limitations.

The school combines the educational foundation from circus and theatre; the playful and creative with order and discipline.

The school offers 10 main training programmes/departments, conceived as workshops: Idea and Textiles, Dance, Artist, Media, Wood and janitorial, Café, Business Class, Rap scene and Technology and Business School.

The Gøglerskolen school in Aarhus represents an alternative for the students who have not finished education and want to learn practical skills.

The focus of the school is on practical work and production, on acquiring practical skills, together with the personal development of the young person. The training programmes at the Gøglerskolen do not result in any formal qualifications. However, students receive school benefits from the Danish state while studying at Gøglerskolen.

Case Study Comparisons Table

Criteria	Case Study 1 MOVE-IT work based delivery	Case Study 2 TAMU Centre	Case Study 3 Low voltage electrician “D. Leonida” College	Case Study 4 Gøglerskolen	Conclusions
Relevance (influence of industry)	The companies are involved in the delivery of the work-based activities, having an active role also in the e-learning delivery. The influence on the curriculum is limited.	The business environment is simulated within the training centre.	The industry/companies are very engaged both in the delivery of the work-bases/practical activities, as well as by influencing the curriculum. However, the influence on the curriculum is limited by national regulation.	The business environment is simulated within the production school, but cooperation is established also with external companies that sometimes influence the curriculum.	All case studies show involvement of the industry. Students are either received in companies for the practical activities (e.g. Romanian case studies) or the working environment is simulated within the school settings, as in the case of the Danish examples.
Impact (helpful for students)	Evaluation by students shows that they felt that the virtual learning environment helped them understand better the knowledge and also perform better their work-based activities.	High success rate: 80% of the students graduating from TAMU Aarhus centre manage to find a job or to continue their education. Interviewed students reported positive experiences.	High rate of employment in the sector after graduation (over 50% students). Interviewed students reported positive experiences.	Interviewed students reported full satisfaction with the pedagogy and subjects studied.	All students are satisfied with the practical work they are performing and feel that the practical tasks performed within companies or within school settings help them prepare for the future job.
Size (number of	The specific methodology was tested with 48	The training centre has a capacity of maximum 40	Over 300 students in the college	The workshops/departments	The capacity of the school/training centre

students)	students (but the college has over 300 students).	students (but there are 6 such centres over the country)		are delivered to a small group of students (approx. 10), so in average 100 students in the school.	differs from one case study to another, but we can notice that in Romania the tendency is to work with bigger groups/classes (e.g. 25-30 students)
ICT involvement	ICT is a crucial element as both courses are e-learning based and involve students, teachers and tutors in the company.	ICT is used generally.	ICT is used generally.	ICT is used generally.	ICT is an important element for the first case study involving e-learning, while in the other 3 case studies it is used at a general level.
Portability	There is great potential for this work-delivery model to be replicated for other courses and business involved, but it requires extra effort from the teachers to prepare e-learning materials, from the tutors in companies to devote extra time for the e-learning platform, etc.	The model of the TAMU training centre has huge potential for replication in other countries. However, it requires considerable investment for each student, which in some countries it would not be supported by public policies.	There is considerable potential for replication of the model, the important thing for a college being to find the suitable companies to involve (e.g. having a win-win situation, companies that would need to recruit students prepared in the schools).	The model has huge potential for replication in other countries. However, it requires considerable investment for each student, which in some countries it would not be supported by public policies, especially as in case of this model the learning path does not lead to a formal certification.	All case studies or at least elements of them can be replicated in other contexts and countries, but limitations should also be considered, especially as regards financial support.

Work Package 2' Summary Report Austria

Executive Summary

The four case studies developed by Austria are focusing on curriculums for students aging from 14 to 19 and are focusing on secondary technical VET education. The VET school system in Austria is financed by the government and free for the students. The curriculums for the courses are therefore centrally decreed by the Ministry – in close cooperation with the Austrian industry.

All four cases are related to a technical VET education with a duration of 5 years leading to a final examination (“Matura”) which allows the students to proceed to a study at a University of their choice. Nevertheless over 60 % of the degree holders go straight into the industry as well educated, young and innovative engineers.

The cases range from Industrial Design, Logistics, Building automation to Material science and Mining. They cover a broad scope of important areas of industry in the next century.

Austria is a small country and therefore the total number of students finalising their studies is limited – but with an unemployment rate of below 2% they are very successful in the labour market.

We did not have a special focus on ICT as it is a key subject for all of the Technical VET curriculums. Therefore all subjects do include a profound ICT training.

1) **New curriculum for energy and building technology** **(Source: Austrian Ministry of Education)**

It was initiated by the Austrian plumbing and building technology association because of a large amount of new skills which are required for future engineers. Subjects like control techniques, electronics and IT are strongly required from the engineers in the future.

