

**ACTIVITY-BASED START-UP SIMULATIONS  
IN ENTREPRENEURSHIP EDUCATION  
AT THE GERMAN UNIVERSITIES**

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## **Abstract**

Only 30% (bga, 2007, p. 8) of all business start-ups are attributed to women. In the area of self-employment gender gaps have a negative effect, both qualitatively and quantitatively. However, universities that want to prepare students for self-employment as part of their curriculum are also confronted with the question of an adequate methodology which helps students to be able to immediately understand and learn entrepreneurial actions. Activity-based course concepts become increasingly important in entrepreneurship education in this context (cf. Ebbers, 2004, p. 26). The DIANA research and development project deals with these aspects. Its aim is to further develop the teaching/learning method of a "practice firm" into a start-up simulation for the tertiary field. At the same time, the development of sensitivity for gender and diversity management in the participants is an important qualification aim. Therefore activity-based simulation seminars in entrepreneurship education were researched by means of internet research and a multi-level investigation method. Based on the results of the investigations as well as on the theoretical concepts of simulation methods and the "doing gender"- approach, it was possible to plan an activity-based and holistic business start-up simulation.

## **PROBLEM OUTLINE AND OBJECTIVES**

While the proportion of women's employment has risen continuously in the past few years in spite of gender-specific division of labour and prevailing gender stereotypes, and today amounts to 45% (Federal Employment Office, 2008), only 30% (bga, 2007, p. 8) of all business start-ups are attributed to women. This fact shows that in the area of self-employment gender gaps have negative effects, both qualitatively and quantitatively, on the desire to start a business and on start-up activities particularly as regards women.

However, universities that want to prepare students for self-employment as part of their curriculum are not only confronted with this phenomenon. In view of making the transfer of knowledge and the sustainability of knowledge acquisition as realistic as possible, it is important to provide an adequate methodology by means of which students can immediately understand and learn entrepreneurial actions. Activity-based concepts for lectures which are holistic, appealing, participant-oriented and promoting reflection become increasingly important in entrepreneurship education in this context (cf. Ebbers, 2004, p. 26).

The DIANA<sup>1</sup> research and development project deals with these aspects. Its aim is to further develop the teaching/learning method "practice firm" into a start-up simulation for the tertiary field; the concept is based on simulation and up to now has been well-known rather in the area of commercial professional education.

At the same time, the development of gender and diversity sensitivity in the participants is an important aim of the qualification. In the context of the qualification scheme described above especially female students gain the opportunity to act as potential company founders in a gender-equitable learning process. The project intends to investigate to what extent the designed general conditions influence the willingness of female students to set up a company in a positive way

## **THEORETICAL FOUNDATION**

### **Professional skills and competences and concepts of activity-based learning**

The concept of the activity-based and holistic business start-up simulation is intended to consist of several modular components that integrate "managing gender and diversity" as a cross-sectoral theme.

This chapter is going to consider more closely activity-based learning as a basic and central concept for the development of the qualification modules. For the development of the qualification modules economic-didactic simulation methods in general and simulation in the sense of practice firm concepts in particular as well as the "doing-gender" approach and the "managing gender and diversity" approach is of importance. They will be presented in the chapters to follow.

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The social demand to develop and promote so-called key qualifications in the qualification modules in addition to expert knowledge required a closer look at activity-based teaching methods. These are imputed to promote extra functional competences in particular (cf. Ebbers, 2004, S. 26 and Esser/Twardy, 1998, p.14).

The term "(basic) professional skills and competence" describes the competence of a given person to understand his/her professional environment that is becoming more and more complex and undefined and "*ziel- und selbstbewusstes, flexibles, rationales, kritisch-reflektiertes und verantwortliches Handeln [zu gestalten]*" [*help construct it by purposeful, self-reliant, flexible, rational, critically-reflecting and responsible action*] (Pätzold, 1999, p. 57). The subsidiary skills of basic professional skills and competences comprise expert knowledge and multidisciplinary elements going beyond, the so-called key qualifications (cf. Gonon, 1999, p.341). The latter can be divided into competences as regards methodological competences (e.g. the competence to solve problems) and social competences (e.g. the competence to interact and to take responsibility) (cf. Braukmann, 2001, p.84; Halfpap, 1991, p. 242). In addition to these other systematizations have been published in the field of basic professional skills and competences (cf. Arnold 1995, p. 70-71; Reetz, 1990, p. 22). Esser and Twardy describe the three subsidiary skills as regards a profile of competences for start-up businesses as typical possible behaviour of a founder of a new business. The expert knowledge of a future founder personality might for example show in the ability to draw up an investment plan. In the context of business start-ups the competence as regards methodological competences can be considered as problem-solving heuristics. The social competences of a founder on the other hand might show in negotiating a bank loan (cf. Esser/Twardy, 1998, p.12). As a consequence it is the assignment of universities in this field to adequately teach these business start-up skills to students (cf. Schulte/Klandt, 1996, p.1). Esser and Twardy come to the conclusion that learning at universities should include all facets of basic professional skills and competence. For them the prevailing forms of learning and teaching at universities that predominately concentrate on the university lecturer is inadequate for the required profile of business start-up qualifications (cf. Esser/Twardy, 1998, p.14). In the following business didactics and the activity-based simulation method will be examined more closely.

