



CR@FTSMAN

**REPORT ON THE SITUATION OF CRAFTSMANSHIP
IN AUSTRIA**

**CR@FTSMAN PROJECT
ES/09/LLP-LdV/TOI/149072**

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1 Introduction

This report is the Austrian contribution of the project "Cr@ftsman: transference of training material for the management of craftsmanship SMEs to e-learning". The general objective of the project is to transfer the six training manuals which were the final products of the project "Handmade: permanent training for craftsmen" to the E-learning methodology. This adaptation shall meet the current, quite specific training demands of the craft sector as well as SMEs in general. On the one hand, the E-learning program shall improve the Know-How, skills and competences regarding management and business administration and on the other hand promote the use of new information and communication technologies (ICTs) in the craft sector.

It is vital to understand the current situation of craft and SMEs in Austria in order to achieve these objectives. Which challenges does Austrian craftsmen face and what are their specific needs? Is there a demand for further education and if so - in what area? Which possibilities do SMEs have to participate in further education and what are the main barriers and obstacles? The report will not only answer these questions but also show at the end why the use of ICTs shows a great opportunity for craftsmen to meet the challenges of the 21st century. At the end, the competitiveness of Austrian - and in the following European - craft entrepreneurs and SMEs will be strengthened and rise.

Below is a presentation of the current situation of craft in Austria, providing information about their socio-economic situation, the characterization of the companies, the current management thereof, current training in the sector and the possibilities and the use currently made of ICTs in the craftsmanship context

2 Socio-economic situation of crafts

Like almost no other industry the craft sector was constantly changing throughout past centuries. Organized in guilds, the craft producers held a dominant and powerful position within society in the 18th and 19th century. In the course of industrialisation the sector suddenly faced competition from factories and their first tendencies of mass- and industrial production. The traditional manual work got more and more detached from mechanization and automatization. Hence some of the former professions almost disappeared, such as blacksmiths, wheelwrights and saddlers. However, others have been newly created like mechanics.

Later on not only the craft sector but the whole economy went through a radical change due to globalisation. The craft sector too was affected by technological and social developments, the new global market and changing consumer demands. Innovative craftsman, -women tried to specialize and niche on markets. In this course some new professions developed within the individual occupational fields, for an example the orthopaedic shoemaker or the interior decorator. However, some professions haven't been changing in its core-activity for centuries, such as baker, butcher, mason, haircutter, or bricklayer.

Craftsmen and -women who wish to sell their products successfully nowadays need to adapt their activities and ways of thinking to these developments and the ecological and social challenges of the 21st century. The detection and development of niches, innovative ideas and business concepts may be deciding for their success and economic survival. The sector needs an integral strategy that should eventually optimize labor and performance within the companies regarding economic, social and ecological aspects.

2.1 General Definition of Crafts in Austria

As shown above crafts have a long tradition in Austria and are nowadays still represented in the entire federal territory. However, it is impossible to find a general definition of the sector. Thus the attempt is made here to approach this vocational field in a conceptual manner.

Historically, those businesses were summarized in the craft sector, whose qualification has been proved through an examination for the master craftsman's certificate. Today it is a highly complex system which has grown for many decades and is far beyond definitions. In the Austrian Federal Economic Chamber, which is by law the representative of the entire Austrian business community, crafts form a collective sector together with trade. However, even the vocational fields in the craft and trade sector are not subject to a standard definition. In the contrary, due to the creation of new occupational profiles and the different means to obtaining a trade license, an increasingly inhomogeneous group of professions is subsumed in this sector. In the end it obtains to the Federal Ministry of Economy, Family and Youth and the Austrian Federal Economic Chamber to classify the different profession to different sectors¹.

¹ Cf. Mag. Barbara Schieder, Spartengeschäftsführerin Sparte Gewerbe und Handwerk, Wirtschaftskammer Wien, via E-Mail

According to the Austrian Federal Economic Chamber the craft and trade sector is organized in 43 Federal Guilds (= „Bundesinnungen“)².

Bundessparte Gewerbe und Handwerk

§ 3. In der Bundessparte Gewerbe und Handwerk werden folgende Fachverbände (Bundesinnungen) zusammengefasst:

- 1) Bundesinnung Bau
- 2) Bundesinnung der Steinmetzmeister
- 3) Bundesinnung der Dachdecker und Pflasterer
- 4) Bundesinnung der Hafner, Platten- und Fliesenleger und Keramiker
- 5) Bundesinnung der Glaser
- 6) Bundesinnung der Maler, Lackierer und Schilderhersteller
- 7) Bundesinnung der Bauhilfsgewerbe
- 8) Bundesinnung der Zimmermeister
- 9) Bundesinnung der Tischler
- 10) Bundesinnung der Karosseriebauer einschließlich Karosseriespengler und Karosserielackierer sowie der Wagner
- 11) Bundesinnung der Bodenleger
- 12) Bundesinnung der Bildhauer, Binder, Bürsten- und Pinselmacher, Drechsler, Korb- und Möbelflechter sowie Spielzeughersteller
- 13) --
- 14) Bundesinnung der Schlosser, Landmaschinentechniker und Schmiede
- 15) Bundesinnung der Spengler und Kupferschmiede
- 16) Bundesinnung der Sanitär-, Heizungs- und Lüftungstechniker
- 17) Bundesinnung der Elektro-, Audio-, Video- und Alarmanlagentechniker
- 18) Bundesinnung der Kunststoffverarbeiter
- 19) Bundesinnung der Metallgießer, Gürtler, Graveure, Metalldrücker, Metallschleifer und Galvaniseure
- 20) Bundesinnung der Mechatroniker
- 21) Bundesinnung der Kraftfahrzeugtechniker
- 22) --
- 23) Bundesinnung der Gold- und Silberschmiede, Juweliere und Uhrmacher
- 24) Bundesinnung der Musikinstrumentenerzeuger
- 25) Bundesinnung der Kürschner, Handschuhmacher, Gerber, Präparatoren und Säckler
- 26) --
- 27) Bundesinnung der Schuhmacher und Orthopädienschuhmacher
- 28) Bundesinnung der Buchbinder, Kartonagewaren- und Etuierzeuger
- 29) Bundesinnung der Tapezierer, Dekorateur und Sattler
- 30) --
- 31) Bundesinnung der Bekleidungsgewerbe
- 32) --
- 33) Bundesinnung der Sticker, Stricker, Wirker, Weber, Posamentierer und Seiler
- 34) Bundesinnung der Müller
- 35) Bundesinnung der Bäcker
- 36) Bundesinnung der Konditoren (Zuckerbäcker)
- 37) Bundesinnung der Fleischer
- 38) Bundesinnung der Fußpfleger, Kosmetiker und Masseur
- 39) Bundesinnung der Nahrungs- und Genußmittelgewerbe
- 40) Bundesinnung der Gärtner und Floristen

² Tables (charts) will only be translated into English if they facilitate comprehension.

- 41) --
- 42) Bundesinnung der Fotografen
- 43) Bundesinnung der chemischen Gewerbe
- 44) Bundesinnung der Friseure
- 45) Bundesinnung der Textilreiniger, Wäscher und Färber
- 46) Bundesinnung der Rauchfangkehrer
- 47) Fachverband der Bestattung
- 48) --
- 49) Bundesinnung der Augenoptiker, Orthopädietechniker, Bandagisten und Hörgeräteakustiker
- 50) Bundesinnung der Zahntechniker
- 51) Allgemeiner Fachverband des Gewerbes

Table 1: Professional guilds in the craft and trade sector in Austria
 Source: <http://portal.wko.at/wk/branchen.wk?DstID=1342>

In a functional and structural definition craft is any commercial activity

- where a master of his/her craft owns the means of production,
- works on his/her own or together with employees
- on demand and
- sells the product as directly as possible to the consumer.

