Approaches to teaching, learning and assessments

Tuning 2 Business group results

Introduction

This paper is based on the taxonomy of the business group for structuring course programmes into the following groups: core knowledge; knowledge deepening with the possible orientations vertical, horizontal and diverse; and generic skills (subject independent) divided into instrumental competences (personal), interpersonal competences (organisational and communications skills) and system competences (transferable skills). The aim of the paper is to focus on approaches to teaching, learning and assessment in order to build up these competences, and the degree to which student relate to and have a perception of these competences. The methodology of the paper is to use the results based on academics' perceptions of both generic and subject-specific competences found in the Tuning 1 surveys among academics together with the results from the exercises on competences carried out by the members of the business group in Tuning 2 related to specific competences at first and second cycle programs. This allows a triangulation of quantitative and qualitative methodologies aiming at cross-checking findings. The paper therefore introduces additional results from the survey among academics made in Tuning 1 and gives a brief description of the general findings in the exercises on competences, aiming at reaching a conclusion on best practice in teaching, learning and assessment on how to achieve different subject specific competences.

Further analyses of business academics' ranking of generic skills and competences from TUNING 1

First analyses are made on academics' ranking of generic skills to find underlying structures in the importance perception of skills made by academics in the subject area of business.

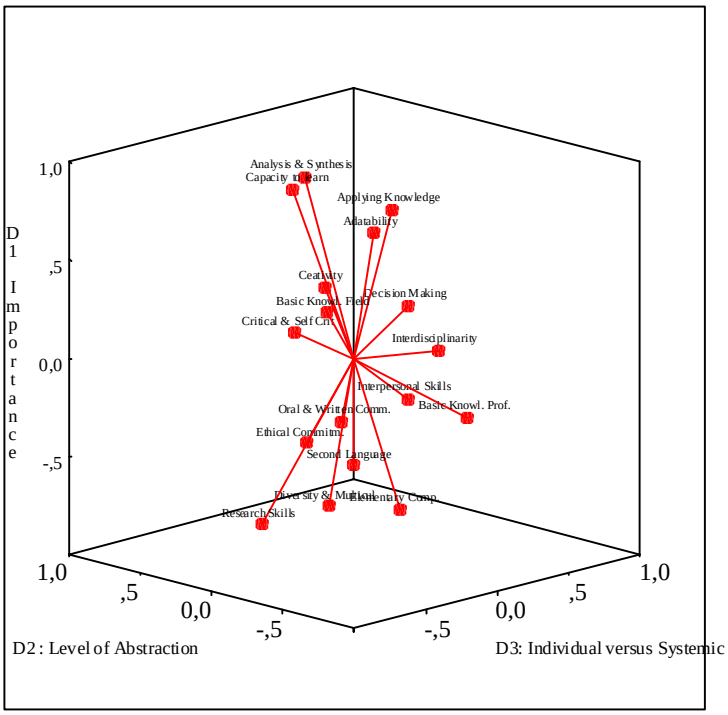
The analyses are done by way of multidimensional scaling. Multidimensional scaling attempts to find the structure in a set of distance measures between objects or cases. This is accomplished by assigning observations to specific locations in a conceptual space (usually two- or three-dimensional) such that the distances between points in the space match the given dissimilarities as closely as possible. In many cases, the dimensions of this conceptual space can be interpreted and used to further understand data.

The analyses came up with the following 3 dimensions for the 17 items on generic competences together with the general rating of the items across the 154 respondents:

Table 1 Multidimensional scaling results on generic competences (n=154 business academics)

	Dimension with final coordinates			Average ranking in surveys among academics
Ranked items	**Level of importance**	**Level of abstraction**	**Individual versus Systemic skills**	
Capacity: Analysis & Synthesis	0,83	0,40	0,06	4,99
Capacity to learn	0,85	0,24	-0,19	5,14
Capacity: Applying Knowledge in practice	0,75	-0,12	0,14	6,23
Adapt to new situations	0,61	0,00	0,14	6,28
Ceativity	0,37	0,09	-0,12	7,36
Basic Knowl. of study field	0,41	-0,37	-0,57	7,41
Critical & self-critical abilities	0,06	0,39	-0,03	8,44
Decision Making	0,19	0,01	0,39	8,85
Work in interdisciplinary teams	0,07	-0,38	0,21	9,10
Oral & Written Comm.	-0,25	-0,13	-0,23	9,52
Interpersonal Skills	-0,25	-0,08	0,30	9,91
Basic Knowl. of profession	-0,16	-0,77	0,02	9,99
Second Language	-0,53	-0,04	-0,05	10,75
Ethical Commitment	-0,54	0,46	0,12	11,12
Appreciation of Diversity & Multiculture	-0,79	0,18	0,00	12,25
Elementary computer skills	-0,77	-0,18	0,14	12,34
Research Skills	-0,85	0,31	-0,33	12,88

