



The knowledge-productive corporate university

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Abstract

Purpose – In this paper the concept of knowledge production is used as a framework to study Dutch corporate universities. Knowledge production serves not simply as a desirable aim of corporate universities, as the concept also offers guidelines for the design of corporate universities. The purpose is to clarify the extent to which corporate universities fulfil this aim of knowledge production and the way they produce new knowledge.

Design/methodology/approach – From different theoretical perspectives 11 design characteristics have been extracted that help corporate universities to be knowledge-productive. Two empirical studies were carried out to find out to what extent corporate universities meet those features required for knowledge production. The first study implies an exploration of opinions of key actors within 12 Dutch corporate universities, in which data were gathered through interviews and analysis of documents. The second study can be characterised as a case study of a concrete training practice within one corporate university. Data were gathered by interviews, evaluative questionnaires, and observation.

Findings – Results reveal that knowledge production is viewed as important, but that concrete measures to stimulate it are often absent. Moreover, corporate universities need to pay more attention to the working environment of their employees in order to achieve their own goals.

Originality/value – Analysing the corporate university from the perspective of knowledge production may stimulate corporate universities to rethink their own goals as well as their position within the organisation.

Keywords Corporate ventures, Universities, Knowledge management, Learning organizations, Strategic alignment, The Netherlands

Paper type Research paper

Introduction

In the current knowledge economy, where knowledge and the application of knowledge is the most crucial asset, many companies feel the need for a new strategic approach to organisational learning. The rise of corporate universities is a clear example of how organisations are coping with this need (Vossen, 2002). As the strategic relevance of knowledge increases, the development of a corporate university receives more and more priority in companies (Rademakers, 2001). Although different definitions of a corporate university exist, a corporate university is most adequately described as a metaphor for a new phenomenon (Meister, 1998). In corporate universities two processes are aspired to: first, offering coherent learning activities that are connected to the goals and mission of the organisation, and second, linking personal development and organisational development (Jansink, 2002). Thus, corporate universities are new solutions that help companies to create, develop and distribute knowledge among employees.



However, in practice, we see that many corporate universities have evolved from Training and Development departments and have extensive course and training offers (Prince and Stewart, 2002). As training is especially suited to knowledge transmission and distribution, we may question the adequacy of courses and training to enable corporate universities to reach their aims. Corporate universities not only intend to distribute knowledge, but also aim at knowledge creation and development, which both contribute to knowledge production. As we were very curious how corporate universities fulfil this second aim, we decided to conduct a study in which we posed the following question:

Q. How do corporate universities produce new knowledge?

To answer this question, we first conducted a literature study, in which we explored what characteristics are necessary for knowledge production to occur. This resulted in a list of characteristics that corporate universities should possess. Second, an explorative study was carried out among 12 corporate universities to reveal the opinions of the key actors holding management or director positions about the relevance and existence of those characteristics within their own corporate universities. Third, a case study was carried out within one corporate university to reveal to what extent a concrete training practice met the characteristics required for knowledge production.

Theoretical background

To explore what conditions and characteristics are necessary for knowledge production to occur, we used three different theoretical concepts: the concept of developmental phases of corporate universities, the concept of knowledge productivity, and the concept of strategic alignment. All concepts refer to different characteristics that are needed for knowledge production to occur.

Developmental phases

A corporate university can be at different phases of development, which are characterised by different relationships with the organisational strategy, and thus by a different approach to knowledge and knowledge production. Rademakers (2001) distinguishes three generic developmental phases of corporate universities: the operational, the tactical and the strategic phase (see also Table I). These phases are viewed as developmental: each corporate university is assumed to develop through these phases in a linear way.

The first phase of corporate university development is the operational phase, in which fragmented training activities within the company are centralised. Corporate universities in this phase can be considered as focusing on achieving more operational efficiency and strengthening the training efforts that are relevant to the company by bonding powers. In this phase, mainly knowledge transfer takes place.

The tactical phase is the next phase, in which the company strategy is influential in determining priorities and the content of the corporate university programme: "The main goal is to reproduce and spread knowledge in such a way that a connection exists between company goals and individual development ideas" (Rademakers, 2001, p. 17). The corporate university operates as the knowledge backbone of the organisation. As

Table I.
Phases in the
development of a
corporate university

Features	Operational phase	Tactical phase	Strategic phase
Type of corporate university	“Advanced training department”	“Knowledge back-bone”	“Knowledge factory”
Goal	Efficiency	In line with organisational goals	Advancement on concurrency
Relation with strategy	Indirect and reactive	Direct and reactive	Direct and proactive
Main activity	Bonding training activities within the company	Extracting courses directly from the concern strategy	Development and realisation of strategy by training and research

Source: Rademakers (2001)

it relies very much on existing knowledge within the organisation, it can be characterised as ensuring knowledge dissemination and sharing.