Another characteristic is the creative activity of the craftsman, -woman. The whole value added, from the conceptual design to the production, is mainly carried out manually without the application of expensive and capital intensive technology or the use of machines. Thus the product is usually unique and individually accented by its manufacturer.

A further limitation of the craft sector can be made on the basis of the company size using the definition of small and medium sized companies (SME) of the European Union.

Enterprise category	Headcount	Turnover	or	Balance sheet total
medium-sized	< 250	≤ € 50 million		≤ € 43 million
small	< 50	≤ € 10 million		≤ € 10 million
micro	< 10	≤ € 2 million		≤ € 2 million

Figure 1: Definition of SME of the European Union

Source: http://ec.europa.eu/enterprise/policies/sme/facts-figures-analysis/sme-definition/index_en.htm

Apart from the size small and medium sized companies can be again divided as the following³:

³ The model is based on the subdivision of the Austrian Federal Economic Chamber.

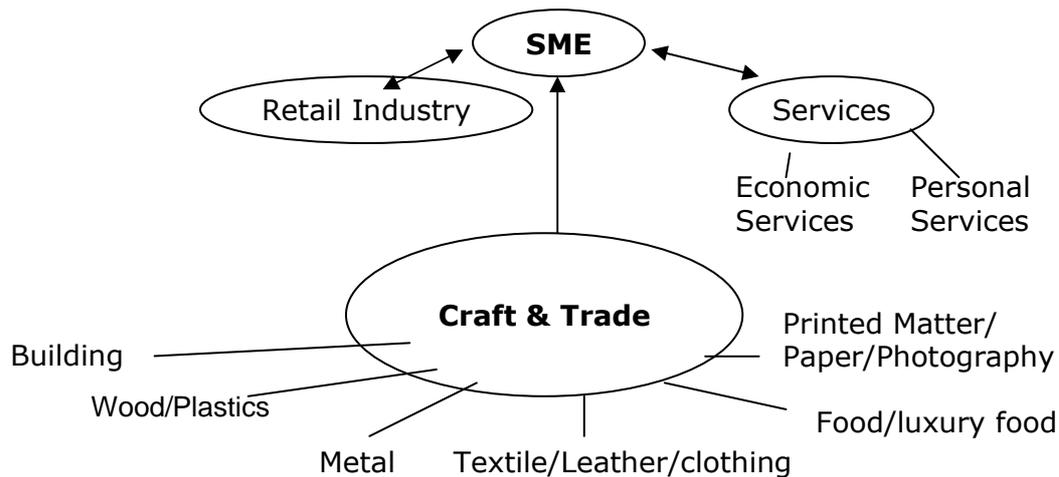


Figure 2: European Definition of Craft
 Source: Meisterstrasse Salzkammergut 2003, translated by plenum

The vast majority of Austrian craft producers are assigned to the category "Trade" respectively "Personal Services" in exceptional cases (e.g. repair services). As they usually employ less than 50 employees they are also assigned to the categories micro sized and small sized companies.

The small company size brings forth further characteristics of the Austrian crafts sector. The companies are led by a self-employed person who seeks for profit and personally bears for the capital risk. The company owner occupies the central position, is able to control and influence the work of the employees and plans the work flow as well as the result. However, there is no clear separation of management (company owner) and the execution field (workers/employees)⁴.

2.2 Sustainability Aspects in the Craft Sector

The craft sector is a key factor for sustainable development: Crafts and small enterprises typically rely on their local roots, and make an essential contribution to local development and social integration. They create jobs, provide vocational training and ensure the transfer and continuous improvement of specific know-how characterised by a high degree of manual skills and a strong involvement of entrepreneurs.

The traditional craft has partly always been working according to sustainable criteria without promoting it to the general public. The self-employed craftsmen, -women are in close contact with their customers, they usually use high-quality, locally available resources and produce predominantly domestically instead of outsourcing costly manufacturing steps to a foreign country. As local suppliers crafts contribute to the security of supply and provide as the largest employer in the country knowledge and skills. Last but not least, the craft producers contribute a major part to the Austrian welfare and life quality by paying high income- and social security taxes. However, this is unfortunately often underestimated by the general public.

⁴ Cf. Meisterstrasse Salzkammergut, 2003

Craft products are usually long-lasting and high-quality goods true to the motto "better than more". Compared to industrial mass-products the higher prices of craft goods generally reflect the true costs of the product as it includes the use of high-quality resources and auxiliary materials as well as human manpower.

However, so far these facts pose an unsolved dilemma for the sector: Even if a shoe made by an Austrian craftsman contributes in various ways to the national welfare it is highly taxed. Whereas an industrially produced shoe – which is mainly a mass product, manufactured in low-wage countries with low environmental and/or social standards – is only taxed lower. As only a minority is used to a sustainable consumption style and are willing to pay a higher price⁵, products of crafts tend to be niche products.

It's first and foremost the financial pressure and the problem in raising capital which makes it difficult for crafts to consider their products holistically. Moreover sustainability as an overall concept including the three dimensions ecology (e.g. looking at the ecological impacts of the whole product life-cycle from cradle to cradle), society (e.g. considering not only employees but also suppliers and consumers) and economy is also not well known in the sector.

As probably no other sector in Austria crafts need to develop innovative forms of management and production modes to maintain their competitiveness. Sustainability offers great new opportunities for them, e.g. minimizing the resource consumption by repair or restoration services. Moreover there are already some successful and innovative approaches to raise capital existing, such as the one of the Lower Austrian shoe producer GEA Waldviertler. For many years the company has been operating without a credit from the bank. Instead it is financed by the "GEA savings club" where friends of the company invest their money (a kind of crowd financing).

2.3 Statistical data and typology of companies

The Austrian Federal Economic Chamber as well as the Austrian Institute for SME Research provides some interesting facts and figures which may in the following represent the current situation and position of crafts in Austrian.

2.3.1 Number of companies and employees in the craft and trade sector

The statistic below shows the actual number of companies as well as the number of employees in each industry sector. 92,617 of the 294,387 companies existing in 2009 count among the sector craft and trade, which is a share of 31.5 percent. Thus this sector represents the largest one in Austria followed by the retail industry (72,874 companies, share of 24.8 percent) and the tourism and leisure industry (52,509 companies, share of 17.4 percent). The figure also shows that the craft and trade sector is the largest employer in Austria. The companies employ 562,814 people (26 percent), which is about 100,000 more than the retail industry where 465,648 persons worked in 2009. At this place the importance of crafts for the Austrian economy has to be highlighted again.

⁵ These consumers are usually well-informed and know the reasons for the higher prices.