The latent structures can be visualised in a 3D plot as follows:

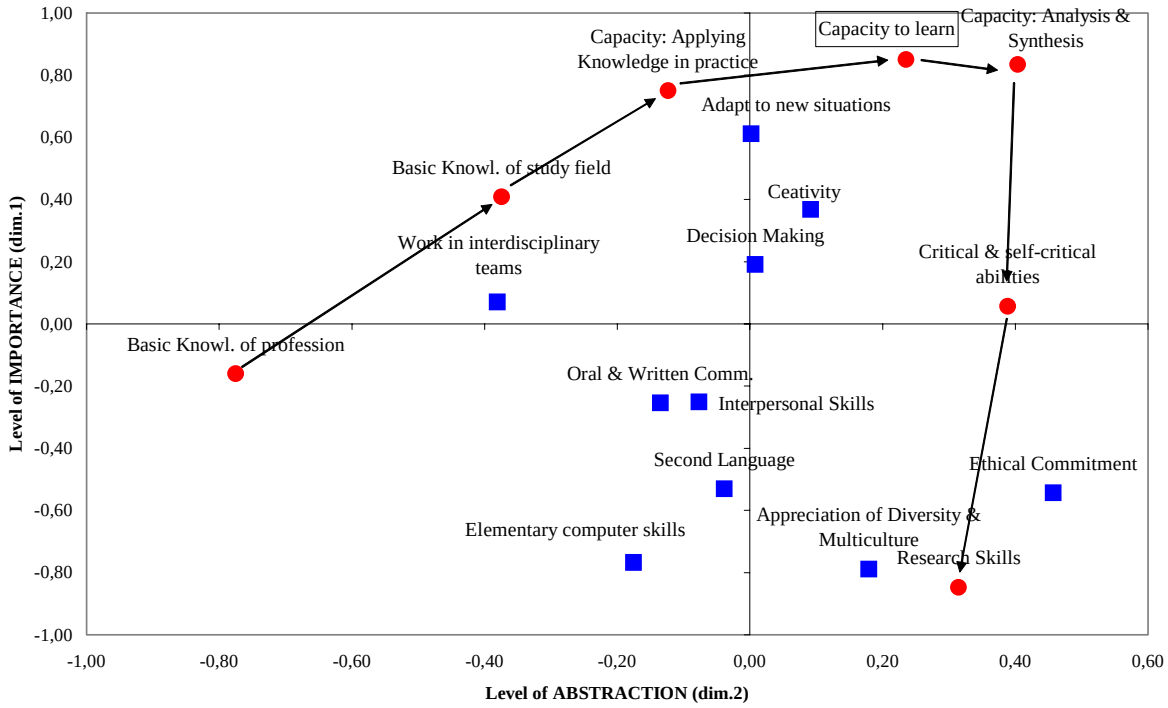


The interpretation of the dimensions gives reason to believe that the 3 dimensions may be interpreted as:

1. Importance perception (very closely linked to the average perception of importance)
2. Level of abstraction
3. Individual versus systemic skills

The interpretation becomes clearer by mapping the skills in 2D perceptual maps. In the maps on the following pages, skills and competences describing pure knowledge skills are mapped by means of circles, and other generic skills and competences are illustrated by squares.

Figure 2 Perceptual map of level of abstraction and level of importance



Conclusions to be drawn from figure 2 are that the skills “Capacity to learn” and “Capacity to make analysis and synthesis” are located as the most important skills to be achieved according to academics. At the same time, these skills require a high degree of abstraction.

Because the two skills are located very closely in the map, there is reason to believe that the two skills are very closely related in the minds of academics, and should be seen as the level descriptors for business programmes.

