

# Contextual Learning in Higher Education

## *Curriculum Development with Focus on Student Learning*

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## **1. THE ROLE OF HIGHER EDUCATIONAL INSTITUTIONS**

Curriculum development may at first be seen as an isolated process that goes on within Higher Educational (HE) institutions. Courses have to be developed, books have to be written, teachers have to be recruited, and so forth. This narrow view on the HE institution as an isolated learning space for selected students has long been refuted. Instead, we have witnessed an ever increasing body of literature on HE that has debated the role of HE institutions in national and international contexts inhabited by multiple stakeholders (Assiter 1995; Harvey & Knight 1996; Ramsden 1998). Here it has been a great issue whether HE shall be research governed or market driven. In our view, none of the radical positions are fruitful for HE institutions or their students. We believe that HE institutions have to take the best from both worlds and implement research governed curricula that take into account current business practice. In our perspective, HE institutions have certain responsibilities for both students and the society at large in which they are located.

HE institutions have to take into consideration that students are educated for flexible jobs in changing markets, and not for low-skilled routine work, as was the case during the time of mass-production. Tinkler et al. (1996) write about the knowledge economy that, "Achieving productivity in this environment requires entirely different methods to those developed by Frederick Taylor for manual work in manufacturing. Key elements are team work, communication, continuous learning at both the organizational and the individual level, and

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the integration of business strategy with human resource development. This scenario presents a major challenge to the education industry..." (p. 69).

In a study of 61,885 university candidates' employment patterns in the region of Copenhagen in 1996, Maskell & Törnqvist (2001) show that only seven percent were employed in industrial firms, the remaining 93 percent found jobs outside industry. Maskell & Törnqvist (2001) define university candidates as persons on "ISCED level six+" including Ph.D.s. As institutions of Higher Education we need to take on the challenge of training and developing graduates that have the competencies necessary for working in a network and knowledge society. That means graduates with the ability to self-produce and self-develop. To get an active career in the job market today students need to possess higher-order thinking skills. This makes us define the following role of HE institutions.

1. HE institutions have to give students qualifications within a certain academic field. To do so they need to develop curricula that help students acquire knowledge *of* things and enable them to develop skills for using this knowledge in certain situations.
2. HE institutions have to give students competencies that can be used outside the learning context of HE institutions. To do so they need to develop study programmes that enable students to develop higher-order thinking skills, which are transferable to contexts separate from the academic field studied.

Such responsibilities of HE institutions are not new to the field of teaching and learning, but have been discussed for quite some time. We believe that the competitive situation within the HE sector calls for a shift away from supply-driven HE programs that have a unilateral focus on academic reasoning. New kinds of competitors, such as corporate universities and vocational training centers with close ties to industry, have entered the market. If "traditional" HE institutions are to find their position among the leading business schools and universities of the world in the near future, they have to design a targeted strategy that will facilitate the development of students who are competent to participate as active learners in the relationship with industry and business.

In our view, we take a middle position in the debate, when we argue that students need to possess competencies within a certain academic field, but also need to possess higher-order thinking skills, which enable them to transfer their competencies to contexts outside HE institutions. Not all bachelor students become master students, and a marginal amount of master students become Ph.D. students. Therefore the role of HE institutions is to educate students for a career in the national and international society in which the HE institution is located. This role implies educating students to become active learners who are able to reflect on the means and ends of their own learning processes, persons who possess what have elsewhere been termed higher-order thinking skills. To fulfill this task, a new paradigm for curriculum development is needed, which explicitly focuses on the learning process of students as such.

The next section is devoted to a discussion of two broad streams within learning theory, and we shall argue that a shift from a conceptualization of decontextual learning to contextual learning helps us better understand the learning process of students.