The third, strategic phase is the most advanced phase of development. In this phase, staff and students of the corporate university are committed to research projects that have the goal of building on new strategically relevant knowledge. In this way, the company can rely on itself for the development of unique, tailor-made knowledge, which is needed to stay ahead of other companies and to gain a competitive advantage. Corporate universities in this phase are, according to Rademakers, to be seen as the knowledge factory of the company, where knowledge production takes place. He also states that the step towards this strategic phase legitimates the use of the word “university”, as a university refers to a place where new knowledge is created and developed by doing research.

In Rademakers’ view, a central condition for knowledge production to occur is the current developmental phase of the corporate university. Only in the final strategic phase will a corporate university be able to produce new knowledge. Within this strategic phase corporate universities address three characteristics. The first is the linking to organisational goals. Although corporate universities show close relationships with organisational strategy in all phases of development, in the strategic phase goals are stated as knowledge production that should contribute to the survival and advancement of the organisation. The second characteristic refers to different knowledge processes occurring within a corporate university in the third stage. Although the emphasis is on knowledge production, a corporate university in the strategic phase has developed from the operational and tactical phase and will thus be experienced in knowledge transfer and knowledge sharing. These processes are as important as knowledge production, as new knowledge also needs to be shared and transmitted to other people within the organisation. The third characteristic is the range of learning activities: although training activities remain very central within a corporate university, research is also introduced as a key activity for knowledge production.

Strategic alignment

As strategic alignment seemed crucial to all corporate universities, a closer look was taken at this specific concept. Van den Berg and Hoeffgen (2002) connected the concept of the strategic alignment of training and development to the knowledge production of organisations. In doing so, they reveal another three characteristics of knowledge production that also apply to corporate universities. At first, they argue that organisational goals are continuously changing nowadays. However, in order to connect learning to organisational goals, it remains important that organisations set clear goals and expectations all the time. The way goal-setting takes place is crucial. Strategic training and development is often translated as a top-down process: goals are stated at an organisational policy level and translated through training policy into training courses that are developed by experts. This is a long process, in which the top of an organisation decides what employees should learn. This is where problems arise: courses are mandatory, learning goals are not owned by the employee, and transfer of learning does not take place. In order to overcome such problems, the ownership of learning goals should also be in the hands of employees. This is the best guarantee of raising motivation for learning.

Consequently, stating organisational goals and translating them into learning goals is a process in which all employees at all levels have to be involved: “where organisational goals and expectations about what this means for the concrete working situation are handled in a knowledge-productive way (this is a process at all levels within the organisation), strategic learning should not per definition end. A strategic development plan is made in a different way” (Van den Berg and Hoeffgen, 2002, p. 74). Organisational goals and expectations influencing performance in concrete working situations, and learning goals have to be determined in a joint process involving all levels of the organisation.

A crucial issue in training and development is the connection between organisational strategy and learning. Offering training courses is one way, as sometimes a technique should first be trained before someone can apply it at the workplace. But a strategic development plan not only arises in a different way, it also contains a broader range of learning activities: next to (restrained) learning through courses, there is also room for learning by doing and for other opportunities to develop competencies (Van den Berg and Hoeffgen, 2002).

In connecting learning to the core processes of the organisation, the learning will, in one way or the other, always end in improved working processes, products or services. Integration between learning and work processes can be reached by strategic planning, but real integration also demands some effort to make sure that within learning activities learning and working are related. In training courses an extra effort must be made to ensure the linkage between learning and working. Within training it is necessary to use day-to-day practice and experiences to make learning relevant to work practices.

Thus, from the concept of strategic alignment, three new characteristics are derived for knowledge production to occur. First, ownership of learning goals: learning goals should be owned by all the parties involved, especially by the learners. Second, the setting of learning goals has to be changed from a top-down approach to a joint process within the organisation to secure the link between organisational strategy and learning, and to raise motivation to contribute to strategically important goals. Third, if training activities are delivered, organisations have to ensure that there is a direct link with practice, by making creative use of the daily practices and experiences of employees.

Besides, the concept of strategic alignment also puts an emphasis on a broad range of learning activities, just as the concept of development phases suggests. It is proposed not to restrict learning merely to offering training courses, but to offer opportunities that enhance learning by doing.

Knowledge productivity

The concept of knowledge productivity is very much related to the production of knowledge, but formulated as an organisational competency: the ability of an organisation to track down relevant information, to create new knowledge with this information and to apply this knowledge in improving and renewing working processes, products and services (Kessels, 2001a). In knowledge productivity, the production of new knowledge is stressed, but only under strict conditions. New knowledge is viewed as helping organisations develop, but only if this new knowledge is also applied. This application of new knowledge will contribute to the improvement and innovation of work processes, products and services. Improvement and innovation will be the most crucial assets in our current competitive economy and should therefore

be the main goal of our companies. The economic value of organisations will be determined by their power to be knowledge productive (Harrison and Kessels, 2004, Prince and Stewart, 2002).