In cooperation with the Ministry of Education a curriculum for a 5 year long vocational education has been negotiated.



The study course started in the school year 2008-2009 in three HTLs all over Austria and is very successful. The locations of schools are:

HTL Pinkafeld (Burgenland), approx. 125 students and 25 graduates per year
HTL Vöcklabruck (Upper Austria) approx. 250 students and 45 graduates per year

HTL Jenbach (Tyrol) approx. 125 students and 25 graduates per year

HTL Mistelbach (Lower Austria) approx. 250 students and 45 graduates per year

Approximately 50 % of the graduates start to work immediately in the industry. The other half proceeds to the Universities.

The unemployment rate among the graduates is below 2%.

2) **New curriculum for Mechanical engineering - Industrial Design** (Source: Austrian Ministry of Education)

The curriculum was initiated by the Industry Associations of Carinthia especially the Lightning industry, Weapon industry and mechanical industry. For technical products it became more and more important to not only have a perfect function, but also a modern and artistic Design to achieve a good price in the marketplaces.

The basic requirements were to give the students an education in industrial engineering, Manufacturing technologies, mechanical engineering and Industrial Design.

Since 2003 this curriculum is offered in different HTLs all over Austria and we get approx. 150 graduates per year (50 % start immediately in the Industry

There was a very successful cooperation to design Petrol stations for AGIB (now ENI).

The unemployment rate among the graduates is below 2%.

3) **New curriculum for Industrial Engineering - Logistics** (Source: Austrian Ministry of Education)

The Association of the steel Industry in Styria proposed a 5 Year HTL course for Industrial Logistics. Focusing on Material flow and Recycling.

In 2003 it was established as a curriculum of Industrial engineering – Logistics.



The following schools in Austria offer this curriculum:

HTL TGM (Vienna) approx. 25 graduates per year
HTL Leoben (Styria) approx. 45 graduates per year (MAGNA .. Car Industry)
HTL Dornbirn (Vorarlberg) approx. 25 graduates per year
HTL St Pölten (Lower Austria) approx. 25 graduates per year
HTL Freistadt (Upper Austria) approx. 25 graduates per year

Approximately 50 % of the graduates start to work immediately in the industry.
The other half proceeds to the Universities.

The unemployment rate among the graduates is below 2%.

4) **New curriculum for Material science.** **(Source: Austrian Ministry of Education)**

Leoben is the centre of the Austrian mining and metallurgy industry and education. The Austrian Montanuniversität Leoben is a leading education centre for mining, metallurgy and material sciences worldwide and their graduates are working all over the world in all kind of engineering projects. However the mining industry is in need of good educated none academic engineers and therefore a new curriculum for HTLs was implemented at the HTL Leoben in the school year 2013/14.

The curriculum was developed during a 2 years process in close cooperation between the Industry and the Ministry of Education.

It is currently only available at HTL Leoben with 32 students starting the first year.

This project is currently in the second year and the first graduates are expected in 2018.



ELVETE - Case Study no 3: Samvinna Rehabilitation Centre

**Developed by: Miðstöð símenntunar á Suðurnesjum (MSS),
Iceland for WP2**

Summary

MSS in Iceland collected four cases at three organisations. The third case was collected at Samvinna Rehabilitation Centre, -a rehabilitation centre for people that have for some reasons left the work force and are provided with courses and vocational training in order to find a way for them to re-engage.

The conclusions indicate that in the case of the rehabilitation centre, the participating companies see it more as social responsibility to take interns and that they would not want to interfere with the shape of the program. The participant interviewed was very satisfied with the program and as a result she has a job in a new line of work that suits her physical abilities better. When asked if the program worked for her as a learner, her answer was: “If one is *willing* to learn and adapt, this is the ideal program”.

General Information on VET Organisation
Institution: Samvinna Rehabilitation Centre
Type of Institution: Samvinna Rehabilitation Centre specialises in rehabilitation for individuals that have, due to illnesses, accidents or social complications left the workforce but are willing to return. Most of the participants are offered to engage in the studies on the behalf of the unions they belong to, there is an office that handles matters of those that have left the workforce due to the above stated reasons and that office assigns the participants to this program. Also occasionally participants are assigned on the behalf of the municipals in the area.
Locality and Country: Reykjanesbær, Sudurnes area, Iceland
Course name and level: There are two main themes of studies, Education line and Employment line.
Target Group of Course/Curriculum: individuals that have, due to illnesses, accidents or social complications left the workforce but are willing to return.
Pedagogy used? Consequences pedagogy or depending on the activities and initiatives of both individual and group, different pedagogies will be chosen according to the evaluation.
Is the course accredited? Not formally, however some of the most basic courses in collage may be evaluated if very similar to the courses in the rehabilitation program.
Statistical Information (if relevant)

General Information on Business involved

Name of Business: Samvinna Rehabilitation Centre works with quite many organisations in the area; the organisation we interviewed is Njardvik primary school (Njarðvíkurskóli) as they have taken on numerous participants as temporary interns at their organisation from Samvinna's rehabilitation program.