## 2. FROM DECONTEXTUAL TO CONTEXTUAL LEARNING

The landscape of learning theories is breathtaking. Concepts and streams of thought dealing with aspects like cognition, psycho-dynamics, self, and society offer different roles in understanding the learning processes of people. It is hard to open a book about learning that does not go through the thoughts of Piaget, Vygotsky, Freud, Marx, Kolb, and Wenger, to name a few of the great ones. We shall refrain from repeating those theories here. Instead we take a broader and more conceptual approach as we discuss the aspects of decontextual and contextual learning.

### 2.1 Decontextual Learning

The decontextual conceptualization of learning sees learning as a psychological process that goes on within the individual. From years of experience in the Danish HE sector, we find that a very large part of traditional curriculum development is based on a decontextual conceptualization of learning. This is apparent when curriculum development processes center upon defining the syllabus itself, expressed by reading lists of scientific literature. The focus on literature demonstrates a particular view, where knowledge is seen as something absolute, something bound to the books. Finding a good book for a course is almost seen as the direct route to produce competent students. At the same time, in the decontextual conceptualization of learning, knowledge is seen as an object that can be transformed into learning across independent entities and contexts. Put simply, here a book is seen to represent knowledge, and all students are perceived as equal learners. Within this tradition, the only matters that affect learning are the students' own efforts to acquire the knowledge presented in books and by teachers. Key aspects of decontextual learning are shown in Table 1 below.

**Table 1. Key Aspects of Decontextual Learning**

Definition of learning	Definition of knowledge	Ways of acquiring knowledge	The relation between knowledge and competencies
To learn is to acquire knowledge	Knowledge is an object; knowledge is propositional and is found in books and papers; knowledge is decontextual and can be transformed into learning across independent entities and contexts.	By reading books and papers, from teaching in classrooms	To be competent is to possess knowledge about relevant rules and principles, competencies are universally transferable.

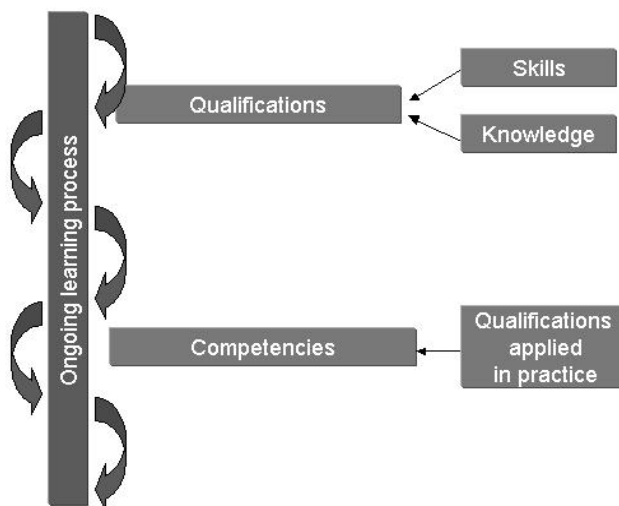
When curriculum development is based on a decontextual conceptualization of learning, it chiefly ignores the learning process of students. This is not to say that study developers do not recognize that students enter into HE to learn, and are undergoing a learning process

during their period of study. Rather, decontextualists see learning as a process of acquiring propositional knowledge found in books and papers, which can be transformed into learning across independent entities and contexts. In summary we can say that a competent student possesses knowledge about relevant rules and principles, and such competencies are universally transferable. It means that teachers can transfer knowledge (and thereby competencies) to students through verbal or written communication. These aspects of the decontextual conceptualization of learning have been criticized and are known in the literature as the problems of representation and transference of knowledge. We argue that it is necessary for curriculum developers to take another view on learning that requires that they explicitly focus on the learning processes of students.

## 2.2 Contextual Learning

The contextual conceptualization of learning offers an explicit focus on the learning process. Here knowledge is seen as an artificial object, which is situated and acquired during social activity, and learning is seen as an ongoing process. This is different from the view above. We subscribe to the concept of contextual learning, and we define learning as a process in which students gain qualifications and competencies. Hereby we distinguish qualifications from competencies. We view qualifications as knowledge and skills, whereas we define competencies as qualifications applied to solve problems in practice. Figure 1 below shows our definition of learning and the relationships between our terms.