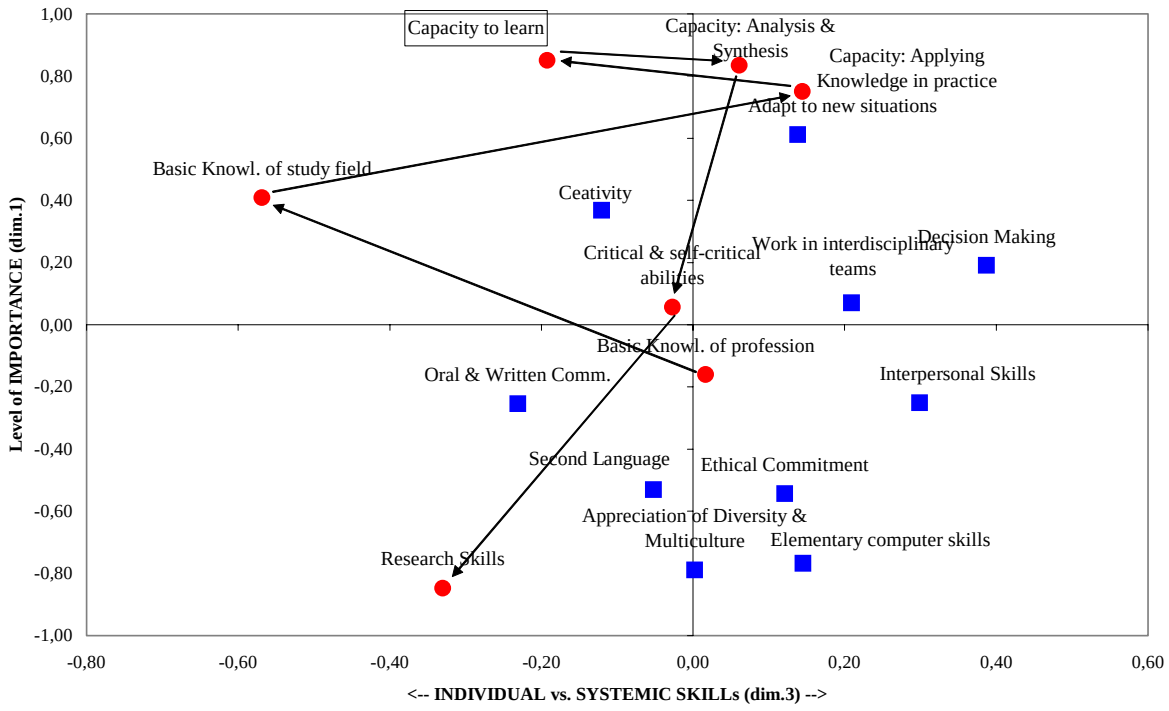
At the same time, and in accordance with the taxonomy, it is interesting to see that business academics view transferable skills such as: “Adapt to new situations”, “Creativity” and “Decision making” to be closely associated with learning skills.

The arrows show the relationship between the knowledge skills as argued in the Bloom taxonomy: “Basic knowledge of the profession” could be seen as a requirement for “Basic knowledge of the study field”, which again is followed by “Capacity to apply knowledge in practice”, leading to the “Capacity to learn” and “Capacity to analyse and synthesis”. At the top level of abstraction, we find “Critical and self-critical abilities” and “Research skills”.

The “Critical and self-critical skills” and “Research skills” are at a high level of abstraction, but are not regarded as important learning outcome objectives. In the map, the associative transferable skills to “Research Skills” are “Appreciation of diversity and multi-culture” and “Ethical commitment”. This finding is in good accordance with the requirements and the objectives of a researcher and (his or her) capacity to do international research; however, not considered important to first and second cycle students.

The positions of the skills in dimension 1 versus 3, are shown in figure 3.

Figure 3 Importance and orientation of skills



The lessons to be learned from figure 3 is that “Capacity to learn” is generally an individual skill and “Creativity” is rather closely related to this skill.

Figure 3 also shows that to follow the Bloom taxonomy (arrows between the learning items) at different levels of learning, changes in the orientation toward individual and systemic skills are needed. This should therefore be reflected in the study programmes, and emphasis and priority of subject-specific skills may have to be different from first to second cycles, when assuming that the learning levels to be achieved in the second cycle are higher than those of the first cycle. In this sense, the orientation could be part of level descriptors.

Overall, the perceptual maps provide good descriptions of the perception of business academic' views on skills and competences.

Analyses of the importance of academics' perceptions of knowledge descriptors have been made across the participating business institutions to find out whether differences exist. By testing the similarity in rakings across institution by means of a Kruskall-Wallis test, the following results are found:

Table 2 Test of similarity in rankings

Test Statistics(a,b)

	Basic Knowl. Field	Basic Knowl. Prof.	Analysis & Synthesis	Applying Knowledge	Capacity to learn	Critical & Self Crit.	Research Skills
Chi-Square	16,680	11,985	19,597	18,142	13,253	14,284	11,602
df	10	10	10	10	10	10	10
Asymp. Sig.	,082	,286	,033	,053	,210	,160	,313

a Kruskal Wallis Test
b Grouping Variable: UNIVERSI

Table 2 shows that the "Capacity for analysis and synthesis" is the only item presenting a somewhat significant difference. It therefore seems fair to conclude that in terms of pure knowledge/learning outcome, there is great similarity in the perceptions among academics across the different business universities/schools in the Tuning I project.

