Study-related diversity: a new paradigm for higher education institution diversity management

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Abstract The student body is becoming more heterogeneous, and this diversity creates new challenges, for teaching and support staff as well as for the students themselves. However, it also creates potential for successful teaching – provided that diversity is seen and used as a chance and an opportunity. In order for this to become possible at all, it is necessary not only to acknowledge, but also to manage diversity. And to manage diversity in the context of a university means to identify the aspects that are relevant for the institution and, that is, relate these to the students' being successful in university.

In order to improve both the analytical and descriptive capacities for study-related diversity, CHE has developed a new kind of student questionnaire that is innovative for Germany: 'CHE-QUEST'. This paper describes the method of this instrument, the results and some of the consequences seen by the participating institutions, and how such an approach might help to develop a truly student-centred teaching environment, leading to individualised learning in universities.

Key terms: diversity; teaching; management.

Introduction

From several international comparisons – the OECD (2010) the TIES project,¹ EUROSTUDENT² – as well as national studies, such as the 'Sozialerhebung' (Bundesministerium für Bildung und Forschung, 2010), we know that the German education system is very selective after the primary and secondary school levels. This means we have strong evidence that young people do not succeed in the educational system based on their abilities alone but very much on their family background. Family background heavily influences the assessment of the students' performance and shapes their decisions related to how and where they choose to continue their education. At university, this selectivity not only leads to a very homogeneous student body, where the children of university graduates with German roots are privileged, but also to a comparably low drop-out rate. Apparently, this

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leads to a strong assimilation of the – comparably few – 'other' students: at German higher education institutions (HEIs), we witness just minor disadvantages for non-traditional students compared to the traditional students. In some respects these disadvantages exist, but they are a far cry from what we see in other countries, where some aspects of diversity are strongly correlated with a decreased probability to do well at university. Over the last few years, the German education sector has experienced a considerable amount of reform and change, and we are now starting to see the first signs of improvement. The problem was (and still is) that the probability for students to even reach the required qualification for admission to university is strongly correlated with family background, as demonstrated by the 'Sozialerhebung'.³ As a result, the probability of continuing on to an HEI is already very much restricted while still at school; namely, during the selection of the secondary school type, typically beginning at the end of the fourth grade in most Bundesländer⁴ – and with that decision, the likelihood a child will later go on to university is strongly affected.⁵

It is apparent that Germany comes from a history of strong selectivity in education, but we need to move further to a future of integration and inclusion, as demanded by our extraordinary demographic developments projected for the coming decades (Leichsenring, 2011). And should we be successful, all experience from other countries indicates that the less selective our school system becomes, the stronger the correlation between family background and study success will also become in German higher education. Since we cannot afford for all the young people who finally find their way into higher education to succeed with just a lower-than-average probability, we need to improve our universities' approach to diversity, starting today. While this idea is not yet widespread, there are several new approaches to be found today at German universities:

- In a project called 'Educational Diversity' at the University of Applied Sciences Cologne, the university develops instruments to identify different learning types. The goal is to offer learning environments from which different learning types can profit.⁶
- In the project 'ZEITLast', the University of Hamburg explores the differences in time consumption for studying and how the university can support time management through curriculum changes.⁷
- The University of Kassel has developed a language proficiency test for all first-year students ('KoDeS') in order to help them discover the particulars of academic German. This test helps the university teachers to understand the language problems many students encounter when faced with academic texts, and furthermore, based on the results, it enables the university to offer tailor-made courses during the first semester.⁸

In the project, 'Vielfalt als Chance', we explore yet another approach: Through the student questionnaire, QUEST, we can combine socio-demographic data with psychometric data that show how well the students can adapt to university. We also included aspects of the personal life of the students – for example, activities and social contacts. The idea is that socio-demographic aspects are not enough to predict study success – in the German higher education system even less than anywhere else. If we want to deal with diversity in higher education, we need to define which aspects in which students differ from each other will encourage and which will restrict success – that is, study-related diversity. This may include different aspects for different institutions, but they need to be related to study success, in a very broad sense: to be as successful as possible on your own standards, to rise to your own potential. This might have been easier in times when universities educated with one major goal: to produce scientists and researchers. Today, when they educate a variety of different kinds of professionals, it is much harder to identify the true potential of a student and adjust the learning and teaching context accordingly. So, the idea of study-related diversity is also closely related to the Bologna-idea of student-centred teaching and learning: What does the student need to learn to reach his or her goals, taking into account what he or she already brings with him or her?