Figure 1 - Elements of learning



As contextualists we argue that knowledge is of things, knowledge is something you know. Knowledge does not rest in things themselves! A book is not knowledge, but a container of information that facilitates knowledge production. In a book about macroeconomics presenting three different theories about the impact of exchange rates on interest rates and public spending, theories are not knowledge themselves. The theories are

merely information which can help students construct knowledge of exchange rates, interest rates, and public spending in different markets or societies. It is, however, not an inevitable consequence that information will produce knowledge in given situations, because knowledge is a social product. Although it is the individual who learns, and knowledge might be said to be an individual product, knowledge production calls for a social process.

Knowledge production is an embedded process, which is affected by the person's position in ongoing systems of social relations. The argument for embeddedness has been defined as "the argument that the behaviour and institutions to be analysed are so constrained by ongoing social relations that to construe them as independent is a grievous misunderstanding... Actors do not behave or decide as atoms outside a social context, nor do they adhere slavishly to a script written for them by the particular intersection of social categories that they happen to occupy. Their attempts at purposive action are instead embedded in concrete, ongoing systems of social relations" (Granovetter, 1992, p. 53-58).

Using Granovetter's concept of embeddedness, we argue that knowledge (or knowledge production) cannot be taken for granted. Knowledge production is personal, situational, and contextual (that is, bound to a particular order of behavior that goes on in the particular class, group of students, and so on).

Skills are something you employ, such as the ability to analyze, compare, infer or evaluate, and are able to employ well. In this way we are able to reason within the frames of Quellmalz' (1985, 1998) taxonomy of learning and argue that knowledge equals the ability to recall information (something you know), whereas skills involve the higher-order thinking skills mentioned earlier. Due to the contextual aspect of learning, neither is an inevitable consequence that students will be able to convert knowledge into higher-order thinking skills.

Competencies are viewed as qualifications applied to solve problems in practice. Qualification expresses that students have achieved a certain level of knowledge or skills relative to the context of HE institutions. In the HE-sector qualifications are seen as degrees, such as B.S., M.S., or Ph.D. Competence expresses that students are able to apply their qualifications to solving problems in contexts outside the learning context of HE institutions.

We make this distinction between qualifications and competencies because we believe it shows the core constituents of learning. Furthermore, it gives us a terminology by which we can analyze the aspects of curriculum development in HE and discuss their contribution to student learning. Students learn when they obtain knowledge, transform that knowledge into skills, and are capable of solving a problem that appears in practice.

This learning process, however, could be random. Solutions to problems could be a coincidence, or not replicable in new situations or in different practices. We therefore require of students that they become active learners, which means that they are capable of reflecting on the means and ends of their own processes of producing both qualifications and competencies. This reflection on means and ends is a competence in itself, as it makes students capable of solving problems tied to their own learning processes. Students who are able to analyze their own learning processes apply higher-order thinking skills to their own methodologies and hence become active learners. In our view, learning is the acquiring of personal skills and knowledge which can be used when meeting new challenges and tasks in life. Skills and knowledge do not appear out of the blue, but are learned over time and transformed into competencies when applied in practice.

Table 2 - Key Aspects of Contextual Learning

Definition of Learning	Definition of knowledge	Ways of acquiring knowledge	The relation between knowledge and competencies
Learning is an ongoing process that involves more than acquiring knowledge.	Knowledge is an artificial object; knowledge is not propositional; knowledge cannot be expressed in books and papers; knowledge is situated and acquired during social activity.	By doing assignments or discussing information with others.	To be competent is “to be able to”; competencies are tied to situations as hand; competencies are not universally transferable.