As for the transferable skills, the following results are found:

Table 3 Test of similarity in rakings

Test Statistics [a,b]

	Diversity & Multiculture	Basic Knowl. Field	Ceativity	Adatability	Decision Making	Elementary Comp.	Ethical Commitm.	Interpersonal Skills	Second Language	Oral & Written Comm.
Chi-Square	27,126	16,680	24,977	13,817	25,380	22,097	6,781	21,113	16,921	16,941
df	10	10	10	10	10	10	10	10	10	10
Asymp. Sig.	,002	,082	,005	,182	,005	,015	,746	,020	,076	,076

a. Kruskal Wallis Test
b. Grouping Variable: UNIVERSI

The tests show that differences exist on perception of importance, in particular in terms of:

- Appreciation of diversity and multi-culture
- Creativity
- Decision making
- Elementary computer skills
- Interpersonal skills

Preliminary conclusions on generic competences

The preliminary conclusions are that academics across business schools/universities have a similar perception of the knowledge levels to be achieved. However, in several perspectives their views on the importance of transferable skills to be achieved differ significantly.

Analysis of subject-specific competences and skills

As for the second part of the questionnaire used to find academics' importance perceptions on a number of subject-specific skills at both first and second cycle, analyses are made to find out the extent to which the perceptions of academics differs across participating business universities/schools, and whether the importance perceptions are identical at first and second cycle.

The rationale behind these analyses it to find out whether it is possible to reach a common understanding across institution of the importance perception of these skills, facilitating transparency and collaboration across European business HE institutions. Secondly, by analysing the differences of importance perceptions from first to second cycle at the institutional levels, we can find arguments for the progression in the approach to competence building as well as business school priorities as to the development of subject-related skills at first and second cycle. Furthermore, this could also be useful in the interpretation and the analyses of the competence matrices filled in by the participants in Tuning 2.
In this exercise the individual members of the group were asked to state:

1. What does this competence mean for your students?
2. How do you help students to achieve this competence in your teaching methods?
3. What learning activities do your students engage with in order to develop this competence?
4. How do you assess whether, or to what degree, they have achieved this competence?
5. How do your students know whether or to what degree they have achieved this competence, and if not, why they have not achieved it?

The table on the following page shows the results and analyses of academics' importance perceptions found in the Tuning 1 survey.

Table 4 Test of the importance of different subject specific skills (sorted by conceptual area and importance at first cycle)

Conceptual area	*Subject specific competences/skills*	*Average importance at first cycle*	*Homogeneity across universities*	*Average importance at second cycle cycle*	*Homogeneity across universities*	*Homogeneity of importance perception at first and cycle*
1. Basic Knowledge	Identify the functional areas of an organisation and their relations (i.e. purchasing, production, logistics, marketing, finance, human resource)	3.19	Yes	3.21	No	Yes
	Identify the constitutional characteristics of an organisation (i.e. goals and objectives, ownership, size, structure)	2.97	Yes	3.17	Yes	No
	Identify the impact of macro- and microeconomic elements on business organisations (i.e. financial and monetary systems, internal markets)	2.89	Yes	3.27	No	No
	Define criteria according to which an enterprise is defined and link the results with the analysis of the environment to identify perspectives (i.e. SWOT, internal and external value chain)	2.68	No	3.32	No	No
	Use the respective instruments for business environment analysis (i.e. industry analysis, market analysis, PEST)	2.45	No	2.99	Yes	No
	Change management	2.26	No	3.15	Yes	No
2 Knowledge Widening - Vertical	Identify related issues such as culture and ethics and understand their impact on business organisations	2.87	Yes	3.19	Yes	No
	Understand details of business functions, business enterprises, geographic regions, size of enterprises, business sectors and link them with the basic knowledge and theories	2.79	Yes	3.09	No	No
	Managing a company by planning and controlling by use concepts, methods and tools (i.e. strategy design and implementation, benchmarking, TQM, etc.)	2.47	No	3.22	No	No
	Audit an organisation and design consultancy plans (i.e. tax law, investment, case studies, project work)	2.19	No	3.14	Yes	No
3 Knowl. - Widening - Horizontal	Understand the principles of Law and link them with business / management knowledge (i.e. competition law, taxation laws etc.)	2.64	No	2.80	No	Yes
	Understand the principles of engineering and link them with business / management knowledge (i.e. operations management, Gantt chart, information technology)	2.26	No	2.79	Yes	No
4 Knowl. - Widening - Diverse	Understand the principles of ethics, identify the implications for business organisations, design scenario (i.e. exploitation of human resources, environment)	2.74	Yes	3.07	No	No
	Understand the principles of psychology, identify the implications for business organisations, and redesign (i.e. working in groups, teams, behavioural studies)	2.58	Yes	2.95	Yes	No
5 Supportive - Instrumental	Identify and use adequate tools (i.e. market research, statistical analysis, comparative ratios)	3.03	Yes	3.51	Yes	No
	Understand und use bookkeeping and financial systems (i.e. profit and loss account, balance sheet)	3.01	Yes	2.82	No	Yes
	Identify and operate adequate software.	2.71	No	2.74	No	Yes
	Understand existent and new technology and its impact for new / future markets.	2.60	Yes	3.27	Yes	No
	Design and implement information systems	2.00	No	2.56	No	No
6 Organisation and Communication - Interpersonal	Understanding, reading, speaking, writing in a foreign language (i.e. working in English as a foreign language)	3.19	Yes	3.34	No	No
	Understand the structure of the foreign language, and develop a vocabulary allowing to work i.e. in English as a foreign language	3.11	Yes	3.23	No	Yes
	Learn-to-learn, i.e. how, when, where - new personal developments is needed (i.e. rhetoric's, presentation, working in teams, personal management)	2.99	No	3.35	Yes	No
7 Transferable - Systemic	Ability to analyse and structure a problem of an enterprise and design a solution (i.e. entering a new market)	2.84	No	3.70	Yes	No
	On the basis of knowledge acquired in university, identify the impact of culture on business operations. (i.e. the possibility of seeling beer worldwide)	2.41	Yes	3.02	Yes	No
	Work assignments abroad (i.e. work experience in an enterprise for 20 weeks abroad)	2.38	No	2.99	No	No