Mutual adaptation and higher education as a successful process

For the QUEST survey, CHE Consult has adopted an approach that is, methodologically, completely new in Germany (Leichsenring et al., 2011). The survey recognises the students' various levels of adaptation to both the requirements and conditions of studying (not restricted to learning styles, but including the different academic and social challenges studying consists of – see the QUEST-Factors discussed below) and the alignment of these with socio-demographic characteristics. The survey uncovers the strengths and also the deficits for specific groups of students in adjusting to their studies and additionally shows where adaptation – meaning a mutual adaptation process between students and university – might succeed, or rather, not succeed.

While we have a significant amount of data at German HEIs on how the students assess the study conditions, we do not know a lot about the students themselves: we do not have much data at an institutional level on the diversity of the student body. Apart from gender, age, nationality and some information on the qualification for admission to higher education, most universities do not have reliable information on their students. This means also that, so far, we have only a little knowledge about the connection between diversity aspects and study success. QUEST wants to bring those two perspectives together: by knowing more about how students deal with their situation at the university, the institutions get information about how to adjust – specifically, the study conditions – according to the diverse needs

of the students. Thus, a mutual adaptation process can be established (Tinto, 1993). The student survey is introduced not as part of university procedures but as an anonymous and voluntary survey, partly in order to respect existing privacy laws, but also in order to respect the current university culture that sees the student as an independent and self-subsistent adult (whereas data usage in teaching and support could be perceived as an unwarranted intrusion into the student's autonomy). This means there are only group-related results, with no individual information.

Figure 1 illustrates the mutual adaptation process: It shows the areas from which conditions contribute (the students, the institution) to the adaptation process during study or the student experience.

The *students* bring a lot of characteristics into the study situation, such as their knowledge, their goals and expectations, and other personal characteristics. This constitutes a study-related diversity that can be measured by CHE-QUEST. Although these characteristics are partly 'hard-wired' and not easy to change; the *study process*, consisting of teaching, consulting, support, but also confrontations and learning processes, is able to change the student who is going through that process in many ways. Some of the students' characteristics may change, some may become part of the experience, some may feature as obstacles towards study success that can be relieved by the *institution*. The institution also brings in characteristics, such as its strategy, its fields of expertise and its structures, some of which seem to be 'hard-wired' and unchangeable, but all of them can in fact be a part of the mutual adaptation process, and can, in the long term, adjust to students' needs.

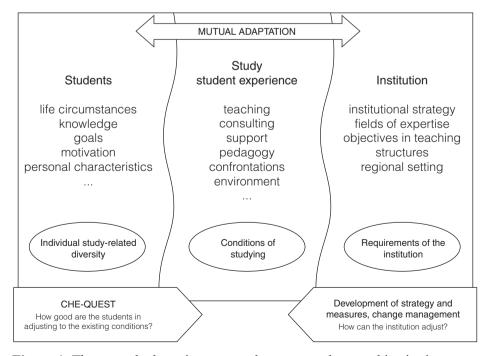


Figure 1: The mutual adaptation process between students and institution

The aim of a HEI then must be to be able to further shape studying into a process of mutual adaptation, including the whole institution while being aware of aspects that might influence the conditions of the student.