### **Methods of simulation and the practice firm concept**

The business-didactic method of simulation belongs to the concept of activity-based didactics. According to Ewig it means a blanket term for all those activities that convey practical experience in economics by imitating reality in a model (cf. Ewig, 1991, p. 130). For the learner, this method provides an opportunity to experience and evaluate the consequences of risky and cost-intensive transactions in a situation that reproduces the reality in a simplified reproduction without actually being exposed to any risks (cf. Buddensiek, 1999, p. 353; Bonz, 1999, p. 125). In this active teaching/learning process learners actively look into the actual subject within a given learning environment (cf. Dörner, 1982, p. 142) and thus have the possibility to enlarge their professional skills (cf. Buddensiek, 1999; p. 354). Simulation methods in this sense can be planned in a variety of configurations with respect to setting and different levels of freedom of action. Concepts for simulation are manifold and versatile. In this context they are sometimes over-lapping as regards content, they comprise for

example role plays, planning games, case studies, practice firms, junior companies and computer simulations (cf. Ewig, 1991, p. 130).

The practice firm concept belongs to the group of more comprehensive methods, as it includes less complex simulation methods such as role plays, case studies and planning games. It is well-known in particular in the area of professional education in business (cf. Bonz, 1999, p. 127; Achternhagen, 1997, p. 625). The varied composition of methods enables learners to experience activity-based teaching/learning processes and thus to gain a deep insight into the entrepreneurial reality (cf. Ebbbers, 2004, p. 42). The practice firm represents a dynamic simulation model of a given company and it reconstructs a model of a business enterprise (cf. Kaiser/Weitz, 1992, p. 90; Reetz, 1986, p. 38). As model it does not reproduce the original true-to-life but reduces reality in certain aspects in order to emphasise relevant and interesting aspects in a given seminar. In doing so, complex processes become comprehensible, interdependencies and strategies of entrepreneurial processes can be identified and thus professional active skills can be encouraged. Experience gained in these simulation seminars can be transferred to real-life situations (cf. Gummersbach, 1989, p. 38-39).

The construction of the model, which is the central process in the design of a practice firm, is planned in two sequential processes of transformation according to Reetz. These are transformations against the background of personal experience of the person who designs the model and the forms of representation of entrepreneurial reality. The first process of transformation deals with a situational representation of concrete pictures of enterprises in particular cases obtained from real-life economy in form of documents, case studies etc (casuistics). In addition to that, this first transformation process includes a scientific representation of the concrete entrepreneurial reality as a system of scientific theories and models from business studies and sociology. The business representation can be carried out according to approaches inherent in the system or decision-oriented. In the approach focussing on system inherent circumstances a given company is represented in form of abstract theories and models as a socio-technical system. The decision-oriented approaches focus on the carrying out of entrepreneurial actions and decisions of a firm. This first process of transformation is the basis for the reconstruction of the model enterprise which is planned to become the practice firm.