How can organisations become knowledge-productive organisations? Kessels (2001b) argues that learning processes are most important in this respect: the different knowledge processes that bring about knowledge productivity require employees, teams and organisations to acquire new competencies, in order to learn. He strongly believes that employees and teams are perfectly capable of learning and producing new knowledge themselves. Employees learn and produce knowledge in various ways: seeking new solutions to work problems, dealing with various customer demands, making new products, or implementing new work procedures.

Nevertheless, this way of learning does not take place through training, but at the workplace. The workplace is also the most powerful place for learning to occur, as it is the only place where a natural link between learning and working may exist: a place where learning and working are not separate activities, but are both integrated in that working involves learning at the same time, while learning also involves working. However, most workplaces do not always in themselves stimulate learning. In order for learning to occur at the workplace, the daily workplace should offer opportunities for learning and should develop from a working environment into a learning environment.

Every company should therefore design a learning plan for the organisation, to turn the daily working environment into a learning environment (Harrison and Kessels, 2004). Such a learning plan is called a corporate curriculum (Harrison and Kessels, 2004; Kessels, 2001a; Keursten, 2002). A corporate curriculum is to be seen as a rich landscape, in which individual employees and teams find their way and are enabled to construct knowledge. The content of a corporate curriculum revolves around seven learning functions, which are all required to help learning processes to occur (Harrison and Kessels, 2004, Kessels, 2001b):

- (1) Acquiring subject matter expertise and content knowledge directly connected to the core competencies of the organisation.
- (2) Learning to identify and deal with new problems with the help of content knowledge.
- (3) Cultivating reflective skills and meta-cognitions that help to find ways to track down new knowledge, to master this knowledge and to make it applicable.
- (4) Acquiring communicative and social skills that provide access to the knowledge network of others and that make the learning climate of a working environment more pleasant.
- (5) Acquiring skills to regulate motivation and affections around learning.
- (6) Promoting calm and stability, to enable deepening, cohesion and integration, and continuous improvement in products, services, and processes.
- (7) Stimulating and steering creative turmoil that may lead to radical innovation.

All seven learning functions have to be delivered by the working environment, which then becomes a real learning environment. How can organisations create such working environments? Kessels formulates three design principles that organisations have to apply to create the corporate curriculum: promoting mutual attractiveness, looking for a passion and stimulating knowledge productivity (Kessels, 2001b). Mutual

attractiveness has to do with the qualities and abilities of individual employees that are valuable to share with others. For employees to work or learn together, each of them has to have a valuable input in order for collaboration to flourish. The individual qualities and abilities employees bring with them create a social context that invites working together, because employees find each other interesting and are willing to learn from each other. Organisations have to ensure they hire the right employees (with qualities that are highly respected by other employees), and connect them throughout the organisation. In this way, they create a favourable social context. The second design principle refers to passion: employees need to know their own drives and interests, as this is the main motivational factor in learning, and thus in developing new knowledge and improvement or innovation in work. As knowledge development and learning are very much dependent on individual effort and motivation, it is crucial to connect learning as much as possible to personal drive and interests. In this way, learning is greatly stimulated. Thus, to promote knowledge productivity, organisations should make an effort to help employees find their passion and to take measures so that employees may act as much as possible according to that passion. Consequently, they recognise and favour individual diversity in order to have great involvement in learning. Stimulating knowledge productivity is the third principle for designing corporate curricula. This concerns all the activities within the work environment that are directed towards creating a beneficial social context to work in, and to motivate employees to perform as well as they can. In stimulating knowledge productivity, what is important is the ability to shape a working environment in such a way that long-lasting competencies can develop, which are also useful in solving future questions: the ability to become smarter, learning to learn, and expanding reflectivity (Kessels, 2001b).

From the perspective of knowledge productivity, five characteristics influence knowledge production in organisations, which are different from the characteristics derived from the concept of developmental phases. It is important to note that the concept of knowledge productivity takes a different stance towards learning activities: the importance of training or research is hardly addressed, as the emphasis is placed on the design of a working environment in which learning and knowledge production can take place.

The first characteristic is a challenging working environment, which is a working environment in which learning may take place. In such an environment new problems and questions arise that have to be solved or that demand improvement or innovation, in which all employees are involved. Thus learning does not take place away from working, but in the work itself. A second characteristic refers to the availability of the different learning functions, which express which elements have to be available within a working environment in order for learning to occur (the corporate curriculum). The remaining three characteristics have to do with how to create this corporate curriculum. Organisations have to take account of mutual attractiveness among employees and of the passion of individual employees and the opportunities within the organisation to work from this passion and develop it further. Besides, organisations have to create a challenge for improvement. Employees should feel challenged to create new knowledge and help their organisations improve and innovate. Actually, this also means that organisations have to be very clear about their vision and ambitions and make sure that all employees are informed and involved. By involving all employees in

knowledge creation, personal development and organisational development can also progress.