So, in our view (see Figure 2), if higher education is a successful process:

- it is a process of mutual adaptation between students and institution
- it makes the student become an academic this may mean different things in different fields and at different times, but generally the university experience needs to demonstrate a visible difference between a person attending university and one not
- the institution becomes enriched⁹ this means that by watching the students carefully (and every new generation specifically) and by dealing with them appropriately, the institutions learn something new about the world and develop new and better ways to teach the students and deal with the younger generation.

If higher education is a successful process...

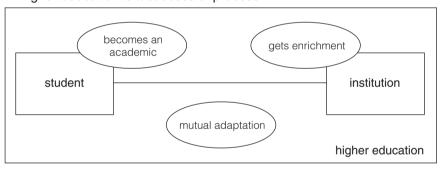


Figure 2: If higher education is a successful process

These are the basic ideas behind the development of CHE-QUEST. During the evaluation, it was possible to identify various student types. It is now no longer necessary to classify students at an HEI as either 'normal' or 'deviating'. The complexity of 'normality' becomes tangible and can be made the basis for action, allowing us to ask: What kinds of services and support, as well as methods of teaching and learning, would be helpful?

The student questionnaire CHE-QUEST

CHE-QUEST is capable of demonstrating how certain groups perform in comparison to the other students at either the same HEI or another altogether. This offers the HEI the chance to verify the frame conditions of the study experience in terms of how they either complicate or facilitate this adaptation, and how these

conditions could potentially be changed. About 8,800 students from the partner institutions in the project 'Vielfalt als Chance', took part in an initial round of surveys in November 2010. The partner institutions were:

- 1. University of Applied Sciences Bremen
- 2. University of Applied Sciences Hamm-Lippstadt
- 3. University of Applied Sciences Ruhr West
- 4. University of Applied Sciences Zittau/Gorlitz
- 5. Bremen University
- 6. Europe University Viadrina Frankfurt/Oder
- 7. Technical University Munich
- 8. Regensburg University

In each case, all students of the respective institutions, including doctoral candidates and exchange students, were invited to participate in this survey, and between 9% and 49% of the student population of each HEI answered the questionnaire.

Design and content of the questionnaire

The CHE-QUEST questionnaire consists of three parts. The first two parts deal with socio-demographic and psychometric aspects. The third part of the survey offered the project HEIs the opportunity to put forward questions specific to their universities. These questions were directed at the universities' own students only and referred to offers and structures of the respective university (and it should be noted that this part of the questionnaire is not being dealt with in this paper).¹⁰

Socio-demographic data

The data collected in part one has not simply been confined to the six traditional categories of diversity (gender, age, sexual orientation, ethnic background, religion, disability), but instead also includes university-related aspects (e.g. course and study type and performance parameters, such as school leaving grades and self-assessment of school performance) as well as criteria for the personal living conditions of students (contact with former social environment, family responsibilities, activities besides the university, etc.).

Psychometric data

In part two, 74 items are presented, each representing a particular behaviour. The participants of the survey are requested to evaluate themselves for each behavioural trait based on a scale of 0 to 100 percent. Initially the psychometric QUEST items are factorised – that is, the items with similar answers are put together into factors by means of statistical methods. This leads to the establishment of the ten QUEST-Factors (see Figure 3). In the questionnaire, there were items such as:

- I often feel exhausted. In the last two weeks I often had stomach pains. as part of the factor *frame of mind*
- I have several clear goals and work systematically to reach them. I have a clear idea of my professional goals. as part of the factor *determination*
- I had another idea of how studying would be. I feel overextended with the requirements. as part of the factor *expectation*
- I learn well in groups with other students. I also like to meet my fellow students privately outside the university. as part of the factor *social integration*
- During the week I often long for my parents' home. I am confident in myself.
 as part of the factor *extroversion*
- I know who to turn to if I have questions concerning my studies. I ask for help when I have serious problems. as part of the factor *accept assistance*
- I often start learning only shortly before the exam. I am highly motivated to study. as part of the factor *diligence*
- In my choice of studies I have been led mostly by my interests. I see studying as a possibility to develop one's personality. as part of the factor *intrinsic* motivation

Both the validity and reliability of these factors have been confirmed in the testing phase (Leichsenring et al., 2011). The higher the figures, the greater the level of adaption to the requirements and conditions of the scientific university study programmes. However, low figures do not indicate, for example, an 'inability to study' but rather signify discrepancies between the (partially implicit) requirements and conditions at the university, and the students' conduct, expectations, interests and objectives.