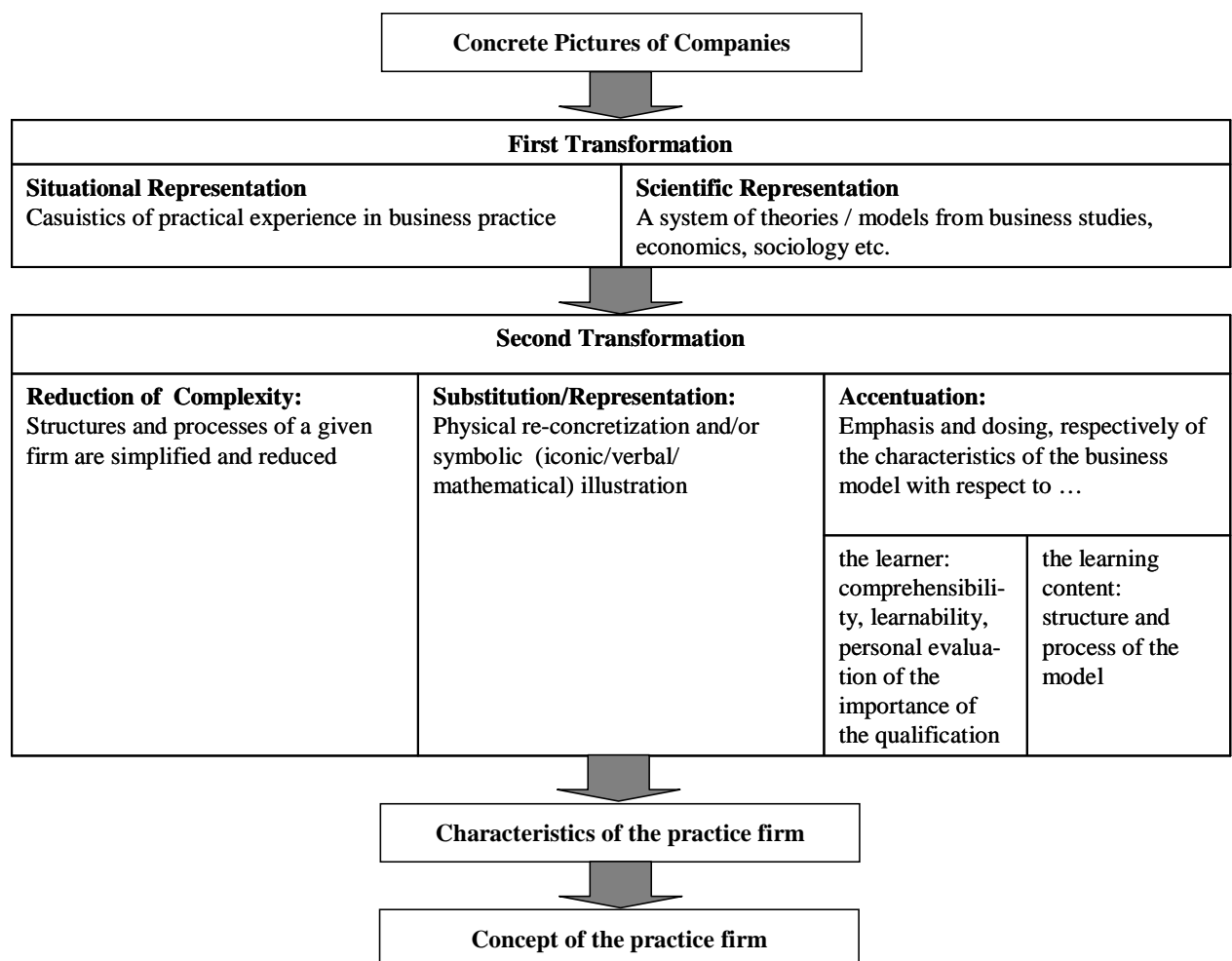
According to Reetz, the second process of transformation which is the building of a model from precise entrepreneurial ideas can be arranged in three simultaneously proceeding steps. These are simplification by reduction, substitution and accentuation (cf. Reetz, 1986, p. 353-354).

The step of simplification means a reduction of the complex original. In order to do so, interactions of departments and work stations can be simplified or reduced in number. This also means that the number and variety of activities inside one and between several enterprises are reduced compared to the processes in the original firm (cf. Reetz, 1986, S. 353-354).

Substitution refers to the replacement of real-life elements or just symbolically to true-to-life representations in the model. Physical representations in practice firm concepts are often open-plan offices. Stores or manufacturing sites in most cases are only symbolically represented. This is due to competing conceptions of learning. On

the one hand there are concepts that are based on environmental and behaviouristic approaches; they focus on true to original physical representation of stimuli. As a consequence they provoke patterns of behaviour that can be applied in other situations. The cognitive concept of learning, on the other hand, favours a reduction of reality in order to obtain a higher degree of transparency. According to the latter, learners achieve a sort of cognitive map when they are confronted with a transparent design of the learning environment. Knowledge is stored and can be transferred to new situations in form of patterns of action.

The step of accentuation highlights precise characteristic features of the company's model with respect to the learner and the learning content. Practical learning and the development of corresponding competences play an important role in this context. The qualification process in the model on hand is meant to meet the learners' needs. The accentuation in this context should be realized with respect to the importance of qualifications for the learner as well as to the comprehensibility and learnability, meaning the didactic treatment of contents. The feature characteristics of the learning content "practice firm" are linked to the learner-oriented accentuation. These in particular relate to the entrepreneurial model structure and inherent processes (cf. Reetz, 1986, P. 351-354). The design of the model according to Reetz:



**Figure 1. Construction of a practice firm (place, where students train entrepreneurship) as business model (according to Reetz, 1986, p. 354).**