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The three different concepts together are helpful in designing those key processes that corporate universities are pursuing, namely offering coherent learning activities in accordance with the organisational strategy and linking personal and organisational development. Combining all the theoretical approaches leads to a set of 11 characteristics that help corporate universities produce knowledge (the complete overview of the literature study is described in the doctoral thesis by Jansink, 2002). In summary, a knowledge-productive corporate university possesses the following 11 characteristics, which can be described as design characteristics (the name of the characteristic as it will be referred to in the rest of the paper appears in parentheses):

- (1) Learning is connected to the goals an organisation stands for (organisational goals).
- (2) Knowledge transfer, knowledge sharing and knowledge creation should all take place (knowledge processes).
- (3) In addition to learning through courses, a broad range of learning activities should be organised, with an explicit focus on learning by doing (learning by doing).
- (4) Courses should not be mandatory and learning goals should not be predefined, but employees need to have ownership of their own learning and learning goals (ownership of learning goals).
- (5) Setting organisational goals and expectations about the consequences for concrete working situations are joint processes involving all levels of the organisation (setting of learning goals).
- (6) Integrating learning and working in courses is important and this can be achieved by making use of cases from day-to-day practice (using daily practices).
- (7) Integrating learning and working can be achieved by offering a challenging working environment (challenging working environment).
- (8) Corporate universities should make the learning and working environment more powerful and should make sure the seven learning functions are operating (learning functions).
- (9) Employees in the organisation and participants in learning activities should be attractive to each other (attractiveness).
- (10) Employees know their passion (passion).
- (11) Employees feel challenged and encouraged to improve the organisation (challenge for improvement).

Knowledge production within corporate universities in The Netherlands

To explore the extent to which corporate universities show characteristics of knowledge production, two empirical studies were carried out. First, a study was

conducted of the key actors within 12 Dutch corporate universities about the relevance and existence of the design characteristics from the literature. Second, a case study within one Dutch corporate university was conducted to reveal to what extent a concrete training practice met the characteristics described for knowledge production. The method and results of the two studies will be described separately in the following two sections, whereas the conclusions of both studies will be described in the “Conclusion and discussion” part of this article.

Study 1. Relevance and existence of design characteristics within corporate universities in The Netherlands

Method

To select corporate universities, the internet and literature were used to find out which organisations in the Netherlands owned a corporate university. It appeared that 33 organisations had a corporate university (spring 2002). From this sample, corporate universities that were in the operational phase were excluded, as learning and organisational strategy are not explicitly related within those corporate universities. It is not to be expected that they will deliver any valuable information relevant to the research question in this study. At the same time, it was expected that the number of corporate universities in the third, strategic phase would be rather limited. So, it was decided to select corporate universities within the tactical or strategic phase of development, as formulated by Rademakers (2001). To be able to determine the current phase of development, a short questionnaire was drawn up using the features of the development phases of Rademakers (2001). All corporate universities were phoned and interviews were conducted with the director or one of the key consultants from each corporate university. Eventually 12 corporate universities that met our criteria were prepared to participate. Of those 12 universities, four were connected to non-profit organisations, and eight to profit organisations. Among the profit organisations were three ICT companies.

Two different qualitative research methods were used to gather information, namely in-depth interviewing and analysis of documents (Patton, 1990). The in-depth interviews were based on semi-structured interview formats and were held with the managing director of one of the key consultants of each corporate university. Brochures and course overviews were used to gather additional information. The interview protocol was based on the 11 design characteristics of knowledge-productive corporate universities. In addition, some background information was sampled, such as the commitment of the board, organisational structure, cooperation with other institutes or universities, and the use of e-learning.

Results

In this section the results will be shown regarding the design characteristics of the corporate universities. In the description of results we keep to the order of the 11 characteristics as defined in the theoretical part of this paper.

Organisational goals. All corporate universities have aligned their learning and training activities towards the organisational goals of their companies. The goals of profit organisations are mainly stated to be making profit and being a market leader. Non-profit organisations have more specific and social goals, such as ensuring safety in society. The reasons that were mentioned for raising a corporate university have to

do with improving the quality of employees and with bonding and interesting employees. All 12 organisations are striving for the personal development of employees to be in line with the development of the organisation. Organisational development is achieved by raising the quality of employees, and for this a corporate university is considered extremely useful.

Knowledge processes. Knowledge production is taking place within four corporate universities only. In all the other corporate universities, only knowledge transfer and knowledge-sharing are occurring. Hence, from the perspective of Rademakers, only those four corporate universities in which new knowledge is created are real corporate universities. New knowledge is created by conducting research, but also by solving difficult work problems, and by solving organisational problems together.

Learning by doing. For learning by doing, it appeared to be important that the workplace offers opportunities for reflection. Within ten of the corporate universities involved this appeared to be difficult to realise, as there was hardly any room for reflection, and thus for learning at the workplace. The amount of daily activities prevents employees from further learning at the workplace. Reflection then becomes a responsibility of individual employees and is not organised or stimulated at the organisational level.