Number of employees: There are about 70 people that work at Njardvik grade school.

Area of involved Business: Njardvik grade school, the organisation we interviewed regarding participants from Samvinna is a children's school that has 377 students at the age 6-16.

How is the Business involved in the curriculum?

The business sees it as social responsibility to take interns that have been out of the labour market and wants to support the rehabilitation program. There is close cooperation between Samvinna and the businesses when preparing for internship of individuals but contrast to our belief the businesses do not wish to influence the curriculum but prefer to be supportive of the current curriculum as they feel they would be interfering with the program that is adjusted to each and every participant.

Engagement profile of business: In what way(s) does the business cooperate

The rehabilitation centre and the business draw up a contract when the internship is arranged. The business registers the participant's engagement, if he/she shows up for work every day on time and provides feedback to the rehabilitation centre. The interns know that if they give excellent performance there have been incidents when interns have been hired permanently so in some cases there is a lot at stake.

Interview with a participant

Student name: Grazyna Kawa, a former employee in the fishing industry but she had some back injuries which made that line of work impossible for her. She took the Employment line at Samvinna. Her period of internship was at a factory that sews clothing for an Icelandic outdoors clothing label. After finishing the rehabilitation program she got employed part time and later on she was offered full time employment at the business.

Relevance of IT: IT is important in some courses but not at all in other. The participants that take the Education line depend more on IT, for a lot of their projects are handed in online through a student system. The participants in the Employment line depend less on IT but still it is relevant.

Give an overall rating of the program: Grazyna rated the program very favourably, when asked out of 10 what would the score be she gave the rate of 9.

How effective is the cooperation of the program provider and the employer? In Grazyna's case the internship period was very successful and the job seemed to be fit for her physical abilities. The cooperation of Samvinna and the business was very good and especially regarding the adjustment of how much work she was capable of performing at the time. She was offered a part time job after the internship period and later on full time job.

Can it be applied to other areas of ICT? In Grazyna's opinion if the students are taking some courses via distance learning or preparing for internship at a computer or IT business then IT can be used more.

Can you apply the achieved knowledge? She has showed that in her case the program was successful, the business wouldn't have offered her full time employment unless it was.

Does it do the job for you as a learner? When asked if the program worked for her as a learner, her answer was: "If one is *willing* to learn and adapt, this is the ideal program".

General Information about VET Organisation

Samvinna Rehabilitation Centre

Samvinna Rehabilitation Centre specialises in rehabilitation for individuals that have, due to illnesses, accidents or social complications left the workforce but are willing to return.

The rehabilitation program is adjusted to the needs of the individual, some have more educational needs but Samvinna also offers financial consultation, psychiatric consultation, group therapy/group dynamics, Self-balance, physical education and training and more. Short periods of vocational training are provided in companies in the Sudurnes area.

The rehabilitation is mainly conducted in a group but based on assessments of the individual's needs. The main pedagogy used is the consequences pedagogy and the main aim is to strengthen the self-esteem of the individual and reinforcement of participants' believes in own capabilities. The program supports the participants to acknowledge their hurdles and to learn how those hurdles can be dealt with. Also the program provides support for participants when setting realistic goals.

There are two main themes that can be chosen according to the participants desire and abilities, Education line and Employment line. The Education line focuses more on supporting participants that are aiming for further studies but the Employment line supports those who want to seek employment.

The duration of the programs

The duration of the programs vary from 1 semester up to 3 semesters and duration is adjusted according to individual evaluation.

Case Study: NTUA/GR/1 :

1ST EPAL AHARNES

1ST EVENING VOCATIONAL LYCEUM OF AHARNES, ATTIKA
- 1ο ΕΣΠΕΡΙΝΟ ΕΠΑΛ ΑΧΑΡΝΩΝ, ΑΤΤΙΚΗΣ

Interim Summary:

Description

The 1st Evening Vocational Lyceum of Acharnes was created in 1999 in order to cover the increased needs in demand for study in the Technical Education of students of municipality of Acharnes. The school emanated from the split of an afternoon technical school, the 4th TEE Acharnes. That is to say, the students of that afternoon school registered in the new evening school that was created, initially with schedule of teaching from 7:10 pm until 10:35 pm.