## **The Doing-Gender-Approach and the Managing Gender and Diversity Approach**

The "doing gender" approach has become a synonym for the social construction of gender in gender research. In this context, "doing gender" means that it is not the gender or the gender identity of the individual itself that is being considered but the fact that "gender" is reproduced in social processes. This concept has to be differentiated from former approaches that implicitly assumed that there is a naturally given difference of genders and cultural specifications are regarded as simple reactions of society on the facts of life (cf. West/Zimmermann 1987). "Gender" in this context is considered to be a continuous process of formation caused by human socialisation (cf. Gildemeister, 2004, p. 132). The "doing-gender" approach emanates from the sociology of interaction. In order to understand its point of view it is necessary to examine theories of interaction in sociology. An interaction takes place when people are physically present and notice and react to each other (cf. Gildemeister, 2004, p. 133). It also represents a formative process which may contain constraints, and in which persons take actions without being able to escape these constraints. In this context the gender identity becomes significant since "doing gender" stimulates processes that show interaction. *"Jede Interaktion basiert auf Typisierung und Klassifikation. Klassifikationen sind in umfassendere Wissenssysteme und in eine Vielzahl institutioneller Arrangements eingelassen, über die Verhaltensregelmäßigkeiten und situativ angemessene Handlungsmuster zuverlässig erwartbar werden."* [Each form of interaction is based on typing and classification. Classifications are embedded in more extensive knowledge systems and in numerous institutional arrangements, through which behavioural regularities and patterns of action which are appropriate to the situation are reliably expected] (Gildemeister, 2004, S. 133). "Gender" in this context becomes a category that minimally differentiates one person from another and that is based on developed stereotypes of the female and the male within an assumed different institutionalization. The category "gender" thus provides systematization and regulation for the surrounding world. The process of systematization is determined by the institutional conditions that are surrounding us (cf. Gildemeister, 2004, p. 133). This general sociological approach concerning the category gender was chosen to direct the social perspective towards the issue of gender and foundation of an enterprise without explicitly addressing the topic foundation. This general perspective rather highlights how sexes are shaped in general social, western orientated institutions, which facilitates the transfer to foundation institutions.

The managing gender and diversity approach is particularly suitable for reflecting on and deconstructing processes like this. It recognises the heterogeneity of the members of staff as a strategic instrument. The existing diversity in a company is not only tolerated, but strategically used to increase the success of the company (cf. Koall/Bruchhaben, 2005, p.17). "Diversity" deals with the individual personality, thus with persons' differences and similarities. Due to growing internationalization diversity of staff members has become the centre of interest of numerous organisations. By this strategic approach individual abilities, experience, competences and qualification are meant to increase the success of companies. However, it is often a big challenge to overcome monocultural ideas, prejudices and resistance to change. Obviously there is a necessity to include these processes in qualification seminars (cf. Vedder, 2006, p. 7).

The appreciation of diversity in staff members aims at achieving a productive overall atmosphere in the company, preventing discrimination of minorities as well as improving equal opportunities – particularly as regards gender.

The list of differences that should be taken into consideration in gender and diversity management is long. It starts with personality traits goes via demographic data such as marital status and age to organizational characteristics such as staff membership in the company and status in the company's hierarchy. The list takes into account differences in outer appearance such as gender, ethnic background, age and physical handicaps as well as individual differences such as character, sexual orientation, religion, competences and life style of a given person (cf. Koall/Bruchhagen, 2005, p.17, also Vedder, 2006, p.9-10). Stuber considers the focussing on perceivable differences as a too strong reduction of complexity which might lead to the elimination and ignoring of certain factors, in particular since not all perceivable differences can be observed but can only be assumed in a given situation, take the sexual orientation of a person as an example. Moreover it is the particular cultural and social background that determines the relevance of these differences (cf. Stuber, 2004, p.18). Stuber describes this risk as follows: *"Ein besonderes Risiko besteht in der Reduzierung der ausgewählten Unterscheidungsfaktoren bei gleichzeitiger Betonung von Unterschiedlichkeit im Sinne von (trennendem) Anderssein. So entstehen allzu leicht klassische Feindbilder zwischen einigen wenigen Gruppen: denjenigen, die der Norm entsprechen, also „normal“ sind, und denen die sich unterscheiden“* [There is a particular risk in the reduction of a selected number of differentiating factors and at the same time emphasis on dissimilarity in the sense of separatively being different. Thus, well-known or traditional concepts of the enemy between some groups occur: those who correspond, meaning they are normal, and those who are different] (Stuber, 2004, p.18).

As a conclusion it can be stated that diversity in the sense of variety picks out several factors of dissimilarity as a central theme. In Germany aspects such as gender, age, moral concepts and education are central factors. Remarkably, the ethnic background plays an inferior role only (cf. Stuber, 2004, p.19).

In activity-based simulations the "doing gender" phenomenon can be uncovered by means of reflective phases and thus be integrated into the managing gender and diversity concept. Persons interested in the qualification thus can be effectively sensitized for the topic of start-up businesses. Furthermore, the platform of gender and diversity sensitized learning provides a deep insight into gender specific questions on start-ups.