McDermott (1999) writes about context that: “...context is not so much something into which someone is put, but an order of behaviour of which one is a part” (p 15). This definition of context makes room for a particular focus on the process rather than the structure or architecture of the context. In student learning, the argument that systems are “ongoing” and context is an order of behavior, is the argument that relations between individual students and fellow students, teachers, administration, departments (and whatever key actors there are in and around HE institutions) are never stable, but constantly evolve into new formations over time. Hence the auditorium, the classroom, or the working group of students cannot be conceived as identical learning spaces over time. Each gathering of groups of students and teachers (and other key actors) constitutes an ongoing system of social relations. One could say that the learning context changes over time and thus is never identical.

This view on student learning has implications for the way in which we work as consultants within Copenhagen Business School (CBS), and for the role we define for CBS as a HE institution. “The contextualisation of learning is of major significance in enabling students to expand their learning competencies from the mastery of propositional knowledge that has dominated the education industry, at least in non-explicitly vocational areas, to include experiential praxis, essential to the mastery of systems thinking and the ability to translate knowledge (about) into action (capacity to do)” (Tinkler et al., 1996, p. 87).

We reason within the frames of this concept because we believe that in practice it helps us focus on important aspects regarding student learning, hence it has positive implications for the ways in which we can educate students with qualifications and competencies suitable for the knowledge economy. In the coming section we turn to the case of CBS to show how our conceptualization of contextual learning has led to the implementation of a certain CBS pedagogy, which affects the way in which curricula are developed to enhance student learning. We believe that the distinction between conceptual and non-conceptual learning processes, and our efforts to advance the concept of contextual, learning-based teaching, can offer HE institutions in general a source for inspiration in the evaluation of their own curriculum

development. Our experiences are therefore presented as suggestions or invitations to debate the best means in which to implement learning-based curriculum development.

### **3. THE CASE OF THE CBS-PEDAGOGY**

Copenhagen Business School was built in 1917 by a private institution named The Danish Society for Advancement of Business Education. It was privately financed until 1965, when it was integrated into the national system of Higher Education. Today it is the largest business school in northern Europe. In October 2001 it had 13,899 students, 10,133 of whom were enrolled in one of the many full-time programs offered at the two faculties. The Faculty of Business Economics has nine bachelor programs and 17 master programs, while the Faculty of Modern Languages has two bachelor programs and three master programs. Overall, 3,492 students attended the open university programs spread over more than 10 four-year diploma courses in both faculties. In addition, 274 of the enrolled students attended five executive programs. Since October 2001 CBS has launched four new executive programs that start during 2002 or 2003. All study programs are grounded in research, and CBS has 11 departments within the Faculty of Business Economics and three departments within the Faculty of Modern Languages.

In order to coordinate and improve the quality of this large variety of study programs and strengthen the position of CBS in the national and international HE sector, in 1994 the Senate of CBS established the teaching and learning unit, CBS Learning Lab (the Senate is the supreme collegiate body of CBS). It consists of appointed external representatives of the business community; members elected from the academic as well as the administrative staff; and student representatives. The president of CBS is chairman of the Senate). CBS Learning Lab got its current name in 2001. From 1994-2001 it was named The Pedagogical Service Unit.

CBS Learning Lab is a professional pedagogic development and advisory unit that supports both faculties. Its overall task is to improve the quality of curriculum and teaching at CBS. To do so the employees first and foremost engage in research, particularly in order to develop new knowledge about the relationship between competence development, learning processes, and the role of new technology in HE. Furthermore, they engage in competence development of teachers, course coordinators, members of study boards, and administrative staff. They give advice about pedagogical and technological development in all study programs at CBS.

CBS Learning Lab also offers professional project management of larger development projects such as development of new curricula or development of curricula based on e-learning concepts or virtual space learning. This is done by engaging in close dialogue with study boards, curriculum directors and course coordinators in order to be able to service the needs of the study programs in the best possible way. Finally, they develop new products and technologies for teaching, such as ICT-based teaching and learning materials that can be applied across various curricula. They also produce more general materials on teaching and curricula, such as books and films on teaching, supervision, curriculum development, and ICT- based learning and pedagogy in Higher Education.