The items in the table are structured in accordance with the taxonomy (conceptual area) used in the business group. The individual item's placement in the taxonomy may be debatable. The table shows the average mean ratings, based on an importance scale from 1-4. The results are divided into perceptions of importance at first and second cycle. The tests to determine homogeneity are based on different non-parametric tests respecting the ordinal measurement of importance, and a traditional p-value of 0.05 is used. In case homogeneity exists, a "Yes" is used in the columns, whereas test results giving p-values below 0.05 indicate that homogeneity does not exits, and consequently a "No" is used for this conclusion.

As for the comparisons of subject-specific competences ***at first cycle***, the analyses across the participating universities and business schools show that on 13 out of 25 subject-specific competences, homogeneity exists in the importance ratings; and almost systematically, there is homogeneity in the top-ratings of competences. This indicates general agreement across institutions on the most important subject-specific competences to be achieved a first cycle.

Comparisons of subject-specific competences ***at second cycle*** show that on 12 out of 25 subject-specific competences homogeneity exists in the importance ratings, and mostly homogeneity exists in the highest competences ratings.

Taking an overall look at the results based on the conceptual areas, there is general agreements in nearly all conceptual areas. Only in one conceptual area: *knowledge widening in a horizontal direction* at first cycle, no general agreement in the importance rating is found; however this may be explained by the fact that the length of first cycles varies across institutions (3 to 4 years), allowing differences in the possibilities of having knowledge widening in a horizontal direction as formulated in items representing this direction.

In the results on the importance ratings of subject-specific skills across first and second cycle, it should be noted that according to academics nearly all areas grew more important at the second cycle compared to the first cycle, and only in 4 out of 25 comparisons homogeneity in importance perception can be concluded, namely *on identification of functional areas of company*, understanding *bookkeeping/financial systems of a company*, *law* and the *identification of adequate software,* including the use of software. As for all other subject-specific competences tested, the importance perceptions are significantly higher at second cycle than at first cycle.

This certainly emphasises academics' orientation toward second cycle curricula, however, it also underlines the possible problems in designing and teaching in first cycle programs. At the same time the findings present a paradox, because first cycles normally last 3 to 4 years, whereas second cycles are of 1-2 years' duration. Obviously first cycles offer much better possibilities to fulfil skills development, compared to second cycles. And just as obviously, first-cycle programs affect many more students, including those who do not take the second cycle.

Analyses of the results from the exercise on competences

It should be emphasised that because only a few answers are to each subject specific competence, the analyses are only to be regarded as explorative and gives no reason for generalisation, therefore only more general observations are referred and the focus are no general descriptions according to the taxonomy of the business group.