## **RESULTS AND DEVELOPMENT OF THE MODULE**

### **Course of investigation and first results**

To be able to advance the teaching/learning method "practice firm" into a start-up simulation for universities that includes gender and diversity sensitiveness an investigation was carried out into activity-based simulations in entrepreneurship education: This chapter discusses the investigation and its results. The following chapter focuses on the development of the modules and their application. The emphasis of the following description of the survey is predominantly on the investigation of the general use of action-orientated seminars at universities. This first step is significant to interrogate the basis for a simulation of gender specific situations in regards to business start-ups.



If this basis was inexistent the fundament for experiencing gender-specific processes would be missing. The investigation was carried out by means of a multi-level investigation method including forms of knowledge transfer between universities and companies, chairs in entrepreneurship and business start-up related initiatives at universities and by additional internet enquiries. In doing so it was possible to form a comprehensive picture of present training firms resp. of the current state of simulation methods used at universities for the development of didactic innovations.

A first investigation was carried out by an e-mail questionnaire among 197 relevant persons involved in entrepreneurship education at universities; the questions that were asked referred to the potential carrying out of the simulation method "practice firm" and its implementation in those university seminars that met the criteria of a practice firm. This method was chosen to receive a first impression concerning action-orientated seminars at universities. As there were no up-to-date studies available. A general conspectus was gained by the use of the questionnaires. In order to be able to categorize a given lecture as a "practice firm" or business start-up simulation the following aspects were defined as determining factors:

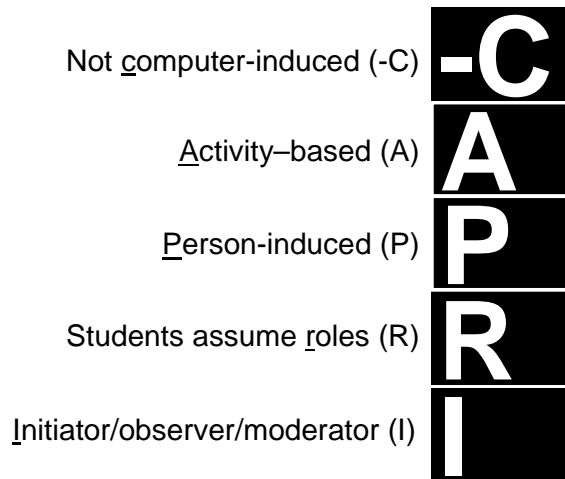
- A high proportion of active learning which is necessary in order to enable problem-solving, self-reliant and self-reflective working and learning.
- All kinds of activities are initiated by persons; in contrast to computer simulations this means that any kind of activity will be initiated by persons who are physically present (above all by students).
- No computer induced activities; Computer induced activities were defined as a disqualifying criterion since it is essential for successful learning by means of a training firm that the method focuses on the interaction of students and on the importance of their independent decisions.
- Active role taking by students; the concept of a pre-defined role might ease the identification with the business start-up and the involved persons. In addition to that it allows reflecting decisions as well the achieved results irrespectively of one's own person (cf. Baur/Marti, 2000, p.41f).
- The university teacher as initiator / observer / moderator. Lecturers should control or 'navigate' only in the exceptional case (cf. Ebbers, 2004, p.156).

89 universities answered the e-mail, 57 of which had filled in the questionnaires referring to a total of 138 seminars. A further number of 32 universities gave information via e-mail that there no similar learning opportunities are available. The results of this first investigation can be summarized as follows:

- There is a very high diversity of concepts in the field of business start-up qualifications at German universities.
- The methodology in general is rather vague and the application of a specific method or other is hardly ever tied to a particular basic theory.
- The term "simulation" is used in a too general way, hardly any theoretical references can be found. There is a wide range of what is called "simulation", reaching from project work in cooperation with people from real-life business via business plan design in individual work to complex business games and training firms.
- Numerous lectures meet single criteria of a practice firm, only some of them, though, combine all of them.

- There is a wide field of definitions of what the term "practice firm" actually means.