Unternehmen und Beschäftigte nach Sparten

Stand: Dezember 2009

Sparte	Unternehmen ¹		Unselbständig Beschäftigte ²	
	Anzahl	Anteil in %	Anzahl	Anteil in %
Gewerbe und Handwerk	92.617	31,5	562.814	26,0
Industrie	6.336	2,2	404.723	18,7
Handel	72.874	24,8	465.648	21,5
Bank und Versicherung	1.077	0,4	105.410	4,9
Transport und Verkehr	17.740	6,0	197.283	9,1
Tourismus und Freizeitwirtschaft	52.509	17,8	264.115	12,2
Information und Consulting	51.244	17,4	164.316	7,6
ALLE SPARTEN	294.397	100,0	2.164.309	100,0

Figure 3: Number of companies and employees by sector in December 2009
Source: Austrian Federal Economic Chamber

Looking into further detail on the data of the craft and trade sector shows that the Federal Guild of "building and construction" counts by far the most members (11,682). 10,781 active members belong to the Federal Guild of "podiatrist, cosmetician and masseuse", 9,657 to the "building support business" followed by "carpenters" with 8,268 and "electronic-, alarm system- and telecommunication-engineering" with 8,232 active members. The Federal Guild including "furriers, glove manufacturers, tanners, preparators and leather tailor" counts with only 254 persons the fewest members and there are also only 306 active millers working in Austria.

Fachgruppenmitglieder 2009 ¹

Sparte GEWERBE UND HANDWERK

WIRTSCHAFTSKAMMERN ÖSTERREICH

Fachverband	aktiv ²	ruhend	insgesamt
1 Bau	11.682	2.631	14.313
2 Steinmetze	675	101	776
3 Dachdecker und Pflasterer	1.284	130	1.414
4 Hafner, Platten- und Fliesenleger und Keramiker	1.627	185	1.812
5 Glaser	976	110	1.086
6 Maler, Lackierer und Schilderhersteller	3.587	516	4.103
7 Bauhilfsgewerbe	9.657	2.448	12.105
8 Holzbau	1.704	245	1.949
9 Tischler	8.268	1.126	9.394
10 Karosseriebauer einschl. -spengler u. -lackierer sow. Wagner	1.086	93	1.179
11 Bodenleger	1.102	185	1.287
12 Bildhauer, Binder, Bürsten- und Pinselmacher, Drechsler, Korb- u. Möbelflechter sowie	430	152	582
14 Schlosser, Landmaschinentechniker und Schmiede	7.698	1.071	8.769
15 Spengler und Kupferschmiede	1.725	174	1.899
16 Sanitär-, Heizungs- und Lüftungstechniker	4.935	646	5.581
17 Elektro- und Alarmanlagentechnik sowie Kommunikationselektronik	8.232	2.084	10.316
18 Kunststoffverarbeiter	628	98	726
19 Metalldesign, Oberflächentechnik und Guss	518	106	624
20 Mechatroniker	5.702	867	6.569
21 Kraftfahrzeugtechniker	5.545	496	6.041
23 Gold- und Silberschmiede, Juweliere und Uhrmacher	1.163	135	1.298
24 Musikinstrumentenerzeuger	401	46	447
25 Kürschner, Handschuhmacher, Gerber, Präparatoren und Säckler	254	38	292
27 Schuhmacher und Orthopädienschuhmacher	667	59	726
28 Buchbinder, Kartonagewaren- und Etuierzeuger	207	24	231
29 Tapezierer, Dekorateur und Sattler	1.323	138	1.461
31 Bekleidungs-gewerbe	2.201	404	2.605
33 Sticker, Stricker, Wirkler, Weber, Posamentierer und Seiler	746	169	915
34 Müller	306	60	366
35 Bäcker	1.734	104	1.838
36 Konditoren (Zuckerbäcker)	1.175	126	1.301
37 Fleischer	1.531	193	1.724
38 Fußpfleger, Kosmetiker und Masseure	10.781	1.947	12.728
39 Nahrungs- und Genussmittelgewerbe	1.104	178	1.282
40 Gärtner und Floristen	3.372	728	4.100
42 Fotografen	2.991	447	3.438
43 Chemische Gewerbe u. Denkmal-, Fassaden- u. Gebäudereiniger	7.775	1.430	9.205
44 Friseure	6.898	467	7.365
45 Textilreiniger, Wäscher und Färber	638	80	718
46 Rauchfangkehrer	661	15	676
47 Bestattung	553	35	588
49 Augenoptiker, Orthopädietechniker und Hörgeräteakustiker	1.328	79	1.407
50 Zahntechniker	665	34	699
51 Allgemeiner Fachverband des Gewerbes	57.895	18.145	76.040
nicht zuordenbar	239	4	243
INSGESAMT	183.669	38.549	222.218

¹ Mehrfachzählung bei Mitgliedschaft in mehreren Fachgruppen, Stand: 31. Dezember

² ohne "ruhende" Mitgliedschaften (Nichtbetrieb, Verpächter)

Figure 4: Members per Federal Guild in the craft and trade sector 2009
Source: Austrian Federal Economic Chamber, January 2010

2.3.2 Company size

As already mentioned above the small company size is a main characteristic for the craft sector. In Austria, even 41,545 craftsmen, -women work in their own without employing anybody. There are 38,661 micro-sized companies employing 1 to 9 persons and 9,604 small-sized craft producers with 10 to 49 employees. Only 1,601 companies employ more than 50 people whereas 211 employ more than 250.

Unternehmen nach Größenklassen

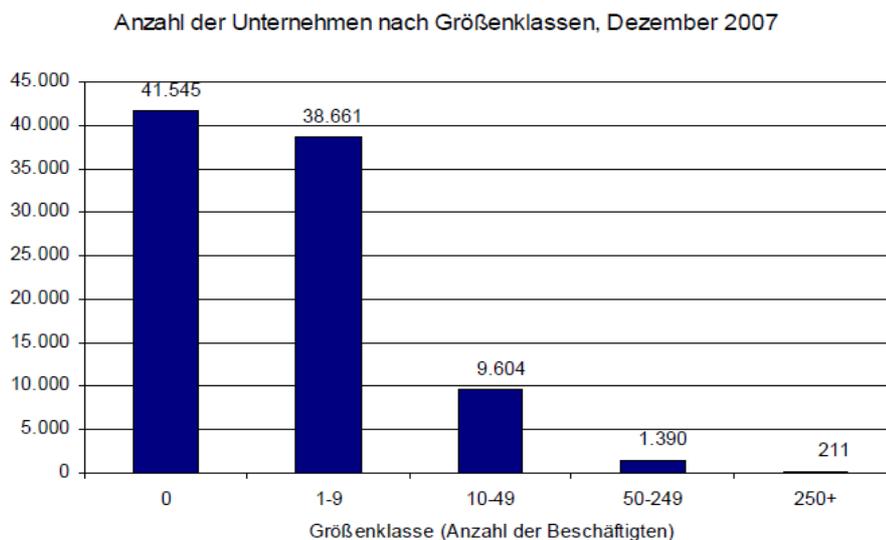


Figure 5: Company size of craft producers in December 2007

Source: Austrian Federal Economic Chamber, Beschäftigtenstatistik, Gründungsstatistik in: Austrian Institute for SME Research

2.3.3 Companies and start-ups per region

There are craft companies all over Austria. Vienna, the capital of Austria and the province with most inhabitants, counted 18,378 craft companies in 2009 and 2,905 start-ups. Followed by Lower Austria, which is the largest province in terms of area, with 17,478 companies and 2,152 start-ups. Even though Burgenland is the tail end regarding the number of craft companies, it has relatively speaking the most start-ups. The craft and trade sector accounts for 35.1 percent of all Austrian start-ups in 2009. Unfortunately there is neither data available concerning the share of start-ups in the other sectors nor concerning the start-up share of each Federal Guild. Thus it is not possible to make a statement of the fastest growing Guild in the craft sector.