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The ten QUEST-Factors	
Frame of mind	Identification
Determination	Expectations
Theory orientation	Social integration
Extroversion	Accept assistance
Diligence	Intrinsic motivation

Figure 3: The ten QUEST-Factors

Study-related diversity

In a second move, the results of the survey were subjected to a cluster analysis, thus identifying eight groups of students who show a high degree of similarity with each other as far as psychometric questions are concerned, and who, at the same time, differ from the other groups. Even though the students in these groups are, of course, individually different, their most important collective characteristics allow for the formation of eight polarised types of students, which have been named as follows:

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- The 'Desired students'
- the 'Lonesome riders'
- the 'Pragmatists'
- the 'Disenchanted'
- the 'Dutiful'
- the 'Not-arrived'
- the 'Going-with-the-flow'
- the 'In-need-of-support'

Each of the types represents a group of similar size, except the 'Dutiful', which is only half the size of the others (see Figure 4). Thus, these groups represent a typology of reactions to the facts of studying. For each and every type of student, significant socio-demographic data can be stated – that is, data that these groups show to a more than accidental degree.

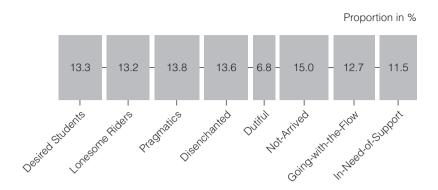


Figure 4: Overview of the proportion of student types (as a percentage)

This analysis makes it quite clear that difficulties in the adaptation process are by no means insurmountable and that this process can be supported by the university, for example, through improved communication, adaptation of the study structures or even changes to the pedagogy. Therefore, study-related diversity can provide impulses for an improvement and enrichment of the university. A key prerequisite, however, is better information and a better understanding of the successes or failures in adapting to study conditions.

The results of the psychometrics have been individually illustrated in a diagram and are presented below (the factors are listed in separate lines). The average value of each type of student is marked and noted in each line. The grey stripes highlight the part of each factor that accounts for the middle third of all participants. The column, 'Relation', illustrates whether the average value of the respective student type lies above (middle grey), below (dark grey) or in the middle segment (light grey). In the following description of student types, only particularly high or particularly low values have been highlighted.¹¹

For the purpose of this paper, only a selection of two out of eight student types will be presented: the 'Pragmatics' and the 'Not-Arrived' (see Berthold et al., 2011, for further discussion). These two types are similar in their interest in practical approaches (i.e., low figures in *theory orientation*), but differ in their figures for *frame of mind*.

The 'Pragmatists'

The performance of the 'Pragmatists' is above-average or average for all factors, but shows a relatively strong practice orientation, as the low value for *theory orientation* indicates (see Figure 5). This indicates that for this group the practical relevance of the course of their studies is comparatively important. The comparatively low value in *diligence* and the markedly above-average value in *frame of mind* prove also to be significant. The QUEST total value for this type lies at 7.83 with a standard

The Pragmatists

deviation (SD) of 0.36 (compared to the overall total of 6.55, with SD 0.99) and thus slightly higher than for the 'Lonesome riders'. 13.8% of the respondents can be assigned to this type with 49.1% of this group being female (in total 54.1%). The average age of this group is 22.5 years, with a 2.86 SD (in total 23.14, SD 3.84) and the average school leaving grade is 2.134 with SD 0.62 (in total 2.11, SD 0.64). The group's self-assessment of its study success probability is estimated highly at 91.4%, with 12.23 SD (in total: 86.79, SD 18.06).