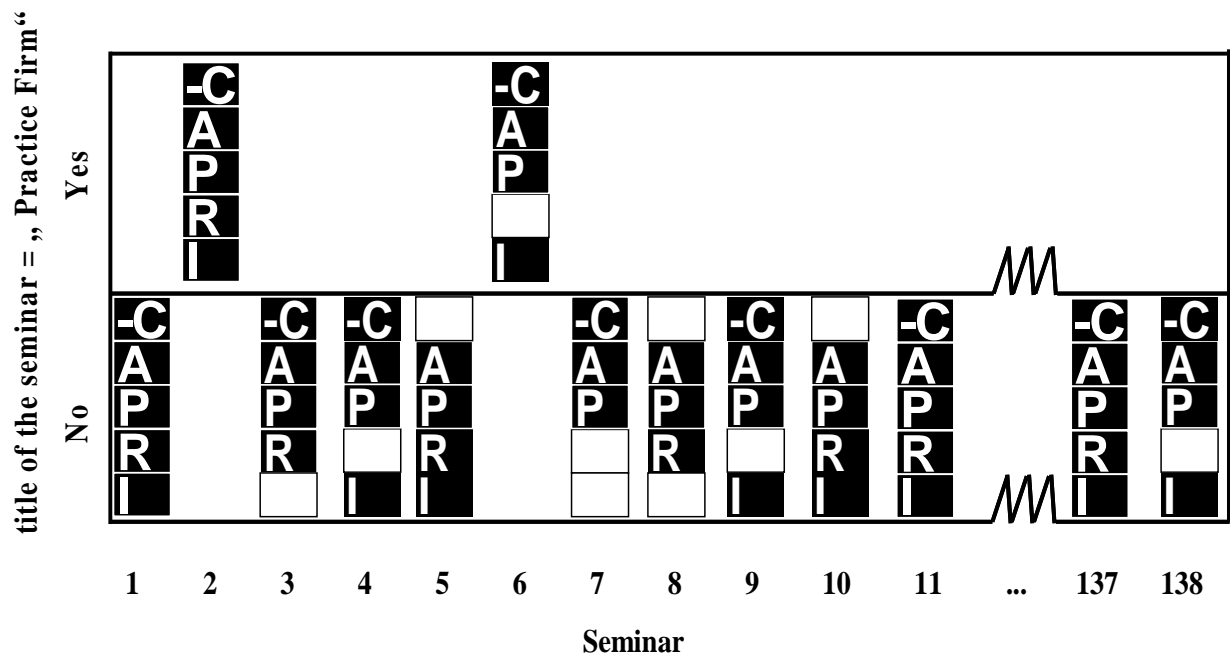
According to these results, the authors will try to categorize the investigated seminars with respect to the above mentioned criteria of a practice firm and by examining if in fact the seminar is called practice firm. The following figure shows a graph of one event that combines all important characteristics of a practice firm. A black bar is allocated to each criterion that was met. Criteria that were not met remain white.



**Figure 2. Example of a university course that meets all the criteria of a practice firm (illustration provided by the authors).**

By categorizing all seminars according to the following illustration the obtained research results that were summarized above become obvious. The following illustration represents only an extract. It becomes obvious that only a small number of seminars are actually called "practice firms"; these can be found in the upper part of the illustration (seminars Nos 2 and 6). However, not all seminars that call themselves "practice firms" do actually meet all the necessary criteria (seminar No 6). The bottom of the illustration shows the seminars that are not entitled "practice firm" and it becomes obvious that they form the majority of the researched seminars. This group includes some seminars that meet all the criteria (seminar Nos 1, 11 and 137) and a range of seminars that meet them only partially, for example in case that students do not assume roles or the lecturer is not only initiator, observer or moderator.

The illustration clearly depicts the discord in terminology with respect to the term "practice firm". However, in both groups, i.e. in those that call themselves "practice firm" and in those that do not, there are certain seminars that meet up with all criteria. The fact that a seminar is entitled "practice firm", however, does not necessarily mean that it actually meets the criteria. Thus the upper and the lower part of the illustration provide the opportunity to depict all possible combinations of criteria. Moreover, it becomes obvious that only a relatively small number of seminars meet up with all the criteria (seminars Nos 1, 2, 11 and 137) and that there is a large variety of very different concepts of seminars in this field.



**Figure 3. Classification of seminars according to company style and number of criteria met (illustration by the authors).**

Due to the general disconcert in terminology concerning the term "practice firm" the term "activity-based business-start-up simulation" will be employed in the following. It is worth mentioning that the investigations could find some very interesting business start-up simulations in other fields of activity, such as gardening and landscaping or in the field of personnel management and organization. This shows that issues in the field of business start-ups turn out to be relevant for a lot of disciplines.

In a second round of questionnaires only those events were analysed in detail that met the criteria of practice firms to the greatest extent. This meant that computer-induced events were excluded from the start. Another prerequisite was that participating and observable interaction were possible according to the answers given on applied methods in the first questionnaire. Seminars that applied the activity-based simulation method only in group work and off lectures were not taken into account.

Thus, 31 institutions and 47 simulation seminars were selected for the second investigation. Interviewees received a questionnaire in order to describe their simulation seminar for a closer analysis of Best Practice Examples with respect to

- general conditions
- target group and overall aim
- aspects as regards content
- use of methods and
- Management style in the start-up simulation.

17 universities returned their questionnaires on 26 seminars. Nine simulations were chosen that met the criteria of the practice firm method and

- offered the opportunity to observe the students in this simulation as regards the doing gender and managing gender and diversity (MGD) approach and
- were planned to take place in the summer term 2007 respectively in the winter term 2007/08.