Gründungsintensität

Anzahl der Unternehmen sowie der neu gegründeten Unternehmen im Gewerbe und Handwerk 2008

	Unternehmen	Neugründungen	Anteil an den Unternehmen	Anteil an Gründungen insgesamt
Wien	18.378	2.905	15,8%	37,4%
Burgenland	3.364	418	12,4%	35,6%
Niederösterreich	17.478	2.152	12,3%	36,1%
Oberösterreich	15.544	1.535	9,9%	35,5%
Steiermark	12.857	1.257	9,8%	31,6%
Salzburg	7.177	692	9,6%	36,4%
Kärnten	6.587	559	8,5%	30,6%
Tirol	9.056	708	7,8%	32,9%
Vorarlberg	5.011	334	6,7%	33,4%
Österreich	91.459	10.560	11,5%	35,1%

Quelle: WKO, Beschäftigungsstatistik, Gründungsstatistik

Figure 6: Number of companies and intensity of start-ups in the craft and trade sector by province in 2008

Source: Austrian Federal Economic Chamber, Beschäftigtenstatistik, Gründungsstatistik in: Austrian Institute for SME Research

2.3.4 Financial data and position

The craft and trade sector generated revenue in the amount of 67,995 Mio Euro in 2008. Even though it is shown above that most companies are located in Vienna, the 15,544 craft producers in Upper Austria generated the highest revenue amounting to 15,428 Mio Euro. The graphic below presents another interesting detail: the companies generate their revenues predominantly nationally. The export share of the whole sector amounts only to 8 percent (5,440 Mio Euro). This fact underlines the high importance of the craft sector as local supplier.

Umsatz und Exporterlöse

Gesamtumsatz, Exportquote und Exportumsatz im Gewerbe und Handwerk 2008

	Umsatz (Mio €)	Exportquote	Exporte (Mio €)
Oberösterreich	15.428	13%	2.006
Wien	11.369	2%	227
Niederösterreich	11.343	7%	794
Steiermark	9.073	11%	998
Tirol	5.704	6%	342
Salzburg	4.875	7%	341
Kärnten	4.463	3%	134
Vorarlberg	3.879	18%	698
Burgenland	1.839	1%	18
Österreich	67.995	8%	5.440

Figure 7: Revenues and export share of the craft and trade sector in 2008
Source: Austrian Institute for SME Research

The economic situation of the craft sector doesn't show an encouraging picture. Only 16 percent of the companies are regarded as "top-companies", which have neither income nor financing problems. Further 11 percent describe their situation as "quite well". In the economic period 2006/2007 12 percent of the companies suffered from financing problems, 27 percent from income problems and 13 percent suffered from both, financing as well as income problems. A full of 21 percent of the companies must show losses. One can assume that the situation today is similar⁶.

⁶ The data base on the analysis of 26,286 annual financial statements.

Betriebswirtschaftliche Position

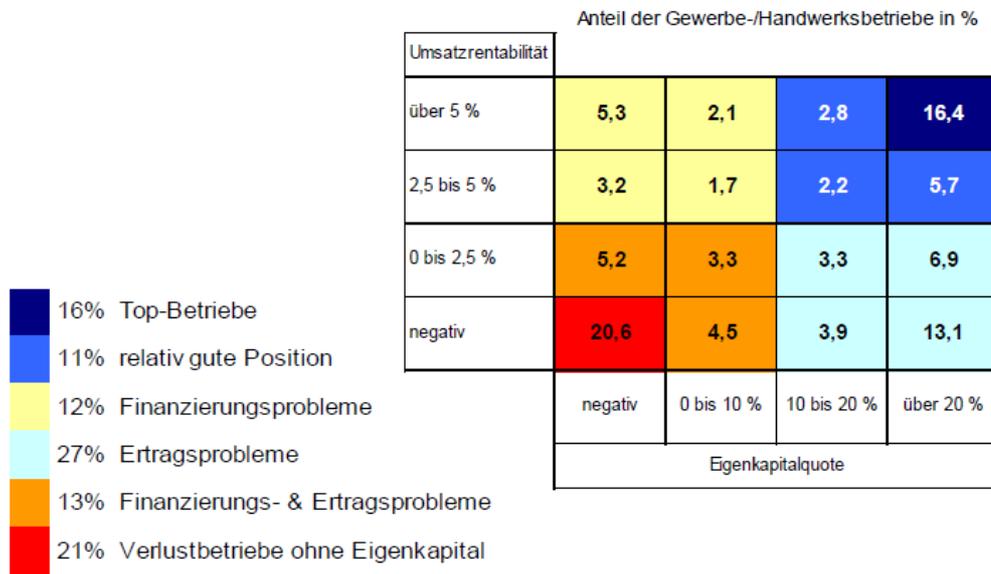
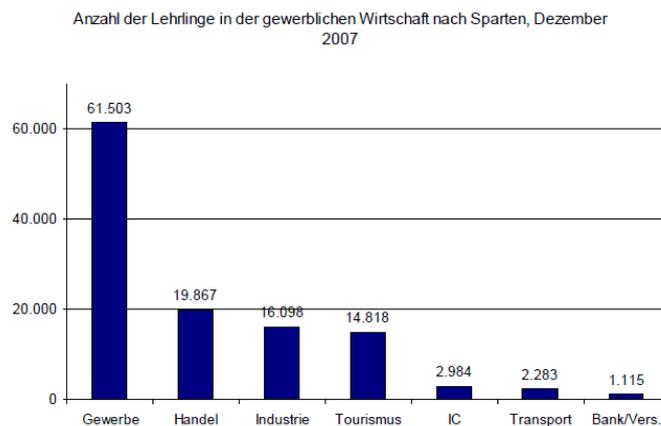


Figure 8: Economic situation of the craft and trade sector in the year 2006/2007
Source: Austrian Institute for SME Research

2.3.5 Crafts as companies providing vocational training

In Austria 155,933 companies employ 2,306,630 employees whereof 129,823 are apprentices. At an average every 17th employed person is an apprentice. The craft and trade sector is the largest employer for young people graduating from compulsory school. 61,503 apprentices are working in 52,967 companies. Hence every 10th employee is an apprentice. In comparison to the other sectors: the retail industry trains 19,867 young people (every 23rd is an apprentice), the industry 16,089 (every 28th is an apprentice).

Lehrlinge



Quelle: WKO, Lehrlingsstatistik 2007

Figure 9: Apprentices per sector in 2007

2.4 Intermediate result

In summary, the following may be noted with regard to the craft and trade sector:

- It consists of 92,617 companies from a total of 294,397 which relates to 31 percent.
- It is divided into 43 Federal Guilds with a total of 170,751 active members
- It represents one third of all annual start-ups
- It accounts for 20% of the Austrian GDP
- It invests 3.5 billion Euros per year
- It represents one third of all employing companies
- The companies train half of all apprentices
- They employ 570,000 people from the total of 3.4 million employees⁷

⁷ Cf. http://portal.wko.at/wk/format_detail.wk?AngID=1&StID=500779&DstID=222&titel=Standpunkte,der,Bundessparte,Gewerbe,und,Handwerk

3 The regulatory framework of the trade and craft sector

The Austrian Trade, Commerce and Industry Regulation Act form the statutory framework for the craft and trade sector. It is a comprehensive business law which governs the different types of trades and stipulates under which circumstances persons are entitled to carry it out. It also regulates the general and particular requirements to exercise self-employment pursuant to the ordinances issued in connection with the individual regulated crafts and trades.