RELATION [...] 4 ♦ 8.3 Frame of mind 8.0 Identification with the HEI 7.4 Determination Expectations 7.1 5.1 Theory of orientation 6.9 Social integration 7.6 Extroversion 8.2 Accept assistance Diligence 6.6 6.2 Intrinsic motivation 4 5 6 7 8 9 [...]

The segment that lies in the middle third of the overall survey.

Figure 5: The QUEST student type 'Pragmatist'

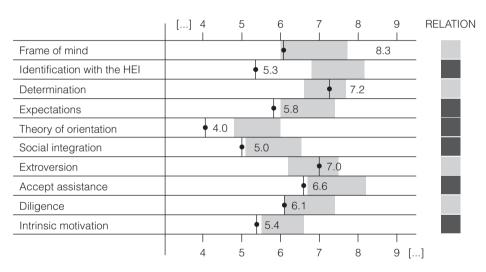
The 'Pragmatists' show a relatively strong practice orientation, are well integrated socially at the university and are very active in the field of sports. All in all, the results show that students of this type can adapt very well to the conditions and requirements of university study. The low values in *theory orientation* and *diligence* do not have any negative impact on the other factors. Rather noticeable is the low share of students originating from diverse cultural backgrounds. This type of student is reminiscent of what might once have been labelled 'typical students at a university for applied sciences', and in fact, this type of student is slightly disproportionately represented at universities of applied sciences.

The 'Not-arrived'

The student type, the 'Not-arrived', has a very goal- and practice-orientated approach to studying: for the factor *determination* a significant, good value is shown. Also significant is the value for *theory orientation* (see Figure 6). The

total QUEST value for this type is 6.38, with SD 0.66 (compared to the overall total of 6.55, SD 0.99). 15% of the respondents can be assigned to this type with 57.5% of them being female (in total 54.1%). The average age is 23.46 years, SD 3.59 (in total: 23.14, SD 3.84), and the average school leaving grade is 2.156, SD 0.65 (in total 2.11, SD 0.64), thus only slightly below the overall total. The respondents in this group estimate their study success probability to be 82.44%, SD 21.59 (in total 86.79, SD 18.06), which is below the average too. This type of student is disproportionately enrolled in education subjects (9.4%, compared to the overall total of 5.9%), and 20% are enrolled in a teacher training programme (in total 11.7%).

The Not-Arrived



The segment that lies in the middle third of the overall survey.

Figure 6: The QUEST student type 'Not-arrived'

The 'Not-arrived' students are comparatively determined – they know what they want to achieve and which steps to take to reach their aims. But this meets with little correlation among the other dimensions (such as in the field of *diligence*). Other aspects, such as socio-demographic ones, which could be associated with *determination* (like a certain closeness between job and studies or their later profession, or studying at the university of their first choice) are not particularly pronounced. This is surprising insofar as a disproportionate part of this group has already undergone vocational training.

This type of student is clearly struggling to 'arrive' at their university, as demonstrated by the low *identification* rate with the university. The reason for this might possibly be that the respondents are highly practice-orientated, but that they – unlike the 'Pragmatists' – cannot implement this orientation sufficiently

into their studies. This might be caused by the disproportionate share of teacher training and other state examination courses such as law and medicine as well in this type. Indeed, there is a special kind of practice orientation to these courses, but this often collides with the scientific orientation of the specialised courses.

This presents an image of a group that ultimately knows what it wants but clearly needs increased incentives and support in order to understand how its studies can be used to reach these goals. This poses the question: What would be conducive to increasing the identification with the studies, and thus create the prerequisites for a more active participation? As 15% of the respondents can be assigned to this type, HEIs should feel challenged to find additional ways of approaching and involving these students. Another question that arises: How can this type of student be assisted in identifying themselves with their goals and motivations and finding a place for these in their study programme? Change that includes this is necessary so that the students can actually 'arrive' at the university.