Ownership of learning goals. All 12 corporate universities operate in organisations in which personal development plans are used. The question arises whether this is a characteristic of companies that own corporate universities or a phenomenon that is occurring more and more in general. Nevertheless, the fact that personal development plans are used shows that all the organisations involved consider the personal development of the employee as important and that learning has to be in the hands of employees. Thus, employees themselves are responsible for formulating and stating their own learning goals. So, in all corporate universities, the ownership of learning goals is also in the hands of employees.

Setting of learning goals. This feature refers to the way organisational goals and expectations for concrete working situations – as well as learning goals – are set. Theory proposes that this should be a joint process of employees from all levels within the organisation. Four corporate universities mentioned that their vision of learning was to create a learning and working culture, whereas three of them stated that they had competency-based learning as their vision. None of the corporate universities mentioned knowledge production explicitly as their vision of learning, although the idea of creating a favourable culture for working and learning comes close to this vision. Although there were explicit notions about learning, none of the corporate universities translates organisational goals into concrete learning and performance goals together with employees. There was thus no discussion or cooperation with employees in translating organisational goals into concrete working behaviour and performances and into the accompanying learning activities.

Using daily practices. Of all the 12 corporate universities, eight make use of cases from day-to-day practice in their training or courses, with the intention of better integrating learning and working (case-based learning approach). The research also showed that there is another way to integrate learning and working, as many corporate universities also make use of coaching. Coaching is widely viewed as an important instrument for providing reflection, counselling and feedback. During coaching, employees are stimulated to improve and think about further improvement and

development, and helped to realise how to improve themselves. Coaching also helps to promote the learning functions of “problem solving”, “reflection”, and “stability and calmness”.

Challenging working environment. As a challenging working environment is one way of integrating learning and working, this feature was researched by asking corporate universities whether they offer employees scope for joint problem solving and are open to new ideas from employees. Within four corporate universities, the integration of learning and working was stimulated by offering scope for collaborative problem solving and for expressing new ideas. Six corporate universities provided scope for only one of these two aspects.

Learning functions. This feature stresses that corporate universities should promote a powerful learning and working environment, in which the seven learning functions are enhanced. In corporate universities most attention is given to acquiring communicative skills that help to gain access to the knowledge network of others and that make the learning climate of a working environment more pleasant. This learning function is almost considered as natural by 11 corporate universities. Ten of them state that they stimulate communicative skills by providing access to relevant sources of information and by using the Internet. Eight universities also organise learning activities in such a way that employees need to discuss, search for information, consult other colleagues or help each other. Acquiring reflective and meta-cognitive skills and acquiring skills to regulate motivation and affection about learning are also given attention by eight universities. This is done by allowing scope for reflection in training activities, and by allocating work tasks according to personal preferences and ambitions.

Nine of the corporate universities took measures to help employees acquire skills to regulate motivation and affections around learning. The measures undertaken had to do with arranging personal meetings with employees, in which their personal development, commitment, learning goals, and plans were discussed. The lowest importance is attached to the learning function of acquiring subject matter expertise that is directly connected to the core competencies of the organisation. Although transmission of subject matter takes place in different training activities, only four corporate universities pay attention to how employees themselves can acquire subject matter expertise or keep up with new information. The remaining three learning functions were hardly addressed by corporate universities, as analysis revealed that they paid only slight attention to some aspects of these learning functions.

Attractiveness. Two corporate universities explicitly stated that their employees are attractive to each other, whereas ten corporate universities do not pay attention to this characteristic. Attractiveness is enhanced as follows: “People are attractive to each other because they want to learn together and they do not want to find out something which was already found out.” The second corporate university expressed attractiveness by pointing at the significant informal learning network within the organisation.

Passion. The research did not show if the employees of the organisations knew what their passion was. However, four corporate universities enable employees to conduct tasks based on personal interest and motivation, but these had to fit the organisation. Employees may develop their own interests, but action will only be undertaken if these interests fit the organisation, and not the other way around.

Challenge for improvement. This characteristic seemed to hardly be discussed as a feature that can be influenced by corporate universities. However, within four corporate universities it is recognised that employees' personal motivation is an important source of work performance. In order for improvement to take place, the personal motivation of employees has to be taken into account.

Considering our research question of how corporate universities produce new knowledge, we may conclude that the majority of characteristics that apply to knowledge production do not exist in corporate university practices. However, this may be due to the fact that most of the corporate universities involved in the research appeared to operate in the second, tactical phase. In this phase, the emphasis is mainly on knowledge dissemination and sharing by offering training and courses. But although corporate universities in the third strategic phase perform specific activities leading to knowledge production, courses and training remain their most important activities. As our list of design characteristics acknowledges that knowledge production also occurs in training activities, it was decided to start an in-depth study of a training activity within a corporate university that appeared to be in the strategic phase. The research question remained the same, but we changed our level of analysis from the level of corporate universities to a training activity within a corporate university, thus to: how does knowledge production arise within a specific training activity?