3.1 Crafts and trades by law

The Austrian Trade, Commerce and Industry Regulation Act divides the craft and trade sector into three categories:

- crafts
- bounded trade
- free trade

The distinctive criterion to execute the specific trade is the professional qualifications one has to provide proof of. Thus it is either compulsory to own take the examination for the master craftsman's certificate as well as the management certificate or to graduate with an appropriate diploma to be a craft enterprise. Baker, butcher or hairdresser are professions in this field. Morticians, masseurs or cosmeticians belong to the group of the bounded trade in the contrary. They do not need to provide proof of an examination for the master craftsman's certificate however have to demonstrate a certain degree of proficiency. They can carry their business immediately after the receipt of a trading licence. There's no formal proof of qualification needed to carry out a free trade. Pawnbrokers or owners of gas stations belong to that group. It is estimated that there are about 20 bounded trades in Austria and about 800 free trades⁸.

The law further divides the trade in types of activity. Thus it is distinguished between manufacturing trade (e.g. carpenters, tailors) and service trade (e.g. hairdresser, painter).

3.2 Federal Guild

The Federal Guild is the legal representative of the interests of the craft sector in Austria and an independent professional organisation with its own area of influence as part of the Austrian Federal Economic Chamber. The Federal Guild or rather the elected officials (= craft entrepreneurs) set the priorities of the guild activities. It has to represent the professional interests of its members as far as it concerns several provinces or is of general or fundamental importance. It also promotes the economic development of its members by positively influencing the regulations. Furthermore it observes the law, participates in the creation and modification of standards and represents the interests of its members towards public authorities, politicians and the public. Moreover the Federal Guild is a member of the collective treaty and represents the interests of employers in the craft sector towards the trade union. The Federal Guild is responsible for the promotion of vocational training and further education too. It thus works together with schools, school administration and institutes of adult education to play a part in the generation of curricula, new occupational profiles or the examination

8 Quelle: Nachhaltige Positionierung des Salzkammerguts mit der USP „Handwerk und Qualität“ Seite 3, Meisterstrasse Salzkammergut

regulations. The legal representative of the Federal Guild is the Federal Guild Master, who directs and controls the entire administration of the business as well as the current transactions⁹.

⁹ cf. <http://www.sattler.at/?Bundesinnung:Aufgaben>

4 Crafts in the context of education

Compulsory education in Austria lasts for nine years and applies to all children who permanently reside in Austria, regardless of their nationality. School attendance is compulsory for all children who reached the age of six before 1st September of a given year. The Austrian school system consists of two basic types of schools: general-education schools and vocational schools. Only the general-education schools provide education from grades 1 to 8. Beginning with grade 9, the school system is divided into general-education schools and vocational schools.

Graphical Overview of the Austrian Education System

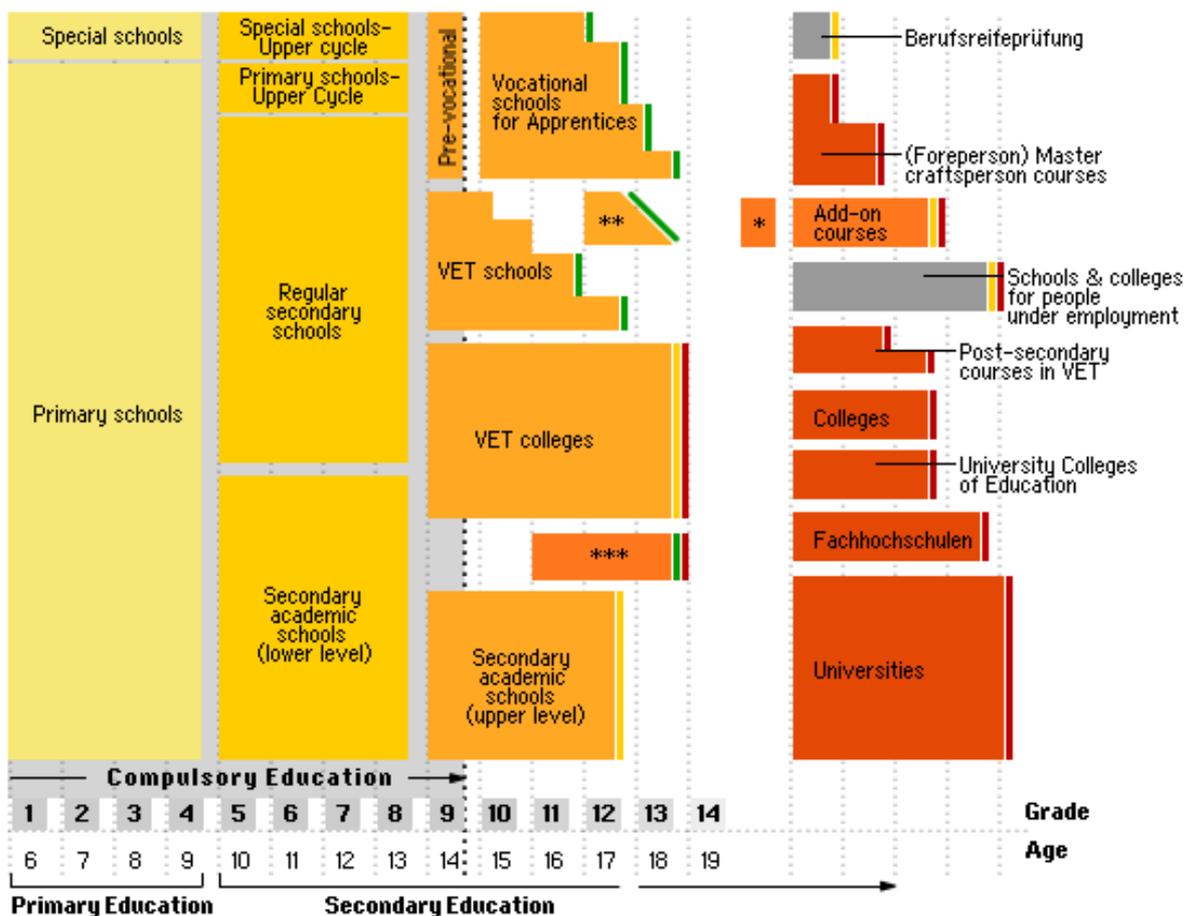


Figure 10: The Austrian education system
Source: <http://www.bildungssystem.at/>

There are different educational ways to become a craft, however one may usually attend the following schools:

Grades 1 to 4:

- Primary school (Grundschule/Volksschule)

Grades 5 to 8:

- Regular secondary school (Hauptschule) or
- Academic secondary school - lower cycle (Allgemein bildende höhere Schule – Unterstufe, AHS)

Grade 9:

- pre-vocational school (Polytechnische Schule) or
- medium-level technical and vocational school (Berufsbildende mittlere Schule, BMS) or higher-level technical and vocational school (Berufsbildende höhere Schule, BHS)

Within this system a person can choose between two educational and vocational paths: After the 8th grade students may either continue their education at a medium-level technical and vocational school respectively at a higher-level technical and vocational school or attend a one-year pre-vocational school.