Another six lecturers were chosen for expert interviews. These were carried out only in case that it had become obvious in the second, more detailed investigation that the events corresponded to the concepts and criteria of practice firms and

- that the seminar is essential for a comprehensive analysis of practice firms at federal universities , **but**
- is not suitable for participant observation due to internal reasons **or**
- is no longer available (in most cases internal reasons, personnel-wise or organizational, were given; another reason was that the project practice firm was so successful that it directly turned into a real-life firm to the market).

The following figure provides a survey of the most important aspects during the participant observation and expert interviews:

<b>Observation</b>	<b>Expert interviews</b>
(The study of the following aspects was carried out by taking into account the MGD-approach, activity-based learning and simulation)	
- Overall aim and educational objective	- Overall aim and educational objective
- Target group and its members	- Target group and its members
- Aspects as regards content	- Aspects as regards content
- Application of methods	- Application of methods
- Processes in working	- Significance of active learning
- Media equipment and use of media	- Experience close to reality and simulation
- Communication	- Aspects of Managing Gender and Diversity
- Role-taking and group dynamics	

**Figure 4. Aspects of participant observation and expert interviews (illustration provided by the authors).**

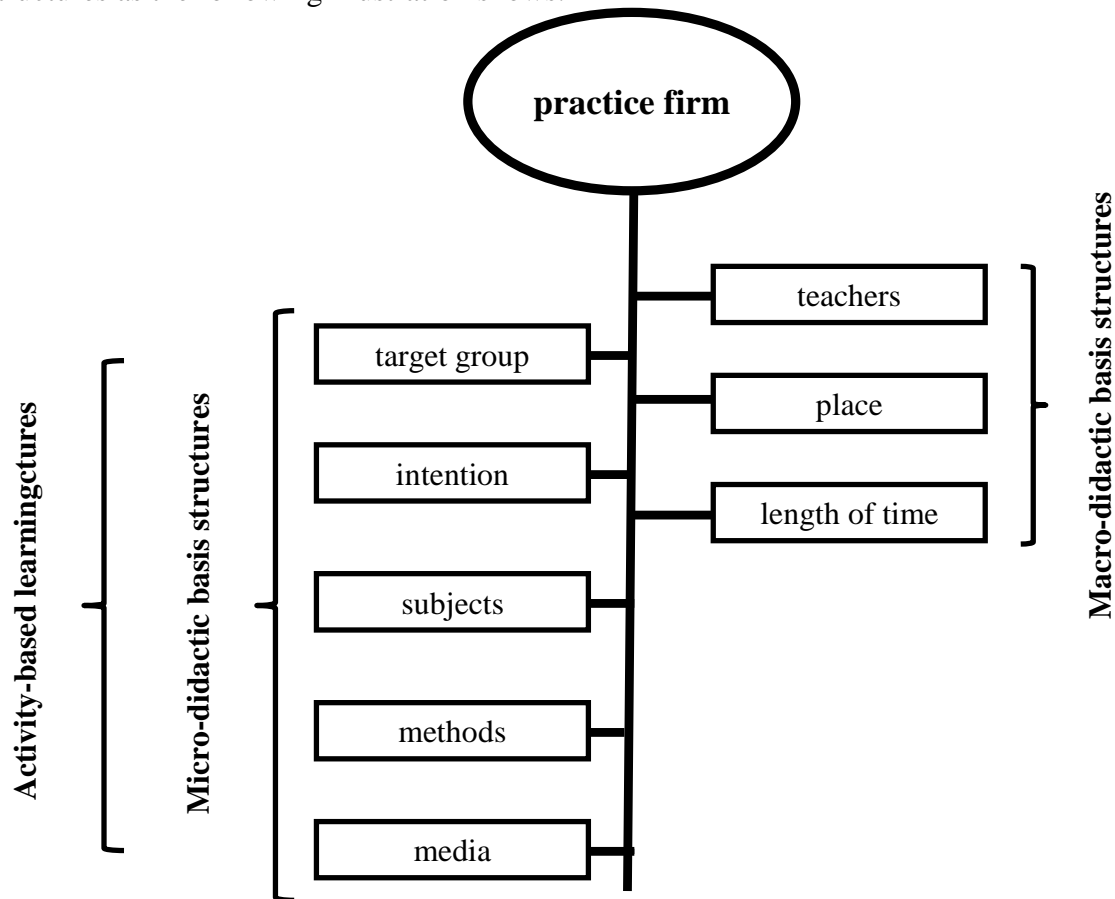
The first result of the second round of investigation including active observation and expert interviews once more is the inconsistent understanding of the concept of active learning as well as of the term 'method' in general and in particular of the method of simulation and the "practice firm" method in particular. Nevertheless the variety of concepts provided valuable impulses for a further development of modules for the DIANA project. Within the context of the analysis of the questionnaires also the question concerning consideration of gender and diversity aspects in the conception of seminars should be answered. However the result was disillusioning. There are, though, no prototypes for the integration of the managing gender and diversity approach in business start-up education. In fact, it became obvious that "gender" does not play a significant role in the seminars. More detailed analyses of the collected data in the future will probably provide more results.