Next year 2001, at a change of legislation, specifically for this school the schedule became 6:30 pm – 10:00 pm, which also is maintained until today. The teaching hours are five per day, as is the schedule of all evening schools in Greece. For this reason, all evening schools have longer duration of study by one year, as compared to day schools. The director was appointed initially, then provisionally, with the decision of the Head of Directorate of Education. Until today, he has not changed.

The 1st Evening EPAL Acharnes has evening schedule and the duration of study is four-years, because of the less daily hours (5 instead of 7 in day schools). The programs of teaching include courses of general education, courses of direction, courses of sector and courses of speciality.

The building has an area of 7500 square meters and allocates installations with complete equipment, modern laboratories centre SEK, where the students consolidate the theoretical knowledge and acquire competencies. There is a room for theatre-cinema and terrains for sports.

The most students come from the municipality of Acharnes, but many other come also from other municipalities, because there do not function Evening EPALs with corresponding specialities.

What characterizes the students is the responsibility, maturity and love for the speciality they selected and this is owed to the ages of the students (students of various ages); in their morning, they work in the speciality that study in the evening.

The laboratory courses are done to the 1st SEK Acharnes. This is situated in the same location of the 1st EPAL Acharnes and serves all laboratory classes of: 1st Evening EPAL Acharnes, 2nd EPAL Acharnes, EPAL Kryoneriou, and IEK Acharnes, 30.

Characteristic of this school (as most evening schools) is that except the schedule that serves all those who have other morning occupations, it is a “quiet” school with many adults students and without any special incidents.

The graduates of the 1st Evening EPAL Acharnes become professionals in their speciality; staff (low level) in public organizations and, other, as self-employed.

Case Study: NTUA/GR/2 :

1st EPAL GALATSI

1ST VOCATIONAL LYCEUM OF GALATSI, ATTIKI, GREECE
1ο ΕΠΑΛ ΓΑΛΑΤΣΙΟΥ , ΑΤΤΙΚΗ, ΕΛΛΑΔΑ

The School have duration of study of 3 years and function in the morning, with a schedule of 7 hours of teaching per day. The big size of this school, with many professors and students, needs a very efficient management. It is more difficult to manage a big school, and, for this reason, all big schools need Directors specialized in administration and management of big units. In the morning schools, generally, does not occur situations of not attendance of

students, either not registration of absent students. The Sector of Health - Welfare functions in this school until graduate all the students that remained in the speciality in the year 2013. The percent of admission to Higher Education, mainly TEI, from all EPAL Schools, all together, is 10% of all positions of TEI per country.

Case Study: NTUA/GR/3 :

2nd EPAL HELION

2nd VOCATIONAL LYCEUM OF HELION, ATTIKI –
2ο ΕΠΑΛ ΗΛΙΟΥ, ΑΤΤΙΚΗΣ

The 2nd EPAL Helion functions with morning schedule and the duration of study is three-years. The curriculum includes courses of general education, courses of direction, courses of sector and courses of speciality. The percent of admission of graduates from all EPALs to Higher Education, mainly to TEI, is 10% of all positions of TEI per country. As in the previous Case Study 2, and here the Sector Health-Welfare functions until graduate the students that remained in the speciality from year 2013

Case Study: NTUA/GR/4 :

1st EPAL AMAROUSIO

1st VOCATIONAL LYCEUM OF AMAROUSIO, ATTIKI,
- 1Ο ΕΠΑΛ ΑΜΑΡΟΥΣΙΟΥ ΑΤΤΙΚΗΣ

The 1st EPAL Amarousio functions with morning schedule and the duration of study is three-years. The programs of teaching include courses of general education, courses of direction, courses of sector and courses of specialty.

Content of Studies

Sector Electronics

Specialty: Computing Systems and Networks

Specialty: Electronic Telecommunications

Sector Electrotechnics

Specialty: Electrical Installations

Sector Constructions and Applied Arts

Specialty: Building Works

Sector Health – Welfare

Specialty: Nursing

Specialty: Medical-Biological Laboratories

Specialty: Baby Care

As in the previous case, the Sector Health-Welfare functions until will graduate the students that remained in the speciality in year 2013.

The percent of admission to Higher Education, mainly TEI, from all EPAL Schools, is 10% of all positions of TEI per country.