4.1 The dual system

After the one-year pre-vocational school young people who have concluded an apprenticeship training-agreement with a company authorised to train apprentices are obliged to attend part-time vocational schools. This type of VET (vocational education and training) is called "dual vocational training system" (or "dual system" for short), as the training has two bases: the company and part-time vocational school. Vocational schools are attended for as many school years as necessary for the apprenticeship training. Depending on the apprenticeship trade, the length of training is between two and four, but usually three years. The apprenticeship-leave examination is taken after completion of the apprenticeship period to establish whether the apprentice has acquired the necessary skills and knowledge for the apprenticeship trade and is able to carry out the activity particular to that trade in a proper manner. The apprenticeship-leave examination is divided into a practical and a theoretical section, and consists of a written and an oral part. However if the student has fulfilled requirements according to the teaching objective of the final year of vocational school, the examination will consist of the practical section only. After successfully completing the apprenticeship-leave exam, graduates have the following continuing vocational training options:

- completing the master craftsperson exam for a craft or trade (parts of this exam are waived)
- completing a professional diploma examination for another regulated craft or trade or being admitted to it if the entry requirement is a relevant initial vocational training
- entry to further education through the vocational matriculation examination (Berufsbereifungsprüfung) or the respective university entrance examination as a

requirement for study at universities, advanced technical college (Fachhochschule), post-secondary vocational training-courses and post-secondary or tertiary colleges¹⁰

Currently about 40 per cent of all Austrian teenagers enter apprenticeship training upon completion of compulsory education. Even though the dual system is well established in Austria and recognized within the European Union the overall number of apprentices just as the number of those entering apprenticeship training has been going back since 1981, 1997 saw the discontinuation of this trend, for the number of new apprentices increased again. It is especially the craft and trade sector which is faced with the problem of the lack of apprentices as well as a specialised workforce as the graphic below shows. In the course of a representative survey in July 2008 60 percent of respondents from the craft sector state that the search for apprentices is "difficult", only 17 percent consider it as "easy". 56 percent also quote that the search for skilled workers is "difficult".



Figure 11: Skill and apprentice shortages in Austria in July 2008
Source: Austria Press Agency

The need for skilled workers is expressed in a recently published article in an Austrian newspaper. Given that they are obtained with the required persons the companies could employ 18,000 persons. Thus every fourth company in the craft and trade sector suffered from a skill shortage in March 2010¹¹.

4.2 Further training and education

Besides school and university education, adult education serves as a third pillar in the Austrian education system. However, neither continuing education and training (CET) nor vocational education and training (VET) are regulated by law. The variety of complementary courses on personal as well as vocational matters aim at meeting the demands of the 21st century and of the rapidly changing world

¹⁰ <http://www.bildungssystem.at/article/articleview/299/1/73>

¹¹ cf: <http://diepresse.com/home/wirtschaft/economist/554214/index.do?from=suche.intern.portal>

of work. The courses provide for the improvement of vocational qualifications, the acquiring of key qualifications, instruction in the use of new technologies and for the promotion of social and communication skills. Courses and programmes of adult education are offered by private as well as public providers, schools for employed persons, Public Employment Service, the Austrian Conference of Adult Education Institutions, interest groups, private providers and enterprises. Yet the most important providers of further vocational training are the adult education institutions of the social partners, i.e. the Vocational Training Institute (Berufsförderungsinstitut) and the Institute for Economic Development (Wirtschaftsförderungsinstitut)¹².

4.2.1 Master craftsmen courses

Besides the courses and programmes described above, there is a regulated and career-related further education and training in the form of the master craftsmen courses. As shown above this education is compulsory to execute certain crafts. Curricula and exam regulations for these schools and courses are issued by the Federal Ministry of Education, Science and Culture. The courses aim at enhancing technical knowledge and at preparing students for their Master Craftsman Examination. Master craftsmen courses are established at secondary technical and vocational schools and are free of any fees. Training at master craftsmen courses usually lasts for two years and ends with a final exam. After two years of work experience graduates of master craftsmen courses may start self-employment.

Master craftsmen courses are offered in the following areas: painting, sculpture, joinery and interior design, metal design, fashion design, ceramics and stove design, milling, baking and clothing, optometry and contact lens optics. In addition to that, there are also more advanced courses for joinery, photography, graphic design, dressmaking and textile chemistry¹³.

4.2.2 Further training and education: craftsmen, -women as self-taught persons

The Austrian Federal Economic Chamber is anxious to enhance the principle of lifelong learning for craft sector. What the sector needs today is a combination of vocational and management education as well as specific courses for both skilled workers and entrepreneurs¹⁴. Looking at the content of the course and programmes attended from Austrian SMEs in 2007/2008 shows that vocational-technical topics bestrides the education activities. Administration trainings come second whereas they become less important depending on the size of the company: medium-sized companies attend these courses more frequently than micro- and small-sized companies¹⁵. This indicates that the majority of Austrian craft producers have a demand of education in this field¹⁶. In line with another Leonardo project the sector requires especially the need of improved marketing and sales skills to be competitive in the change.

Moreover several studies show that employees of craft companies are the ones who at least benefit from training programmes¹⁷. Anyway 83 percent of interviewed micro-sized companies undertook education programmes for their employees whereof the great majority are external activities. E-Learning activities

12 Cf. http://www.bmukk.gv.at/enfr/school/adult/Adult_Education4582.xml

13 http://www.bmukk.gv.at/enfr/school/adult/Adult_Education4582.xml

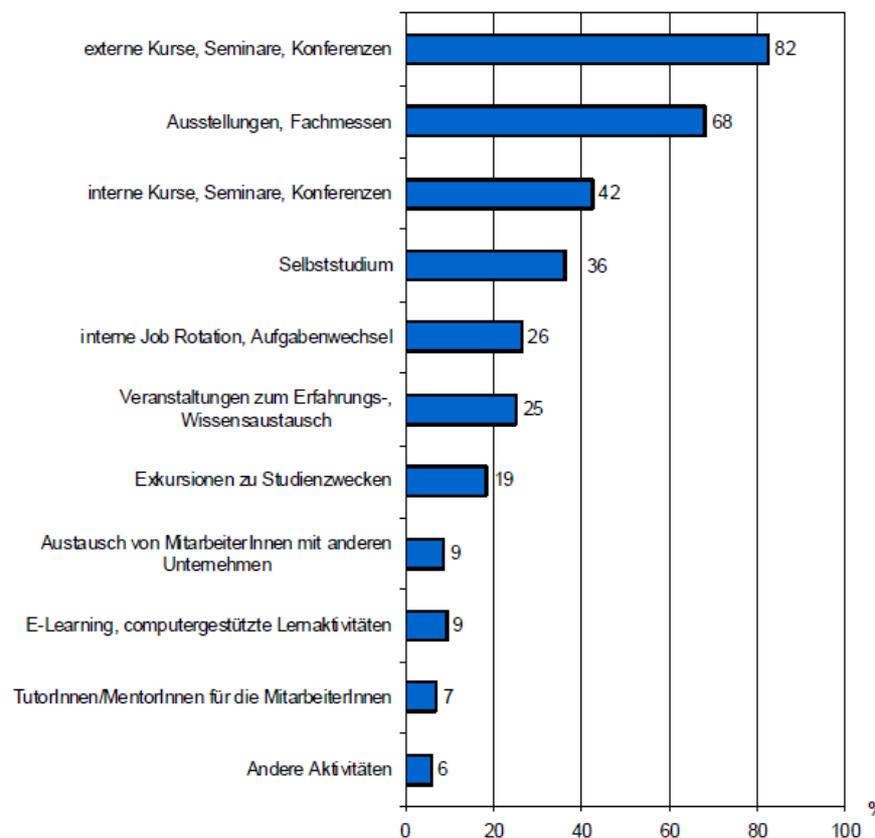
14 WKO: Die Bundessparte Gewerbe und Handwerk gestaltet aktiv ein modernes Berufsrechts mit

15 Cf. Oberholzner, T., Dorr, A.: Weiterbildung in Unternehmen. Schwerpunkt KMU. Endbericht. Vienna, 2008

16 As shown above the the Austrian craft sector consists of 48,265 micro- and small-sized companies.

17 Cf. Oberholzner, T., Dorr, A.: Weiterbildung in Unternehmen. Schwerpunkt KMU. Endbericht. Vienna, 2008

are only secondary so far as they are used from less than a tenth of craft companies.