Basic Knowledge

1. What does this competence mean for your students?

First cycle: Most students are aware of the context and subjects of business studies already at the start of their first cycle in some cases introduction courses are used to make new students aware of basic knowledge required to be a business academics.
Second cycle: Mostly build on the courses at first cycle however, because specialisation often takes place at second cycle emphasis are made on stipulating basis knowledge within a specific direction of specialisation at second cycle.

2. How do you help students to achieve this competence in your teaching methods?

First cycle: Student are normally to have a lot of courses in different subject areas and in some instances in the later part of first cycle programmes have some courses, exercises and thesis to help get a more holistic view on the relationship in the different subject specific courses. ***Second cycle:*** In some cases core courses on basic knowledge of the specialisation student have made.

3. What learning activities do your students engage with in order to develop this competence?

First cycle: Mainly lectures and exercises in the subject specific courses, and later in first cycle presentation, seminar and project work**.**
Second cycle: General lectures to give an overview on subject, before further specialisation.

4. How do you assess whether, or to what degree, they have achieved this competence?

First cycle: Use of written, oral exams seminars and presentation normally assessed only by marks and seldom by additional feed-back.
Second cycle: No indications

5. How do your students know whether or to what degree they have achieved this competence, and if not, why they have not achieved it?

First cycle: First of all by the overall grading after the first cycle and in several cases by doing a thesis or major project at the end of first cycle demonstrating their general abilities or lack of these in solving real-life problems in companies.
Second cycle: No indications

In table we find that academics at ***first cycle*** have the perception that basic knowledge should concentrate on the identification of functional areas and objectives of a company and identifying the impact of micro and macro economic elements to the business organisation, whereas the

perceptions of important basic knowledge at ***second cycle*** still the first cycle element and added to this abilities in analysing business environment, reaching the goal of the organisation in a change perspective.

Knowledge Widening - Vertical

1. What does this competence mean for your students?

First cycle: Students gradually become aware of the need for vertical knowledge widening through their different basic knowledge courses, and develop an interest in specific subjects.
Second cycle: Vertical specialisation is often in the direction where they have their main interests, and therefore they directly relate to the competence. Students grow to see themselves as experts in a field.

2. How do you help students to achieve this competence in your teaching methods?

First cycle: Student have the possibilities of doing elective courses, in which teaching methods are often adapted to and facilitate vertical widening by offering more dialogue, presentations and teamwork
Second cycle: In some cases core courses in the basic knowledge of the specialisation student have chosen.

3. What learning activities do your students engage with in order to develop this competence?

First cycle: Elective courses are often offering more differentiated learning activities, where professors test new concepts of learning activities, for instance game, simulation, discussions.
Second cycle: General lectures, combined with seminar, project and thesis in their specialisation.

4. How do you assess whether, or to what degree, they have achieved this competence?

First cycle: Often oral exams, seminars, projects and presentations.
Second cycle: Their thesis and their grades

5. How do your students know whether or to what degree they have achieved this competence, and if not, why they have not achieved it?

First cycle: It is difficult to make any specified points on this, but often specialisation at first cycle is followed by further specialisation at second cycle.
Second cycle: By the grade they achieve, but they may also, during their thesis prepared in collaboration with companies or by internship, get a fairly good indication of whether they have achieved the competence.

Table 4 shows that knowledge widening at first cycle is ranked as a relatively low priority by academics. Only *understanding of culture and ethics* together with understanding *details of business functions* are given some importance at first cycle, while such aspects together with management, planning and auditing aiming at new design of the company is given a very high priority at second cycle.

Knowledge Widening - Horizontal

1. What does this competence mean for your students?

First cycle: Opening the students' eyes to new aspect of a subject-specific skill, and is often linked to soft skills aimed at enabling the student to get a job.
Second cycle: Specialisation at second cycle opens the students' eyes to new aspect of the specialisation. For both cycles, underlining the interdisciplinary connections between subjects

2. How do you help students to achieve this competence in your teaching methods?

First cycle: Courses in language, philosophy, ethics, history, and allowing students to take elective courses, even at other faculties.
Second cycle: Same as first cycle.

3. What learning activities do your students engage with in order to develop this competence?

First cycle: Traditional teaching, internship, case studies, preparing papers, colloquia.
Second cycle: Similar activities as a first cycle.

4. How do you assess whether, or to what degree, they have achieved this competence?

First cycle: Often oral exams, seminars, projects and presentations.
Second cycle: Same as at first cycle.

5. How do your students know whether or to what degree they have achieved this competence, and if not, why they have not achieved it?

First cycle: Often from the direct feed-back they get on their work in the various assessment activities.
Second cycle: Similar to first cycle.