Case Studies Comparison Table NTUA:

Case Study Comparisons Table					
Criteria	Case Study 1: <i>1st Evening EPAL Aharnes</i>	Case Study 2: <i>1st EPAL Galatsi</i>	Case Study 3: <i>2nd EPAL Helion</i>	Case Study 4 & 4a: <i>1st EPAL & SEK Amarousio</i>	Conclusions
Relevance (influence of industry)	The businesses are very much involved in the curriculum because most of the students work in day-time as employees in businesses of related profiles.	The businesses are lightly involved in the curriculum, through Practical Training and Study Visits to selected enterprises of speciality			<p>In the Evening EPAL the businesses are more involved in the curriculum.</p> <p>In the Day-time EPALs, the businesses are lightly involved in the curricula.</p> <p>In the Greek formal education, is not possible for employers and companies to influence the curricula.</p>
Impact (helpful for students)	<p>The experience of working to real enterprises has positive impact on students.</p> <p>They have the responsibility and maturity for the speciality they selected.</p> <p>This is because of the ages of the students (not only 14-18, but possibly higher); in the morning, they work in the speciality that study in the evening.</p> <p>The graduates of school become successful professionals in their speciality; employees in public organizations, other as self-employed or start own businesses.</p>	<p>The practical experience of working to an enterprise has positive impact on students.</p> <p>Study visits to specific businesses, related to their studies, make the students feel that this will benefit their training.</p> <p>Students gained positive experiences, enjoyed learning about new subject areas, acquired new experiences and meet other people.</p> <p>Students learned about team work, become more self-confident and confirm that they had made the right choice for their career.</p> <p>Benefits are to build relationships, to learn how to deal with other people and to experience a real work environment.</p>			Students are positive about the experiences and value of working with businesses and identify a wide range positive impacts and skill development.

Size (number of students)	Approx. 250 students	Approx. 1000 students	Approx. 200 students	Approx. 250 students	<p>Ranges across case studies, depending on specialties based EPALs, to an approach of many sectors and specialties.</p> <p>All have an average of 27-30 students per Class A.</p> <p>An average of 12-28 students per Class B</p> <p>An average of 8-28 students per Class C.</p> <p>For less than 12 or 8 students per class, a special permission is required. Otherwise, the class is cancelled and the students continue in other EPALs</p>
ICT involvement	<p>ICT is a part of programs of study in most of courses.</p> <p>Some courses are offered using computers in teaching and training. Other have their content online, including power-points, video-presentations, assignments and studies, homework.</p> <p>Students and teaching staff are able to carry out activities including uploading-downloading documents and assignments, with feedback from students to professors.</p> <p>For generic courses, ICT is generally used. For specific courses, ICT is a mandatory part of teaching and learning.</p>				<p>For all specialties, ICT is an important instrument.</p> <p>Many courses include a high level of ICT in curricula.</p>
Portability	<p>This model of Evening Vocational School has potential for replication.</p> <p>There is potential for the business involvement in the curriculum design.</p> <p>This depends on the availability of vocational courses that are of interest to businesses and the commitment of businesses to become involved.</p>	<p>Whilst many students undertake practical work experience, in Greece or across Europe, it is not formally accredited.</p> <p>The accreditation depends on the existence of relevant accreditation system.</p> <p>It depends on the existence of a national central body to support educational institutions.</p>		<p>There is potential for replication for specialties and courses of the case studies.</p> <p>There are barriers due to the system of education.</p> <p>The management is a very important part of all existing and of any new structures in vocational education.</p>	



Work Package 2 Summary Report UK

Executive Summary Needs to be translated to French

From the UK perspective, four case studies have been developed. These have focussed on three 11-18 institutions and a City-wide model. The case studies have identified a range of provision and specific activities ranging from specific courses to generic employer engagement. The case studies identified a range of employer engagement levels: where specific courses are supported, 1 employer is intensively involved. For more generic activities, a wide range of employers and businesses are engaged with and the level of intensity varies. Although there are challenges, the student perspective indicates that such interaction is useful and relevant, with students identifying how the experiences will assist their future careers. The number of students involved ranges across case studies from small curriculum based groups to a city-wide approach. In relation to ICT, for the specific course, ICT is an important element. For more generic activities, ICT is used more generally. There is potential for replication for elements of all the case studies, albeit with some barriers.

Case Study Summaries

Case Study 1 – RSA Academy and Caparo

This case study focussed on the interaction between RSA Academy, an 11-18 Academy in Tipton, West Midlands and a large West Midlands based business, Caparo Industries. The focus was on 2 specific vocational courses: BTEC Level 3 Engineering. Post-16 vocational qualification Product Design Level 3 and Post-16 vocational qualification (Part of International Baccalaureate Career-Related Certificate course). The BTEC Engineering course requires some form of industrial link and this has been achieved through a range of visits to industry. External competitions are engaged with and often link to the Engineering Education Scheme. As part of these, a number of businesses have been engaged with, among them Caparo. Caparo and RSA Academy work together to offer students a range of opportunities. These include Apprenticeships, joint development of Health and Safety modules, Caparo investment in the Engineering Education Scheme. The relationship and activities between RSA Academy and Caparo include elements of regular feedback and evaluation. A key challenge, from the school perspective, of working closely with businesses in this way is maintaining the ongoing relationship and commitment from businesses. RSA Academy has found businesses through local networks including STEMNET and through school staff contacts and parents. For Caparo the challenges are in relation to resources and capacity, and the changed responsibilities for staff that such work brings. There are also Health and Safety issues that need to be addressed in relation to working with under 18s and having students on industrial sites. Support for this has been sourced from the local authority EBP (Education Business Partnership) team. The relationship between Caparo and RSA Academy is fluid and flexible, and regular discussion take place regarding how to progress and develop the links. The successes and benefits for the school of working with businesses are wide and far-reaching.