Quelle: KMU FORSCHUNG AUSTRIA, Unternehmensbefragung März 2008, n = 205, Mehrfachnennungen möglich

Figure 12: Further education training programmes in 2006 and 2007 in Austrian SMEs.
Source: Oberholzner, T., Dorr, A.: Weiterbildung in Unternehmen. Schwerpunkt KMU. Endbericht. Vienna, 2008

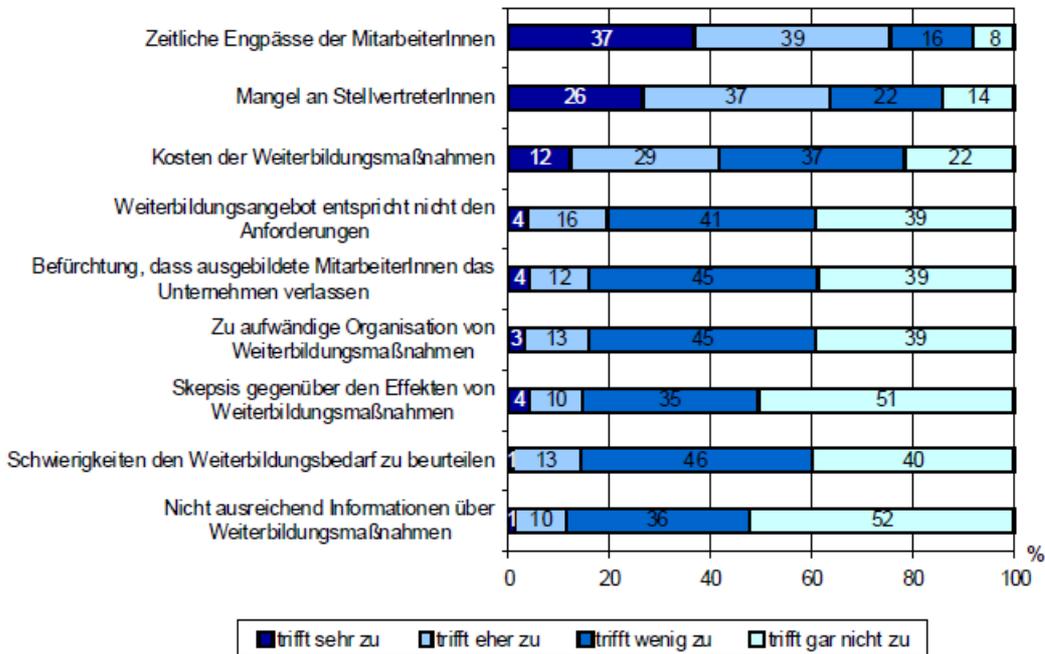
4.3 Barriers and/or difficulties for accessing training

Nobody continues to doubt the importance and sense of measures in further education today. However due to their size and economic position craft companies run into several difficulties.

The by far most dominant obstacles are the serious lack of time and the current work load. As there are only a few people working in craft companies the lost time of each and every employee are of significance both in financial means as well as manpower. As the employer is often an important part of the daily operational business he/she has hardly any time to take up new activities in form of further education neither.

This brings forth another barrier. The micro-sized companies normally do not have a keyholder for the boss or an employee who could take over the work of the absentee.

The third major obstacle for the craft industry is the severe financial problems which make it even more difficult to invest into training activities¹⁸.



Quelle: KMU FORSCHUNG AUSTRIA, Unternehmensbefragung März 2008, n = 221

Figure 13: Barriers for Austrian SMEs for attending training programmes
 Source: Oberholzner, T., Dorr, A.: Weiterbildung in Unternehmen. Schwerpunkt KMU. Endbericht. Vienna, 2008

However, craftsmen and -women are willing to gain further qualifications and recognize their importance. Thus an adequate training program has to be established taking into account all these barriers.

¹⁸ Oberholzner, T., Dorr, A.: Weiterbildung in Unternehmen. Schwerpunkt KMU. Endbericht. Vienna, 2008

5 New technologies in craftwork activities

E-Services, E-Learning, E-Business or E-Shops. The World Wide Web offers endless technical opportunities and chances for individuals and companies. Although these new technologies simplify and professionalize processes craft companies do not put them into an optimal use.

In order to improve this situation, the European Commission launched a programme to improve the quality and accessibility of European education and training systems through the effective use of ICT (Information and Communication Technology).

The Austrian Institute for Economic Development offers a course called "businessman, -woman training" in the form of blended learning. However it is industry-neutral and serves as a preparation for the master craftsman's certificate. Thus only those people are attending the course who wants to become a master in their profession¹⁹.

¹⁹ Information by phone, on April 20th, 2010 from Peter Angeli, Institute for Economic Development

Unternehmertraining

BLENDED LEARNING

Ziel: Branchenneutrale Vorbereitung auf die Unternehmerprüfung und Vorbereitung auf die betriebliche Praxis. Sie wissen über die erforderlichen betriebswirtschaftlichen und rechtlichen Bestimmungen für die selbstständige Ausübung eines Handwerks oder gebundenen Gewerbes Bescheid.

Teilnehmer: Personen aller Branchen, die die Unternehmerprüfung lt. Gewerbeordnung ablegen werden. Jungunternehmer/-innen und Kleinunternehmer/-innen, die sich eine wirtschaftliche Grundausbildung aneignen wollen.

Technische Voraussetzungen: Computer mit Internetanschluss.

Inhalt: Rechnungswesen - unternehmerische Rechtskunde - Marketing - Kommunikation - Organisation - Mitarbeiterführung.

Hinweis: Nach dem Kursstart finden im Abstand von 2 Wochen 7 weitere Präsenztermine zwecks Vertiefung und Prüfungsvorbereitung im WIFI Wien statt. Zwischen den Präsenzterminen lernen Sie online mit unserer Lernplattform, wobei Sie von einem Trainer/einer Trainerin begleitet werden. eLearning Durcharbeitungszeit: ca. 118 Lehreinheiten; Anwesenheit im WIFI Wien: 32 Lehreinheiten.

KOSTEN: EUR 900

DAUER: 150 Lehreinheiten inkl. eLearning

Termin	Tag	Uhrzeit	WIFI Wien
3.10. – 12.12.2009	Sa	9.00–13.00	22190/029
19.11.2009 – 28.1.2010	Do	17.00–21.00	22190/039
9.1. – 10.4.2010	Sa	9.00–13.00	22190/049
12.2. – 30.4.2010	Fr	16.00–20.00	22190/059
23.3. – 8.6.2010	Di	17.00–21.00	22190/069
3.5. – 19.7.2010	Mo	9.00–13.00	22190/079
19.6. – 18.9.2010	Sa	9.00–13.00	22190/089

NEU UNTERNEHMERTRAINING IM VIRTUELLEM KLASSENRAUM

Ab Herbst haben Sie die Möglichkeit die Inhalte des Unternehmertrainings modulweise losgelöst von Kursräumen des WIFI Wien zu erlernen. Bei dieser Kursform werden virtuelle Klassenräume und eLearning-Inhalte eingesetzt.