Discussion

The comparison of the two student types suggests that in the case of the 'Pragmatists', the HEI does a lot of things right, while for the 'Not-arrived' type the situation at the university is far from ideal. How could an HEI address these findings and reconsider its own part in the successful adaptation of the students?

- 1. Supporting structure: The comparison shows that the more troubled student type is less likely to know how to get *assistance* a finding consistent with other results of the survey. So as a first step, the institution needs to rethink the kind of assistance it is offering and amend it with the students' needs in mind. The QUEST results suggest that better *social integration* might be a starting point for how and what kind of assistance to offer assistance to the 'Not-arrived': Make sure that these students become part of a social network within the university through which they can get knowledge about available assistance. On the other hand, the 'Pragmatists' are a group that is very well *socially integrated*, and that *identifies* highly with the institution and knows how and where to get *assistance*. This might be a resourceful group that could support the institutional goals in various contexts, especially if combined with their practical orientation.
- 2. Introduction to studying: While the 'Pragmatists' easily seem to find all information they need to make their way through university, the 'Not-arrived' students, in contrast, struggle with disappointment: their *expectations* have not been met either by the university or by themselves, or even both. The comparably low figure for *diligence* might also suggest a starting point, because it also includes the concept of 'locus of control' that is, the feeling that it is possible to influence the outcome of an effort.

- 3. Enrichment: How can the institution use the characteristics and interests of the students as an impulse for improving its offers and structures? This question not only relates to administrative tasks but also includes teaching style and pedagogy. For example, a problem-based learning approach could meet the practical orientation of the 'Pragmatist' type as well as the 'Not-arrived' type and the more theoretically orientated students might also profit from such an approach. Another example is that the low figures for *expectations* for the 'Not-arrived' type as well as other student types have been an important argument at some of the project institutions for rethinking the structure of their introductory courses in the first semester or even developing semester-long orientation courses for those students who would like to know more about university before taking on studying. This points also to the very important issue of recruiting.
- 4. Recruitment: In Germany, we know that children from non-academic families decide over-proportionally against university, even if they have the adequate qualifications. So, recruitment needs to fulfil a complex task: Make sure that all possible students take on studying, and make sure that they do so in the field (and institution) where they fit best. The institution- or faculty-specific results of QUEST show which aspects need to be introduced into recruitment in order to further good adaptation processes.

The main benefit of QUEST, however, is that it allows an institution to identify those types of students that are of special importance on an institutional level (in comparison with other institutions) as well as on a faculty level (inter-institutional comparison), which is then the basis for strategic decisions: Which groups can be addressed by what measures? And, in the long term, which measures actually do reach the target group and support their adaptation to the study situation?

Perspective

A university study programme consists of more than courses and examinations. It is desirable that interdisciplinary competences are developed, that the students' self-sufficiency is encouraged, to broaden their personal horizons, to support the development of personality and to inspire reflection. However, it is disputed and not altogether clear what sort of role HEIs are to play in this. Teachers at German HEIs too often only feel responsible for direct teaching matters. What is more, at present, they have limited possibilities for acquiring an insight into how the students respond to their study environments. If HEIs wish to better discover the potentials of their present and future students and offer new forces of innovation, greater provisions are required that exceed the mere isolated support measures or advisory services now available.

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It is also necessary to work on comprehending the process of becoming an academic in all its complexities and to identify the 'set screws' for the enhancement and differentiation of successful study methods.