Study 2. Knowledge production within the Wehkamp Homeshopping Academy

Method

Firstly, a case had to be selected within one of the corporate universities in the Netherlands. As one of the researchers was temporarily employed at the Wehkamp Homeshopping Academy, and Wehkamp is one of the universities operating within the strategic phase, it was decided to select a case within Wehkamp. The Wehkamp Homeshopping Academy is the corporate university of the largest homeshopping company in the Netherlands.

Within this company a training activity was selected that met the criteria that were described for case-study research into innovations or improvements from the perspective of knowledge productivity (Keursten, 2002). Keursten suggests that an innovation or improvement should be selected:

- in which employees who will be directly influenced by the innovation play an important role;
- in which the development and use of knowledge play an important role within the innovation;
- in which the innovation has already been achieved/ implemented (not a plan, but something that is already in use); and
- that has a restrained focus, thus the participants or persons involved and influenced by the innovation are limited, so that they can all be included in the research.

Eventually, the training activity that fitted our criteria was the Go-@ll class. The goal of this class is to teach employees to think and act in a process-oriented way. A customer satisfaction survey held in 2000 by Wehkamp had revealed that customer

satisfaction was not good enough. Customers proved to be dissatisfied with the primary process. To increase customer satisfaction, a new model of process-oriented cooperation was launched, implying the employees' recognition of a chain existing from supplier to customer, but also their own contribution within this chain. A process model was therefore developed to elicit existing processes, which was divided into six different parts: communicating the brand, presenting products and services, selling products and services, delivering products and services, account management, and conducting after-sales services.

As there were different Go-@ll classes, further selection was necessary, and a Go-@ll class concerning after-sales services was therefore selected. The class consisted of six training modules, delivered by ten different trainers. There were ten participants from different departments involved in the after-sales process, while four managers were involved in organising the class. The goals of the class were to acquire knowledge and skills in delivering an optimal quality of service to clients after sale of the products, by improving the internal organisation of processes. Learning goals were defined at a knowledge and skills level: enhancing knowledge of internal organisational processes, and being able to create new products that better support the quality of after-sales service (for instance: service-level agreements).

From the 11 design characteristics of knowledge-productive corporate universities, nine characteristics were the focus of this second study. The alignment with organisational goals and the setting of learning goals did not have to be clarified any further, as they were clearly existent in this case. Learning was clearly connected to the goals of the organisation as organisational goals concerning process-oriented working were the main incentive to start the class, and also served as the primary learning content within this class. Next, as the class itself was used as a tool for involving employees at different levels to work together in tracking down organisational goals for daily practices, the setting of learning goals was performed jointly.

The extent to which the remaining nine characteristics were existent within the Go-@ll class serves as the leading question within this study. To increase the reliability of the results, it was decided to use triangulation of data sources and methods (Miles and Huberman, 1994). Various data-gathering methods and persons were therefore involved to create an overall and clear picture of the extent to which this class met the remaining nine design characteristics of knowledge productivity. First, interviews were conducted with the programme director and with four managers before and after the class. These interviews were mainly directed at the design characteristics referring to creating a challenging work environment, making use of learning by doing, and using daily practices. Second, a questionnaire was developed and administered among all ten trainers and ten participants to measure the extent to which the class met all nine design characteristics. Third, participant observation was used to reveal to what extent the different learning functions were really being used within the concrete training practice, and also to establish the type of knowledge processes taking place. Fourth, interviews were held with two participants to evaluate if the newly-learned knowledge and skills could be integrated into the working environment and if the working environment was challenging and allowed learning to occur. Fifth, all relevant documents regarding goals and organisation of this class were gathered and studied.

Results

The answers regarding the nine design characteristics of knowledge-productive corporate universities can be summarised as follows:

Knowledge processes. Within this class all those processes of knowledge transfer, sharing and creation were taking place. Trainers transferred knowledge to participants, but also stimulated participants deliberately to share knowledge with each other within various assignments. In working on assignments, many new insights and ideas arose, which is considered as creation of knowledge.

Learning by doing. Almost all learning occurred through participation in courses. However, the principle of learning by doing was applied by having participants work at cases that were directly connected to their daily working situations. All participants stated that the class was a necessary intervention for learning, as their actual working situation did not provide opportunities to learn all the new knowledge and skills. Nevertheless, participants stated there was little scope for applying the newly learned knowledge and skills in their own working environment. This may be explained by the fact that the new model of process-oriented working had not yet been implemented in practice. Nevertheless, it became clear that the working environment did not provide enough scope for applying new knowledge and skills. Daily routines and work pressure prevented participants from learning by doing in their concrete working situations.