KOSTEN: EUR 900

DAUER: 150 Lehreinheiten inkl. eLearning

Termin	Tag	Uhrzeit	WIFI Wien
6.10. – 3.12.2009	Di, Do	18.00–20.00	22490/019

Informationen und weitere Termine finden Sie unter www.wiflwiwien.at/elearning

Figure 14: Blended learning program for SMEs

Source: Austrian Institute for Economic Development: Lernen überall und jederzeit! eLearning und Blended Learning – Die flexible Art des Lernens

Furthermore general training courses in the form of blended learning are offered for Accounting & Balancing (basic and advanced), cost accounting, sales (basic and advanced), business law and the European Business Competence* Licence, EBC*L.

5.1 Role of ICTs for training the craftsmen: e-learning as a new learning environment

In the context of this report e-learning is defined as learning which is supported by new Information and Communication Technology. This new form of learning offers several opportunities and advantages which are discussed in the following.

The two main arguments speaking in favour for e-learning are the studies independent of time and place. No matter if in the office or at home, during working hours or in the spare-time, in the morning or the evening, on Monday or Sunday, the content is always available and the learning process can be adapted

to the user's time frame. Furthermore travel expenses and time are eliminated which makes this form of learning even more attractive for the craft sector.

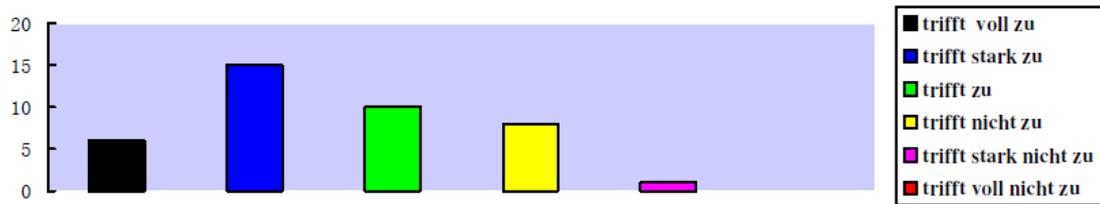


Abb. 2.1 Ortsunabhängigkeit gelernt werden kann

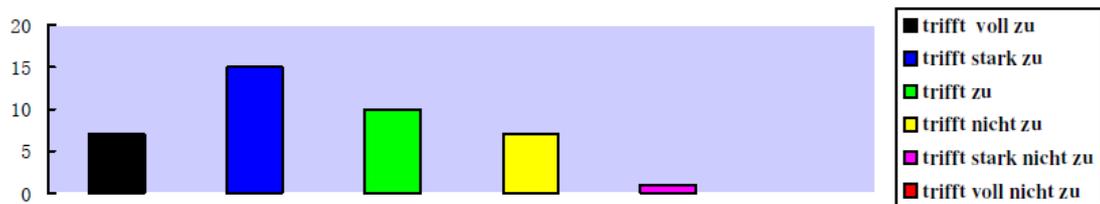


Abb. 2.2 Zeitunabhängigkeit gelernt werden kann

Figure 15: Main advantages of e-learning
Source: Jun, H., Vor- und Nachteile von E-Learning, Vienna 2006

As the content is usually structured in modules, the learner can always get on the e-learning programme user-defined and can continue almost arbitrarily. The flexibility of this ICT-based learning makes it also possible to satisfy the individual demand of learning immediately as the content is available all around the clock.

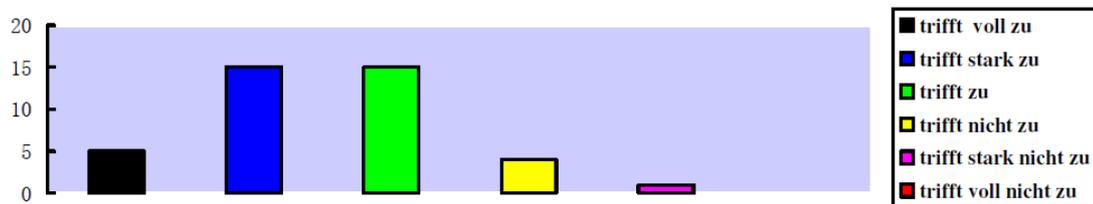


Abb.2.3 Flexibilität, "just in time" gelernt werden kann

Figure 16: Flexibility as an advantage of e-learning
Source: Jun, H., Vor- und Nachteile von E-Learning, Vienna 2006

Furthermore E-learning takes the individual types of learning into account as it the programmes can be supported by visual or aural elements. Additionally the user has the possibility to repeat the individual modules at will and at an indeterminate period.

Abb.2.4 Abstimmung auf eigene Anforderungen

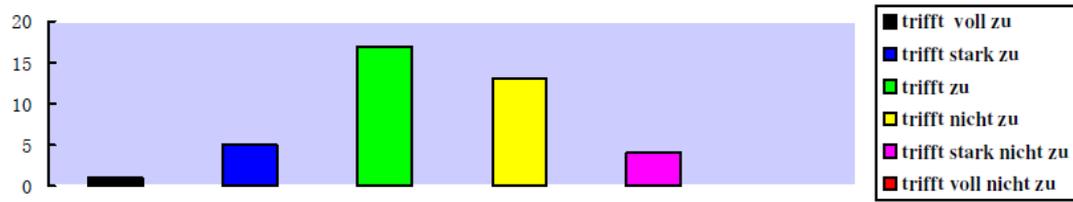


Abb.2.5 Multimediale Ergänzungen und Simulationen für den zu vermittelnden Lernstoff

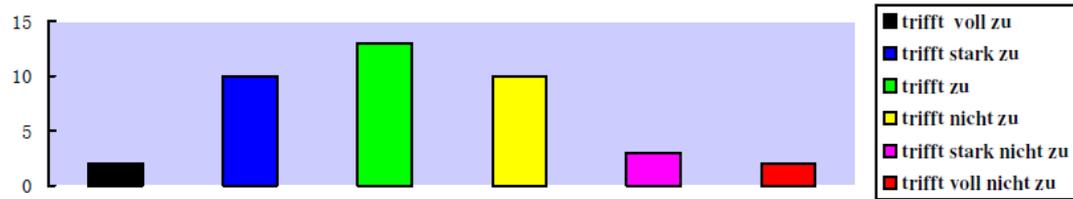


Figure 17: Individuality as an advantage of e-learning
Source: Jun, H., Vor- und Nachteile von E-Learning, Vienna 2006

Finally one has to mention that the content can easily be updated without buying further literature.

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8 List of Illustrations

9 List of Diagrams

10 Glossary

Find below the translation for some specific terms

English translation	German term
Building support business	Bauhilfsgewerbe
Vocational matriculation examination	Berufsreifeprüfung
Vocational Training Institute	Berufsförderungsinstitut (BFI)
Federal Guild master	Bundesinnungsmeister
Advanced technical college	Fachhochschule
Free trade	Freies Gewerbe
Trade and crafts	Gewerbe und Handwerk
Austrian Trade, Commerce and Industry Regulation Act	Gewerbeordnung (jur.)
Bounded trade	Gebundenes Gewerbe
Retail industry/sector	Handelsbetrieb / Handel
Craft	Handwerk

Master craftsmen course

Meisterkurs

Examination for the master craftsman's certificate

Meisterprüfung

Institute for Economic Development

Wirtschaftsförderungsinstitut (WIFI)

Austrian Federal Economic Chamber

Wirtschaftskammer Österreich (WKÖ)