### **Development and application of modules**

The essential element of the project is the conception of an activity-based and holistic business start-up simulation in the form of six modular components. The development of the qualification modules is based on a literature research and on the results of the

investigation (analysis of potentials) – and thus on the particularities and strengths of existing activity-based seminars. The theoretical setting of the development of modules is based on concepts of active learning, simulation methods and the doing-gender approach.

For the conception of a specific practice firm it is important to take into consideration formally constant and according to contents variable micro- and macro-didactic basic structures as the following illustration shows.



**Figure 5. Basic setting for the development of modular components (according to Ebbbers, 2004, p. 213).**

Since the development of modules is based on these basic structures, the fundamental considerations as regards content configuration will be explained more in detail in the following.

The focal points as regards the content of these components are the seed phase and the start-up phase comprising the six topics: cooperation/networks/teambuilding, form of organization, marketing/sales, financing, taxes and succession. The six modules are supposed to be sequential but can also be applied separately.

On the basis of these previously mentioned considerations a first business start-up simulation was carried out at the university of Hildesheim in the winter term 2007/08. The modular components were chosen and applied according to didactic considerations such as target group, educational objective, required examination results, time-frame, general conditions and availability of media. On the basis of the evaluation results obtained from this first application, a further development of the modules for a

future implementation at the universities of Lüneburg and Hildesheim in the summer term 2008 is being planned.

The managing gender and diversity concept is represented in all modules as a cross-sectoral topic. Each component includes a particular introductory presentation which can be used as a topical introduction to each seminar in general. The decision to use this introduction or not depends on the participants' previous knowledge. In order to be able to use the modular components in a flexible way and well-adjusted to a specific target group, we developed a compendium that provides questions and answers on important business start-up topics. This enables lecturers a more flexible structuring and focussing and at the same time provides background knowledge. Apart from instructions how to apply the offered simulation and methods in the sense of sequential simulation seminars this material will soon be published in a reference book for lecturers.

The methodical frame of the modular components as regards content is built up by the so-called setting. The setting determines a variety of business areas and thus includes a number of potential business ideas. Besides the setting predetermines profiles of persons – males and females - who want to become self-employed. For the development of these profiles it was important to take into account the important aspect of diversity. Students assume the roles of potential entrepreneurs and are challenged to cope with identifying and dealing with the facets of this profile, possibly even of the opposite sex.

In principle, both the setting and the profile descriptions can be readjusted to any specific target group. In this context it is important to point out that the professional competences and skills gained in the qualification modules with respect to setting and business idea can be transferred to any other business idea. Moreover the development of professional competences is only one of the objectives of the qualification. As was mentioned before, the focus is on the forming of methodical and social competences (gender and diversity competence) and on the awareness of professional self-employment as an alternative to dependent employment. The qualification modules are expected to evoke a greater variety and a more multi-faceted picture of entrepreneurship. It is in particular the focus on the aspects of gender and diversity-sensitivity of the teaching/learning modules that contributes to the students' reflecting and questioning their own behaviour in the process of work at any time in the simulation process. In doing so, gender stereotype attributions are uncovered and thus can be reconstructed. This is intended to promote self-aware entrepreneurial behaviour in female students in particular. It is especially the group of female potential entrepreneurs that can profit from experiences gained during the simulations.

## **CONCLUSION**

The authors of this paper assume that an increased awareness of the individual opportunities and risks of entrepreneurship can be achieved by means of the described innovative form of activity-based and practice-oriented qualifications, be it through a business start-up or succession. Above all, it will be easier for female students to estimate their potential business start-up more realistically. The possibility of reflecting "doing-gender" within the simulation sequences means that male students can be made aware of this process and, as a consequence, can become more aware of their

own behaviour in their future real-life business start-up and thus may profit from the diversity of the business start-up network more efficiently. For this reason it will be necessary to implement more action-orientated seminars at universities. The surveyed result clarifies that universities rather veer away from practice-orientated teaching methods than approximating them. But the simulation process is the only way of exposing gender gaps within the context of business start-ups. Therefore the issue of gender is almost disregarded. It does not seem classified as relevant so far anyway, although the result of the survey concerning the willingness to found a company shows its significance. The implementation of the modules introduced in chapter 3.2 might be a starting point to initiate change concerning teachings at universities. The opening of seminars regarding the reflection of gender gaps in the context of business start-ups could sensitize the students for the gender-issue. Changes in the behavior of the participants due to the introduced modules will be closely observed in the future. The intention is to identify a way to raise the awareness for the reality of business start-ups concerning gender aspects.

The option of becoming self-employed can thus be purposefully decided upon, based on a reflected socio-cultural perspective according to circumstances at the end of university studies or at any other chosen point in time in the individual life or career plan of a given person.

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