Ownership of learning goals. As the Go-@ll class was raised by the organisation, the participants were also selected by the organisation. Hence, participating was not the choice of the employee and the learning goals within the class did not reflect their own learning goals. However, as process-oriented working was expected from all employees in the near future, participants showed high levels of motivation and involvement.

Using daily practices. The Go-@ll class certainly used cases from day-to-day practice to help integration of learning and working come about. Cases were viewed as important learning resources in raising the probability of transfer of learning to the workplace. No other measures were taken to improve transfer, such as using coaches. Participants as well as managers admitted that problems occurred regarding transfer, as the working environment did not facilitate the application of the newly-learned knowledge and skills. Learning remained too much something that happens within the classroom only.

Challenging working environment. Participants were strongly convinced that their daily working environment offered them numerous opportunities to learn and develop. But learning and development was mainly related to their primary work duties, not to implementing new knowledge and skills from the Go-@ll class. So, considering the innovation of process-oriented working, they did not regard their working environment to be challenging. There was not enough time to really implement something new and to learn from that. Their workload prevented them from putting their new knowledge and skills into practice.

Learning functions. Within the Go-@ll class, four learning functions received a satisfactory level of attention. Participants mentioned that they learned to solve problems with the help of the newly-acquired subject-matter expertise; they learned to understand the sources and causes of existing problems, which was viewed as prerequisite for solving them. There was a lot of attention within the class given to acquiring reflective and meta-cognitive skills. Trainers organised feedback and evaluation, and also tried to stimulate reflection within their didactical approach by

asking open questions and creating time for discussion. The class also helped to acquire skills to regulate motivation and affections, as participants were continuously challenged to invest in the training, which heightened their personal commitment. The learning function of creative turmoil was practised as participants were confronted with problems that had to be solved, and also by confronting participants with new knowledge from outside: customer remarks, new organisational models, expertise from other homeshopping companies. Thus, awareness was raised that changes were really necessary and that innovation had to start. Analysis revealed that the learning functions regarding acquiring subject matter expertise, communicative skills, and the promotion of peace and stability were hardly addressed. Although the class paid a great deal of attention to subject matter expertise, this was only by means of the transmission of expert knowledge. Participants were not stimulated to acquire this subject matter on their own, thus this learning function was considered as not being addressed.

Attractiveness. Mutual attractiveness definitely existed in this class. Participants came from different departments, both from the front office and the back office and did not know each other beforehand. Thus, the class offered lots of opportunities to get to know other departments and colleagues, but participants also discovered that other colleagues and departments were useful sources of knowledge and information. Consequently, participants expanded their internal networks within the organisation and expressed their wish to stay in contact after class and to cooperate more closely. Attractiveness was greatly stimulated by the careful selection of employees attending the class: employees who really have to work together in a process-oriented organisation were selected, as the idea was that they would be more likely to invest in a closer working relationship, which turned out to be the case.

Passion. The class invested in meeting personal interests, although nothing was done to express or develop personal learning goals. Participants working in the front office especially stated that their own interests had been taken into account within the class. The trainers achieved this by preparing each module together with two participants. However, other participants said that the class did not meet their interests fully: these were mainly the participants working in the back office, a department that is further away from the primary process than the front office.

Challenge for improvement. Participants felt challenged to develop the organisation, as most of them felt committed to the subject that implies innovative working processes. Moreover, participants were rather positive about the learning culture within the class and especially about the amount of effort invested in making learning as interactive as possible. Participants also very much appreciated that their opinions and ideas were taken seriously, so that they felt their investments and responses had been considered important.

From these results we can clearly see that within this concrete training activity some characteristics were certainly existent, whereas other characteristics were only partially addressed. This study thus shows that, even when knowledge production is deliberately pursued and a great many measures are taken to enhance knowledge production, not all the characteristics exist to the same extent. We may conclude that the results of this second study give a closer understanding of and insight into concrete measures to be taken to make knowledge production come about. However, this study also provides insights into the problems and obstacles encountered in efforts to

enhance knowledge production. This will be the focus of the next section, in which conclusions are drawn that apply to both studies.

Conclusion and discussion

Conclusion study 1 and 2

The first study reveals that two design characteristics frequently exist (9-12 corporate universities showed them: organisational goals and ownership of learning goals). Two other characteristics exist to a certain extent (5-8 corporate universities revealed them: learning functions and using daily practices), whereas all the other features are hardly ever seen (0-4 corporate universities). Those features that showed up to a lesser extent were very dispersed within individual corporate universities. Hence, every corporate university presents a different picture, whereas none of the 12 universities met all the characteristics. Although all corporate universities expressed their goals of becoming a real corporate university, in which new knowledge is created, only a quarter of them have taken any measures to achieve this important goal. This leads us to conclude that, from a theoretical perspective, the design of corporate universities contributes to knowledge production in a limited way only, although some of them meet more characteristics than others.