Table 4 shows that knowledge widening in a horizontal direction is given much importance among academics at first cycle, and only a slightly importance rating at second cycle. One of the main reasons for this is that much research, by nature, is specialisation in a vertical direction, and the horizontal dimensions are often not recognised to the same extent in highly specialised research.

Knowledge Widening - Diverse

1. What does this competence mean for your students?

First cycle: During first cycle courses and project work students may become aware of the need for looking in diverse directions, such as psychology, engineering, chemistry.
Second cycle: The need for specific diverse knowledge widening may become more evident during specialisation; for instance marketing may accentuate the need for knowledge of psychology; supply-chain management may lead to a need to know more about engineering etc.

2. How do you help students to achieve this competence in your teaching methods?

First cycle: No general trends found.
Second cycle: In some instances students are allowed to take elective courses at other universities in different subject areas.

3. What learning activities do your students engage with in order to develop this competence?

First cycle: Usually not activities at business universities/schools.
Second cycle: Like description of first cycle.

4. How do you assess whether, or to what degree, they have achieved this competence?

First cycle/***Second cycle:*** Normally done by the institution offering (elective) courses for business students

5. How do your students know whether or to what degree they have achieved this competence, and if not, why they have not achieved it?

First cycle/Second cycle: Student will often not have a clear perception of the degree to which they have achieved this competence in relation to business, unless they engage in practical project work. Business universities/schools do not normally give such diverse courses a high priority because by nature diverse courses are offered by other providers than business schools/universities, and therefore funding and the way in which resources for teaching are allocated may be a structural obstacle.

Table 4 shows that knowledge widening in a diverse direction is given relatively low priority among academics at first cycle, and a significantly higher importance rating at second cycle, which could be interpreted to mean that academics view such competences as competences of special relevance only once students have a solid understanding of core business subject areas.

Supportive - Instrumental competences

1. What does this competence mean for your students?

First cycle: Student normally have a clear perception that skills in information technology are needed for doing business, and relatively soon after starting their studies they become aware of the fact that skills in quantitative methods such as mathematics, statistics and research methodology are needed to be a business practitioner.
Second cycle: During the first cycle, students are taught basic supportive and instrumental skills, and during first cycle courses and learning activities they often realise that additional skills in these areas are needed.

2. How do you help students to achieve this competence in your teaching methods?

First cycle: Often the basic courses in supportive and instrumental skills are compulsory, and later on additional elective courses are offered.

Second cycle: Specialised courses relevant to the specialisation subject often offered at second cycle. Such courses could be in advanced marketing research methods, econometrics, matrix algebra.

3. What learning activities do your students engage with in order to develop this competence?

First cycle: Often lectures and exercises and later on more project-oriented teaching.
Second cycle: Some focus on traditional lectures with exercises, but eg project work and case-based teaching play a more dominant role at second cycle than at first cycle.

4. How do you assess whether, or to what degree, they have achieved this competence?

First cycle: Often oral or written exams and gradually more presentations.
Second cycle: Oral or written exams, sometimes combined with presentation of projects or cases.

5. How do your students know whether or to what degree they have achieved this competence, and if not, why they have not achieved it?

First cycle: Often by the grading, but student become aware of the degree of achievement when they have to use these skills for subject-related problems.
Second cycle: By applying these skills to subject-related problems, and especially when doing their final thesis.

Table 4 shows that most supportive and instrumental skills are rated highly by academics at both first and second cycle, especially adequate tools such *as market research, statistical analysis and understanding of new technology* in a business context. For two of the subject specific competences mentioned in the questionnaire homogeneity exist as to the importance at first and second cycle.

Organisation and Communication – Interpersonal skills

1. What does this competence mean for your students?

First cycle: The business area is by definition an area where graduates have to be able to organise, communicate and interact, so students are aware that in order to be a successful student and graduate, such skills are required.
Second cycle: Similar to first cycle, and students in general are more aware of such skills at second cycle because they have got a substantial insight into business functions from first cycle. Both first and second cycle students often have contact will older student close to graduation or who have got their first job, and therefore become more aware of these competences.

2. How do you help students to achieve this competence in your teaching methods?

First cycle: In some cases by having formalised compulsory or elective courses in languages, negotiation, presentation techniques, but more often student achieve these competences by doing seminars, project work and thesis, where personal organisation and communication skills are essential parts of the learning process.
Second cycle: Similar to the description at first cycle

3. What learning activities do your students engage with in order to develop this competence?

First cycle: Formalised teaching in these competences, as well as feed-back on seminars and presentations and during the supervision students get from teachers when doing project work and thesis.
Second cycle: Similar to first cycle.