Since its establishment in 1994, CBS Learning Lab has worked with the formulation of a CBS pedagogy to frame all curricula. The first crucial step was a reform of the largest bachelor program in 1996, and it led to the Faculty Council for Business Economics' definition of "Principles for a CBS pedagogy" in 1998. Each fall the largest BS program at CBS starts with more than 550 full-time first-year students. During their three years of study, they follow 13 courses within the key areas of accounting, finance, organization, and marketing. They are organized in 14 parallel classes. The primary goal for all study programs at CBS is to enable the students to:

1. Take responsibility for and organize their own learning processes.
2. Apply theories analytically to issues and problems faced by companies.
3. Work methodically with the problems and issues contained in the subjects.
4. Reflect critically on the foundation and relevance of the theories.
5. Develop personal and interpersonal competencies.

The CBS pedagogy is based on the concept of contextual learning. The CBS pedagogy requires of study programs that they enable students to develop particular skills. The formulation of the CBS pedagogy presented above requires that students at CBS – in order to be regarded as skilled - have to be able to apply theories, work methodically, and reflect critically. An example of the sort of approach which may be implemented is cited below from a book published by one of our teachers, demonstrating the teaching of monopoly theory:

If the students are to be able to relate themselves to the world around them with the aid of the theory, the teacher must necessarily define the surrounding world sufficiently concretely that the student can see the relevance and the connection, and the easiest way to do this is to make the perspective situational. In concrete terms this means that one shall construct an example which contains a situational problem which the students can identify with, and which demands a means of dealing with it that the students shall learn to apply.

EXAMPLE: If one is to teach about monopoly theory, the scenario could be that the students are employed in an EU-secretariat, where they shall advise the Commission on whether a given fusion between two businesses shall be permitted. In order to do this they must be able to analyze the consequences of a business' monopoly-like status on a market; and to make this determination, they must use theory (Herskin, 2001).

The above example demonstrates the implementation of our philosophy, stimulating the students to make a line of inquiry by specifying a context, a situation, and a problem to be solved, rather than the traditional passive learning and studying what others have experienced. As it appears, the primary goal requires high standards of students. It demands that they take responsibility for their own learning process (and its organization), and it calls for, as stated above, students who are able to apply theories analytically, work methodically, and reflect critically. The formulation of the CBS pedagogy also means that students are expected to take responsibility for and organize their own curriculum, and to develop personal and interpersonal competencies during their time of study at CBS. In our view, acquiring the skills demanded of the students at CBS requires a process of learning.

Quellmalz (1985, 1988) presents the following five thinking skills: 1) recall, 2) analyze, 3) compare, 4) infer, and 5) evaluate. Using these we can obtain a useful categorization that

can help us work with curriculum development that benefits the learning process of students and fulfils the goals of the CBS pedagogy. In Figure 2 we relate Quellmalz' "taxonomy" to our definition of qualifications in Section 2.

Figure 2 - The Nature of Knowledge and Skills in the CBS Pedagogy

<b>Knowledge</b>	<b>recall</b>	Remember definitions, concepts, key words, etcetera. Repeat information from the course.
<b>Higher order thinking skills</b>	<b>analyze</b>	Understand cause and effect. Reflective structuring of knowledge.
	<b>compare</b>	Explain similarities and differences.
	<b>infer</b>	Deductive, inductive or abductive reasoning.
	<b>evaluate</b>	Use criteria to judge conclusions, quality, etcetera.

In other words, we want our students to have knowledge of things (to be able to recall information) and to possess higher-order thinking skills to carry through analysis, comparison, inference, and evaluation. To facilitate this learning process of students, it has been decided that all study programs shall be grounded in ongoing research at CBS. It is our belief that the complex process of learning higher-order thinking skills needs to be rooted in more than textbook reading. Being a HE institution, in which the majority of the internal academic staff does empirical research themselves, we want to use this research as a way of training those skills.