Our second study revealed a somewhat different picture concerning knowledge production. Within the training activity under study, six characteristics existed to a large extent: organisational goals were aligned; learning goals were jointly set; participants showed ownership of learning goals; all the types of knowledge processed occurred; attractiveness of participants was deliberately sought; and a challenge for improvement was clearly raised by the training intervention itself. However, the remaining five characteristics were met only to a lesser extent. Learning by doing only took place in the classroom, and not in the workplace. Daily practices were used, but were drawn from former experiences, and not related to the innovation of process-oriented working itself. The working environment did not challenge the use of the newly-learned knowledge and skills, but rather inhibited their application. Although a couple of learning functions were dealt with, they were only addressed within the training itself, thus only within the learning environment. No connection was made with the working environment of the participants. Finally, individual passion did not play a very important role within the training activity: the class was not designed to consider personal interests, although some of the participants' personal interests were taken into account. This seemed to happen coincidentally, rather than by design. Although those five characteristics did not exist within the working environment of the participants, they were dealt with within the training and learning environment. We therefore conclude that the class was designed in such a way that knowledge production occurred and a lot of measures were built in to guarantee the creation of new knowledge.

However, although knowledge production took place within the training situation to a large extent, knowledge production within the organisation was barely promoted. New knowledge that was created within the class did not lead to changes in the current way of working. Participants wrote proposals for improvements in work processes and procedures, but those proposals were handed over to the board of the company. By doing this, a situation of "waiting for each other" arose, which stopped further learning[1]. Another reason that knowledge production did not occur within the organisation was due to the busy working environment: all participants were very busy with their primary tasks and there was no room for improvement and innovation or for the application of newly-learned knowledge and skills.

Discussion

This research clearly shows that the concept of knowledge production is attractive to corporate universities, as it draws attention to the conditions necessary for knowledge production to occur. Those conditions refer to training and learning environments, as well as to the working environment of learners. A corporate university should not only organise training. Training has to be part of the “learning policy”, in which there is also room for creating positive conditions for learning and for guiding learning at the workplace. This learning policy will become more and more an integral part of organisational policy and in that way meets more and more with the main idea of a corporate university. We observed that many corporate universities are looking for ways to bridge the gap between learning and working. However, they do so by making adjustments to training and learning situations, by using work problems and working experiences within learning activities and situations. They also invest in enhancing personal motivation and interest in learning and innovation. Integrating learning and work by making adjustments to working situations in such a way that they evolve as learning environments is hardly ever practised. Both studies show that the characteristics that refer to training and learning environments are more frequently dealt with than those referring to the working environment.

However, for knowledge production to occur, the learning as well as the working environment has to fulfil certain conditions. It is not enough only to create a favourable learning environment. If corporate universities really want to promote the knowledge production of their organisations, they should do more than merely arranging training. They also have to invest in creating challenging working environments. They may therefore rely on the concept of the corporate curriculum and the accompanying seven learning functions. If corporate universities seriously wish to strive for all the learning functions to occur within the working environment, they should increase their opportunities for knowledge production to a large extent. Moreover, by putting the emphasis on creating those conditions, they really opt for a new role that is more consistent with their own goals. A new role for corporate universities can also be found by starting “train the trainer” or “coach the coach” projects. As facilitating and stimulating learning in work is important, employees should be trained and guided in this. Furthermore, the corporate university can help departments and employees to design tools which will help them to learn at work or design learning trajectories at work.

Implications

This research mainly focused on the production of knowledge within the corporate university. To establish how knowledge productive a company as a whole is, it will be necessary to find out how knowledge productive the working environment is for all employees.

It would be interesting to enlarge this research to include training and development departments that do not call themselves corporate universities and to find out if there are any different conclusions. The fact that in corporate universities learning is connected to organisational development might lead to the conclusion that organisations with a corporate university are more of a learning organisation than those without one. It might also be interesting to find out if the type of organisation influences the amount of knowledge productivity in the organisation.

Specifically for the Wehkamp Homeshopping Academy the conclusion can be drawn that it should focus more on teaching employees to learn and on creating positive conditions for learning and guiding learning at the workplace. For this reason, the Wehkamp Homeshopping Academy should ask itself if it only wishes to offer courses or if it also wants to guide and facilitate knowledge processes in the organisation. Only in the latter situation can knowledge production be promoted and contribute to a learning organisation. In addition, more attention should be paid to the seven learning functions of the corporate curriculum, both in training and working. The role of the Wehkamp Homeshopping Academy will change: it will act more as an expert in learning. The focus is placed on advising the organisation how to guide learning in the workplace and how positive conditions for learning can be created. In the working environment, freedom and self-steering are important for employees: freedom to experiment with new ways of solving problems, freedom to choose the person you want to work with and room for creativity. When the Wehkamp Homeshopping Academy is able to develop in such a way, it will improve knowledge productivity within Wehkamp, and Wehkamp will be more a learning organisation.

Note

1. The board of Wehkamp acknowledged this situation and decided to hand back the assignment to the participants, to start with it in reality.

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