Teaching staff have seen key differences between the original curriculum and the one influenced by, and involving business. From Caparo's perspective a number of successes and benefits have been seen. Recruitment costs, processes and time is reduced and they are able to 'grow their own' staff through placements and apprenticeships and there are plans to extend the scheme. ICT is a vital part of how students study both the BTEC Engineering and Product Design courses. Both courses are online and content includes all the guidance, units, PowerPoints and assignments. Students and staff are able to carry out a range of activities including uploading documents and assignments, feedback and marking. Both courses also include a high level of ICT in relation to topics and content. The experience of working closely with a business has had a very positive impact on students and they clearly see how this will benefit their future careers. Some students have been offered apprenticeships with the business.

Case Study 2 – Wolverhampton Education Business Partnership, Wolverhampton City Council

This case study focussed on the city-wide provision for education and business links within Wolverhampton and provides details of a model used by Wolverhampton EBP to assist the 17 schools with developing, planning and maintaining links with business. The model can be applied to all year groups and curriculum areas and encompasses all links with business. Wolverhampton EBP is aware of research from the Government's Employers Taskforce which indicates that there is a positive relationship between how many employer contacts young people experience at school. As a result Wolverhampton EBP has developed 2 key initiatives. The 4+ campaign aims to support schools in ensuring that young people experience 4 or more engagements with employers and a 'World of Work Plan' has been developed to assist the planning process. It encompasses all external engagement, transition to work, work experience, careers education, IAG and employer engagement and links. Each route map is different and is adapted to the schools' needs. It therefore provides a model that is flexible and that can be tailored to specific characteristics and needs. A wide range of employer engagement activities, events and initiatives can be seen within the city. Activities range from subject specific to cross-curricular and focussed on a specific year group(s) or common across all ages. Activities can also have a direct influence on the curriculum and can be linked to curriculum plans. Each school and the EBP will have regular yearly reviews with an aim to keep the process flexible and fluid and up to date. The plans also enable the EBP to target, recruit and engage employers through a co-ordinated and city-wide approach.

Case Study 3 – ACE Academy

This case study focussed on ACE Academy, an 11-18 Academy in Tipton, West Midlands and the extensive, school-wide employer engagement activities it carries out for all year groups. The case study outlines the provision in place and focuses on a number of specific examples. There are two part time members of staff responsible for career related and business links and who provide a point of contact and support for students. A range of weekly and fortnightly events take place in dedicated slots within the timetable. At key points throughout the year a number of events are held including interview

skills workshops for Year 11, careers convention for Year 9 students and Year 10 students attend a 'preparation for work' day which aims to prepare them for their forthcoming work experience. The Academy also runs the Career Academy (a national initiative for Years 12 and 13) and regular career talks from an external business representative. A range of events are also organised for Years 7 and 8, for example, visits to businesses.

All events and activities are evaluated by students and staff and results are summarised and reviewed and records are also kept in student career files. As a result provision is adapted accordingly and areas where students need extra help and support can be also easily identified. The team also has the capacity to provide bespoke support if needed. Whilst students are well supported, they are expected to be proactive and show commitment. There is a large commitment from senior management and resources, including staffing, are allocated to the activities. ACE Academy develops and maintains the links with employers in a number of ways.

Case Study 4 – North East Wolverhampton Academy

This case study focused on North East Wolverhampton Academy (NEWA), an 11-18 Academy in Wolverhampton, West Midlands, and the work experience programme they organise for Year 10 students. Work experience takes place for 2 weeks towards the end of the summer term, usually in June. It is accredited through BTEC Level 2 WorkSkills course. Students receive a WorkSkills Award by working through 3 credits. They can also receive extra credits through other subjects and PSHE and be awarded higher levels of the award. The key reasons for undertaking work experience are in relation to employability, skills development, re-focusing students in relation to the purpose of their education, informing them of the expectations of employers and particular careers and to develop independence. A range of preparation work takes place with both staff and students including a specific scheme of work, handbook and audit booklet. CV preparation and development also takes place in the run up to work experience. The week before students go on their placement a preparation day is held where they look at Health and Safety, employer expectations and so they are clear about what they want to achieve from their time in a business. Where possible, students undertake a placement which is relevant to their subject areas or chosen careers. Placements are also linked to the curriculum where relevant, and subject teachers also get involved in finding placements and supporting students. Work experience is also supported by academic mentors who visit students once a week. Students reported very positive experiences and particularly enjoyed learning about new subject areas, gaining new experiences and meeting new people. A number of students said it had developed transferable skills such as team work and confidence. For those students who had firm ideas about their future careers, it either confirmed that they had made the right choice for them, or eliminated it as a choice. A number of students also reported that they had experienced new forms of ICT such as specific systems and software. Other benefits they identified were in relation to building relationships, learning how to deal with people and experiencing a real work environment. NEWA is also planning to introduce work experience to Year 12 in 2015. This will have a strong emphasis and link with subject areas and career choices.