In 1998 the Faculty Council for Business Economics at CBS decided that research-based curricula shall be reinforced by the following activities:

1. Application of up-to-date literature at a high academic level.
2. Application of cases, examples and textbooks using CBS' own research as a springboard.
3. Incorporation of the latest research findings as well as researchers in teaching, and an increased integration of external lecturers in the research environments.

Together, the goals of the CBS pedagogy and the implementation of research governed curricula aims at facilitating the development of students' qualifications and fulfilling the first of the roles of HE as we mentioned in Table 1, that of giving students qualifications within a certain academic field. We believe that curricula developed due to the CBS pedagogy will help

students to acquire knowledge of things and enable them to develop skills for using this knowledge in certain situations.

Regarding the second role of HE institutions mentioned in Table 1, that of developing competencies that can be used outside the learning context of HE institutions, this is done by basing the CBS pedagogy on an orientation towards practice. Although we highly encourage that original research among the academic staff at CBS is implemented in teaching, we find it important to take into account current business practices when making research governed curricula. As a business school, we educate students to face national or international business careers, and we believe it is important that our candidates are able to bridge the two worlds in their future careers. Otherwise we do not find them to be competent.

The Faculty Council for Business Economics at CBS furthermore formulated these requirements for curricula in 1998:

1. Both teaching and projects will be based on practice-related problems.
2. Particular emphasis will be given to the use of case studies in all programmes.
3. The subject's content and scope are given priority in accordance with their professional relevance. Representatives from the business community are continuously included in discussions concerning professional priorities, e.g. in the form of advisory boards.

The basis for implementing both the CBS pedagogy and a unique profile of each individual study program originates with the study boards. Once a year the program directors report to the Faculty Council on the extent to which curriculum and academic development has developed in the direction of the CBS pedagogy and to what extent a unique profile of the individual program has been achieved.

To summarize the ways in which we believe our experiences at CBS might be valuable in designing contextual, learning-based programs at the HE institution in general, the below points may be noted:

1. All curricula are grounded in ongoing research.
2. Original research among academic staff is implemented in teaching.
3. Current business practices are taken into account when making research-governed curricula.
4. Responsibility for organizing the curriculum is on the students.
5. Students are able to apply theories, work methodically, reflect critically, and develop personal and interpersonal competencies.
6. Pedagogy is based on an orientation towards practice.

#### **4. NEW ROLES OF KEY STAKEHOLDERS**

In its most simple form, the formulation of the CBS pedagogy in 1998 forced (or inspired) teachers, study boards, and so forth to discuss aspects of student learning. Working as consultants at CBS Learning Lab on a variety of curriculum development projects it has become clear to us that several questions spring to mind regarding the CBS pedagogy's

implications for the roles of a) students, b) teachers, c) departments, and d) study boards. These questions are important to deal with explicitly, because they affect the new paradigm for curriculum development at CBS. In this section we will touch upon these implications. In implementing a new paradigm for curriculum development at the HE institution in general, we believe that we may offer valuable information from the experiences presented at CBS. The intention is to inspire institutions of learning to reflect on the usefulness of our experiences in the assessment of their own curriculum development.

## **5. CONTEXTUAL LEARNING – NEW ROLE TO STUDENTS?**

Although the curriculum will structure students' learning processes in particular ways, it is impossible to force students to learn. Therefore, it is at the core that students take responsibility for and organize their own curriculum. We believe that students learn more when they are actively engaged and explorative in problem solving. This is not to say that teachers have no role to play. Teachers have the overall responsibility for running the curriculum, and facilitating the courses. However, implemented with a contextual perspective of learning in mind, the CBS pedagogy does not rely on teachers spoon-feeding course readings to students – as we do not believe that students learn from this.