4. How do you assess whether, or to what degree, they have achieved this competence?

First cycle: To some extent oral or written presentation skills count in the grading.
Second cycle: Similar to first cycle.

5. How do your students know whether or to what degree they have achieved this competence, and if not, why they have not achieved it?

First cycle: During the feed-back and the grading of projects etc, and in case they do projects in companies, they realise the extent to which these skills have been achieved.
Second cycle: Similar to first cycle.

Table 4 shows that most supportive and instrumental skills are rated highly by academics at both first and second cycle, especially adequate tools such as *market research methods, statistical analysis and understanding of new technology* in a business context. For two of the subject-specific competences mentioned in the questionnaire, homogeneity exists as to the importance at first and second cycle.

Transferable – Systemic Skills

1. What does this competence mean for your students?

First cycle/second cycle: Capacity to tackle new and real-life problems in existing or new environments. Better understanding of what is expected of business graduates.

2. How do you help students to achieve this competence in your teaching methods?

First cycle: Seminars, open discussions, evaluation of their papers' ability to argue and real-life problem-solving. Emphasis on understanding problems.
Second cycle: Similar to the description of first cycle but further emphasis at second cycle especially on abilities to analyses the cross-functional problems of a company and ability to use the specialised knowledge gained in second cycle in a real-life context.

3. What learning activities do your students engage with in order to develop this competence?

First cycle: Seminars, presentation of papers, internship and bachelor thesis.
Second cycle: Similar to first cycle.

4. How do you assess whether, or to what degree, they have achieved this competence?

First cycle: Students have to do large assignments or thesis at the end of first cycle.
Second cycle: Similar to first cycle.

5. How do your students know whether or to what degree they have achieved this competence, and if not, why they have not achieved it?

First cycle: During the feed-back and the grading of projects, thesis etc, and in case they do projects in companies, they realise the extent to which these skills have been achieved.
Second cycle: Similar to first cycle. Sometime students have part-time jobs in companies during first or second cycle studies, and thereby realise the extent to which these systems skills have been developed.

Table 4 shows that academics at first cycle put special emphasis on students' abilities in structuring a problem of an enterprise, and this capacity is seen as the most important skill at the end of second cycle. As to the impact of culture and work assignments abroad, these are not regarded very important at first cycle but become significantly more important at second cycle.

Conclusions

Academics' perception of the importance of some subject-specific topics differ significantly across business institutions, but when it comes to the most important subjects there is a high degree of consensus. Normally first cycle programs last 3-4 years and second cycle programs 1-2 years. Academics attach low priority to topics taught in first cycle programs, often also reflected in large sized classes (more than 50 students). Universities have to organise themselves in ways that focus more on first cycles courses and programs. The incentives and the employment conditions of academics have to be changes and differentiated in order to put more focus on first cycle courses and programs. In the business group we found that in many universities large parts of courses at first cycle programs were taught by part-time teachers. It is important to ensure that the needed skills for higher education are present when students start at first cycle of HE. Firstly, because students only get to the second cycle if they stay on and actually pass the first cycle exams. And secondly, the skills gained at first cycle are the building blocks needed at second cycle.

Good practices in teaching, learning and assessments

First cycles programs will have to focus on general knowledge acquisition, in order to get students acquainted with the different business functions, the environment in which these functions are carried out in a company and their interrelationships. This is all the more necessary as the skills of the student intake vary a good deal. In order to achieve these teaching and learning goals, the student needs at the same time to become familiar with a number of basic supportive instruments, organisation and communications skills together with abilities to structure the problems of a business organisation. To reach these learning objectives at first cycle, students should experience different types of teaching methods, such as traditional lectures and exercises, seminars, project work and relatively simple practical cross-functional problems found in companies. Added and linked to this, students should experience a variety of assessment methods to document that learning outcomes have been achieved. This means that the learning objectives of a course should be matched with the appropriate teaching and assessment methods, where students document not just their levels in basic knowledge, but also their abilities to use supportive instruments, to organise their own work, communicate and argue for the results and recommendations. This means that

business schools even at the first cycle should use a variety of assessment methods, especially assessment methods that enhance the students' organisation, communication and system competences.

The teaching at second cycle should focus on knowledge widening, building on first cycle basic knowledge. As to the direction, whether it should be vertical, horizontal or diverse, the group does not intend to give any recommendations, except that the direction should be based on knowledge acquired during the first cycle. At second cycle, just as at first cycle, a variety of teaching and assessment methods should be used, to stimulate not just knowledge acquisition in the subject field but also to prepare the students to find the relevant instruments to do problem solving, as well as to stimulate their abilities to organise and communicate, and finally to be able to present their solutions to a problem in a broad business organisation context.