Case Study Comparisons Table

Criteria	Case Study 1 RSA	Case Study 2 EBP	Case Study 3 ACE	Case Study 4 NEWA	Conclusions
Relevance (influence of industry)	The business is heavily involved in the curriculum through both planning and delivery.	The involvement of businesses is implicit in the model and is essential for it to work. However, the influence on the actual curriculum is limited, other than where specific curriculum related events take place in conjunction with businesses.	The involvement of businesses is implicit in the activities carried out and is essential for them to work. However, the influence on the actual curriculum is limited, other than where specific curriculum related events take place in conjunction with the businesses.	The involvement of businesses in the work experience programme is implicit and essential for it to take place. The relevance to the work experience qualification gained is high. It is also high where students are on placements relevant to their curriculum areas of study.	The case studies identified a range of employer engagement levels. Where specific courses are supported, 1 employer is intensively involved. For more generic activities, a wide range of employers and businesses are engaged with and the level of intensity varies.
Impact (helpful for students)	The experience of working closely with a business has had a very positive impact on students and they clearly see how this will benefit their future careers. Some students have been offered apprenticeships with the business.	Not specifically known.	Activities are evaluated by students and their feedback is taken into account when planning and developing future activities.	Students reported very positive experiences and particularly enjoyed learning about new subject areas, gaining new experiences and meeting new people. A number of students said it had developed transferable skills such as team work and confidence. For those students who had firm ideas about their future careers, it either confirmed that they had made the right choice for them, or eliminated	Students are generally very positive about the experiences and value of working with businesses and identify a wide range positive impacts and skill development.

				it as a choice. Other benefits they identified were in relation to building relationships, learning how to deal with people and experiencing a real work environment.	
Size (number of students)	BTEC Engineering has an average of 20 students per year. IBCC Product Design has an average of 2 to 10 students per year.	All students (Years 7-13) across 17 secondary schools - TBC	1400 students in the school	Year 10 numbers - TBC	Ranges across case studies from small curriculum based groups to a city-wide approach.
ICT involvement	ICT is a vital part of how students study both courses. Both are available online and content includes all the guidance, units, PowerPoints and assignments. There is also functionality for a wide range of activities. Both courses also include a high level of ICT in relation to topics and content.	ICT is used generally.	ICT is used generally.	ICT is used generally and some students used new and specific forms of ICT during their placements.	For the specific course, ICT is an important element. For more generic activities, ICT is used more generally.
Portability	There is potential for the replication of business involvement in the curriculum design and delivery as seen in this	The model has huge potential for replication in other countries as it provides a framework for activity, whilst allowing	The model, and specific activities, within it, has huge potential for replication. This would be dependent on staff	Whilst many students undertake work experience across Europe, it is not always accredited. This model	There is potential for replication for elements of all the case studies, albeit with some barriers.

	case study. However, this would depend on the availability of vocational courses that lend themselves to business involvement in this way and the commitment of businesses to become heavily involved.	flexibility with the actual activities undertaken. However, it would depend on the existence of a central body to support educational institutions.	capacity to organise activities and the availability of businesses to be involved.	therefore has potential for replication. However, this would depend on the availability of relevant accreditation/ qualifications.	
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Employer Led Vocational Education and Training in Europe (ELVETE)

Highlighting of good practice in 14 -19 VET education

Reference

Work Package:	2 – Highlighting of good practice in 14 – 19 VET education
Purpose:	To highlight good practice in 14 to 19 vocational education and training by sharing and exchanging experiences and investigating and writing up case studies
Case Study Ref:	WC/UK/1, WC/UK/2, WC/UK/3, WC/UK/4
Author:	Accredited Skills for Industry & Walsall College
Date:	31st December 2014

Executive Summary

The four case studies are looking at a specialist 14 – 19 engineering school which is specifically engineering and science orientated and led by industry, plus three heavily employer influenced areas of Walsall College’s curriculum where the learners are predominantly in the 16 to 18 age range.