From our consultancy work at the bachelor level we can see that this shift from teaching to learning also implies a cultural shift within the groups of students from what they experienced in high schools to what we expect of them at the university level. It is a difficult task to make students active learners (in the ideal sense of the expression), but we argue that it is possible if we help them to become aware of their processes of learning, and offer them ways in which they can discuss these processes. That calls for new elements in the curriculum and it is such we wish to introduce in our new paradigm for curriculum development.

## **6. CONTEXTUAL LEARNING - NEW ROLES FOR TEACHERS?**

With regard to the responsibilities of teachers, it is important to stress that the CBS pedagogy leads to a shift in the role of the teacher from one who employs traditional didactic teaching to that of a process consultant. Teachers often ponder what kind of teaching they ought to deliver – instead of wondering what kind of learning processes the students need to experience. As contextualists we argue that teaching students is not in itself a guarantee that the students will learn. Students do not learn from being taught – that is, having the text gone over. Students do not learn until they engage in solving the problems that are relevant to them.

To give the students responsibility for developing and organizing their own curriculum does not imply non-classroom management. As process consultants, teachers will govern or guide the learning process with assignments, tests, and tasks to facilitate student learning.

The particular view on contextual knowledge affects teachers because it cannot be assumed that all students will acquire the same knowledge by reading the same book or attending the same class. In our development of a course, we therefore have to focus on possible ways in which the individual student can transform information in books into knowledge of things. This implies thorough discussions of which assignments to give to

students, how group work has to be organized, which theoretical and empirical discussions to facilitate as a teacher, and so forth, all related to the time frame of the course. We do not intend to suggest that a course should use only one type of assignment, group work, or classroom activity. As Crawford (2001) states, the role of teachers is to engage students actively in the learning process, which implies students discussing with each other their strategies for problem solving. Students learn more from this explorative work with problems at hand than they do from being told the right solution to problems they have not experienced themselves.

The CBS pedagogy requires that teachers refrain from didactic teaching and take on the roles of facilitators and coaches. The teacher then needs a large repertoire of micro-pedagogical competencies in order to be able to organize learning situations where students collaborate with other students or with representatives of current business practice.

## **7. CONTEXTUAL LEARNING – NEW ROLES FOR DEPARTMENTS?**

If we agree that the auditorium, the classroom, or the working group of students cannot be conceived as identical learning spaces over time, because student learning is an embedded process where relations unfold in new formations, departments have to approach staffing in a way that takes into account these situational aspects. Usually departments employ teachers (may it be part-time teachers or academic members of the department itself) based on their knowledge within a particular academic field, such as organization theory, financial theory, or accounting. Often economic considerations and aspects regarding the flexibility of the overall portfolio of teachers within the department determine which teacher is used for a particular course.

Contrary to this, we call for “intelligent staffing,” where the department introduces alternative recruitment procedures that help them find the right person for the right course. To do this, departments need to recruit part-time teachers or full-time researchers based on the required type of input to the students’ learning process. To state an example, it is thought-provoking to see that our course in Organization Theory and Methodology, which is the largest of the bachelor programs at CBS, has 14 teachers with quite different academic and practical profiles. Do we use members of staff in the best way (and do we facilitate students’ learning processes in the best way) when we employ the same course with one assistant professor, five Ph.D. students, one external lecturer, and seven teaching assistants? We do not think so. We argue that it is important to base even first-year studies on ongoing research, because the sooner the students are confronted with learning processes that require higher-order thinking skills the better. Maybe “intelligent staffing” would be to employ active researchers, even professors, at the first-year level, and once the students have become familiar with the methodologies and processes following from the CBS pedagogy, confront them with teaching assistants. The question is thought provoking and our answer has great implications for the facilitation of students’ learning processes.

## **8. CONTEXTUAL LEARNING - NEW ROLES FOR STUDY BOARDS?**

At CBS, it is the study boards that approve curricula. Following the implementation of the CBS pedagogy and being at the verge of a new era governed by the credo of lifelong learning, study boards need to change their old approval mechanisms, whereby they simply ask responsible teachers for literature lists and approve courses based on this suggested literature. To approve selected literature for courses is a decontextual approach that does not take into account how HE institutions govern the education of students as active learners. With a curriculum that no longer has a unilateral focus on scientific literature, and with new roles to students, teachers, and departments, it is crucial for the implementation of the CBS pedagogy that study boards change their procedures for discussing, negotiating, approving, and evaluating curricula. We believe this has to be done from a contextual conception of learning.

Our goal is to introduce CBS' experiences as a frame of reference to other institutions who see the advantage in changing the approach towards curricula to a more learning-based and contextual one. Seen from our experiences, this demands the following adjustments in the perceptions and roles of the institutional bodies at the HE institution in general:

1. Students having responsibility for, and given the task of organizing, their own learning processes and parts of their curricula.
2. Students becoming active learners by becoming aware of their processes of learning.
3. The role of the teacher transforming to that of a process consultant.
4. The role of the teacher being to engage students actively in the curriculum.
5. Departments introducing "intelligent staffing": alternative recruitment procedures helping to find the right person for right course.
6. Departments recruiting part time teachers, full time researchers based on required type of input to students' learning process.
7. Departments basing even first year studies on ongoing research.
8. Study boards no longer simply approving courses based on responsible teachers' suggested literature lists.
9. Study boards changing procedures for discussing, negotiating, approving, evaluating study programs to accommodate a contextual conception of learning.

## 9. CONCLUSION

At Copenhagen Business School's (CBS) Learning Lab, our conceptualization of contextual learning and learning-based teaching is implemented in a CBS-pedagogy. We move from traditional syllabus-driven didactic teaching to establishing a new paradigm for study development based on students' learning processes. In the decontextual conceptualization of learning, learning is a psychological process within the individual, the important factor being students' own efforts to acquire knowledge presented in assignments, books, and by teachers. The contextual conceptualization of learning has its focus on the learning process. Knowledge production is seen as an embedded process, affected by the person's position in ongoing systems of social relations. With this paper we hope to inspire HE institutions to re-evaluate current methods of curriculum development. This may be done by 1) reconsidering the role of the HE institution in the context of a contemporary societal reality where more cooperation among the professional and educational spheres is beneficial; 2) reconsidering the learning processes of students by examining the students' role as passive vessel or active participant. Introducing the concepts of a decontextual conceptualization of learning, vs. a contextual conceptualization of learning in order to encourage the latter and improve the learning process of students and the relevance of the education to society as a whole; 3) discussing how new perspectives resulting from curriculum developments done with a new paradigm may be accommodated by the key stakeholders at the HE institution by changing some of the institutional practices and defining new roles for key stakeholders. We offer our own experiences at CBS as inspiration or a point of departure for an ongoing discussion of the development of HE curricula in the current societal frames.

Several implications have been defined, and overall we can say that the HE institution needs to focus the effort on creating a dynamic and positive interrelation between 1) industry, 2) ongoing research, and 3) the learning processes of students following the study programs. It is important that HE institutions leave behind the habit of communicating abstract theory without practical usefulness. As we see it, they must work constructively towards the creation of challenging learning situations that facilitate the solving of new kinds of business problems. By first defining this dual role of HE institutions, we can systematically discuss the requirements and new roles of key stakeholders needed in order to educate active learners who possess qualifications and competencies. We believe that curriculum development which takes into account the problems of transference and representation of knowledge leads us to an overall improvement of HE, when it comes down to producing knowledgeable students.

The work with curriculum development according to the CBS pedagogy continues, and it is our impression that we have made quite good progress, although there is still a long way to go. After all, HE institutions are complex political organizations to maneuver.

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