The studies are being developed along themes of examining how and to what extent contemporary industry skills demands are reflected in the curricula on offer. Whilst the specialist institution should be of most interest because it most closely aligns with the theme of the work, the other areas also describe relevant models.

Case Study:	WC/UK/1
	The Black Country University Technical College
Summary:	<p>University Technical Colleges (UTCs) are an initiative of the UK Government. Initially established in 2010, UTCs offer a highly vocationally specialised general education for students aged 14 to 19. The central concept of the UTCs is that they offer the general school curriculum as required by the UK Government, but with a central specialised vocational element. Other subjects are taught, where possible, in the context of the central specialism. In addition to this overarching pedagogy, key elements of the curriculum are written by employers. The links between the employers are very close throughout the design and delivery of the curriculum. This case study (WC/UK/1) reports on the involvement of key employers in the production and the ongoing deployment of the UTC curriculum. A key feature here is the availability of comparable performance and standards result, plus destination data.</p>
Case Study:	WC/UK/2
	The Graduate Academy Salon and Spa at Walsall College
Summary:	<p>Walsall College is an English General Further Education College with a strong vocational offer to learners aged from 14. The majority of the College's full-time vocational provision is for 16 to 18 year olds, with some 3,500 learners in that cohort. The College's current main campus is five years old and incorporates on the main site a Graduate Academy Salon and Spa. This development was designed with substantial and detailed input from a leading Hairdressing chain – the FrancESCO Group. Walsall College learners in Hair and Beauty complete their training in the Graduate Salon under conditions that are an exact facsimile of employment in the industry. The Graduate academy trades to the general public. This case study (WC/UK/2) describes the involvement of employers in the design and delivery of the Hair and Beauty curriculum.</p>

Case Study:	WC/UK/3
	The Roland DG Academy
Summary:	<p>Walsall College is an English General Further Education College with a strong vocational offer to learners aged from 14. The majority of the College's full-time vocational provision is for 16 to 18 year olds, with some 3,500 learners in that cohort. The College's current main campus is five years old, and its secondary campus, Green Lane, was established in 2000, and has since undergone continuous development. Roland DG is a multinational print industry business, part of the Roland group based in Japan. Roland DG were instrumental in the development of the academy in a number of ways explored in this case study (WC/UK/3): the sponsorship of the centre, including capital equipment; the availability of industry expertise to support delivery, and also in the design of the well-respected national sign making qualifications that are undertaken by employed learners via Walsall College.</p>
Case Study:	WC/UK/4
	The Business and Sports Hub
Summary:	<p>Construction work has just commenced on a new campus for Walsall College – the Business and Sports Hub. This building will be the focus for the College's broad business skills curriculum for years to come and is due to open to learners in September 2015. The physical aspects of the development are being informed by local employers and other sector stakeholders, but prior to this, employer/business involvement in the re-design of the current curriculum has been marked. This case study (WC/UK/4) focusses on how the employer voice has been articulated in the redesign of the current Business and Computing curriculum and how this will continue as the new curriculum migrates to a new purpose built Hub.</p>

Elvete Case Study Comparison Summary Table

We have reviewed the four case areas against the five standard criteria and described an annotated score where 1 is low and 5 is high (for example, 1 is low relevance, low impact, small size, low IT involvement, and poor potential portability; and 5 relates to high relevance, significant impact, large scale, substantial use of IT and clear scope for potential portability.)

	Relevance: how strong is the influence of industry on the curriculum?	Impact: how helpful is the curriculum for students?	Size: how many students are influenced by the curriculum?	ICT: does the curriculum use IT (and how much)?	Portability: could this curriculum be implemented in other countries and cultures?
WC/UK/1: The Black Country University Technical College	5: the institution and its curriculum is entirely industry focussed	4: success rates (jobs and progression) are high	2: the institution is young and the overall roll is still low	4: the engineering curriculum utilised IT substantially	5: the model is highly adaptable
WC/UK/2: The Graduate Academy Salon and Spa at Walsall College	4: the salon and its curriculum are highly industry focussed	4: success rates (jobs and progression) are high	3: in excess of 500 learners per year enrol on this curriculum	3: learners use college learning systems	4: the model is easily adaptable
WC/UK/3: The Roland DG Academy	5: the academy and its curriculum is entirely industry focussed	4: success rates (jobs and progression) are high	2: under 50 learners	4: machinery is IT driven and industry specific	4: the model is easily adaptable
WC/UK/4: The Business and Sports Hub	4: the business curriculum was recently revamped with increased employer input	4: success rates (jobs and progression) are high	3: in excess of 800 learners per year enrol in this area	4: the college learning systems and industry specific applications are used extensively	4: the model is easily adaptable