The results of the first round of QUEST lead us to the following observations:

- 1. We believe that among the QUEST student types it is the type 'Desired students' that represents who professors and also administrative staff have in mind when they think of the 'normal' students: students who know why they are at university, what they want to achieve and who are capable of achieving it, and who have leisure time besides their studies, filled by interesting jobs or hobbies. But we find that only 13% of the students resemble this picture. 87% adapt to university in another way than probably expected, some more, some less successfully. For the university, this sets the challenge to explore more and different ways of how the potential of each and every student can develop in the best possible way.
- 2. For an HEI, not only should the probable study success play a crucial role, but their students' *frames of mind* play a role as well. Two other factors may be decision-forming: the QUEST-Factor *expectations*, which not only includes the expectation the student has towards the university, but, even more importantly, the expectations the student has formed towards him or herself as a student, as someone who is capable of studying; and the QUEST-Factor *accepting support* it seems that the more difficult the situation of the student is, the more likely the student is to reach just a small value for this factor. This suggests that the more complicated the situation is, the less easy it is to know where to find help and how to accept it.
- 3. We need measures that help to identify diversity as a resource and display its quality of enrichment. Until now, we in Germany have initiated measures with few empirical means by which to judge what is required or the efficiency of these measures in delivering these requirements. Measures that help the students to help themselves are important, and those that help to adjust a study programme or an institution to the changing conditions in the world are as well. The connections and changes between conditions of the students and conditions of the institution need to be monitored. In principle, a large range of measures from practical support offers, such as day-care centres, to pedagogical innovation– should be taken into consideration. In order to be able to evaluate the appropriateness and the advantages of different basic approaches, new methods of analysis need to be developed.

This is the prerequisite for reaching a better insight into student perceptions and their individual worlds of experience, as well as for developing study design options. CHE-QUEST and its evaluation based on student types is helpful in that it does

not categorise students into 'normal' and 'deviating' groups led by prejudices, but rather acknowledges the complexity of 'normality' and makes this realisation the basis for decisions and actions.

It is important not to separate the manifold requirements and burdens students are facing 'inside' and 'outside' the university. Such a separation is impossible because these two components influence each other. The university should verify which of these aspects can and should be taken into consideration – not least in light of the university's strategic aims.

In order to provide HEIs with in-depth views into the situation and self-assessment of their students, and at the same time offer suggestions for the better management of diversity, the CHE-QUEST survey 2010 will be further evaluated. The additional evaluation will investigate how different target groups – for example, women, students with a migration background, those with family obligations, or health problems or physical handicaps – cope with adapting to academic study. In this respect the evaluation also aims to provide HEIs with an insight into the respective groups' levels of heterogeneity, and to identify the possible starting points for a change in managing these groups.

In winter 2011/2012 a second survey round with CHE-QUEST will be conducted. For the first time, HEIs not currently involved in the project 'Vielfalt als Chance' will be offered the opportunity to participate as associate project members. The results will be available in summer 2012.

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End notes

- See The Integration of the European Second Generation (TIES) website, at www. tiesproject.eu (accessed: 15 November 2011).
- See the EUROSTUDENT website, at www.eurostudent.eu (accessed: 15 November 2011).
- In Germany, of 100 children from families with high socio-economic status, 85 gain a qualification for admission to university, and 81 go to university in the end. Of 100 children from families with low socio-economic status, 36 gain admission and only 11 go to university. In the last few years, however, there has been a positive trend to a higher percentage of students from families with lower socio-economic status. See Bundesministerium für Bildung und Forschung (2010:103).
- Although some Bundesländer, such as Berlin, introduced the possibility of making this decision at the end of the sixth grade (that is, at around age 12 instead of 10), there is an ideologically motivated debate going on where one side wants to support the children according to their needs (therefore having different kinds of secondary schools, as is the German tradition), while the other side strongly advises teaching all children together in one kind of secondary school until the age of 16. In most Bundesländer, we now see a development where the traditional 'Gymnasium' (which offers the direct route, the Abitur, to university) remains, while all other kinds of secondary schools are combined into one, in which all kinds of qualifications, including the Abitur, can be achieved.
- The first PISA-studies also showed a strong correlation between family background and educational pathways, independent of performance. This improved strongly over the course of the last few years so that now Germany reaches the OECD-average. See Baumert et al. (2001).
- See the Educational Diversity website at www1.fh-koeln.de/educational_diversity/ (accessed: 21 November 2011; information only available in German).
- See the ZEITLast website at www.zhw.uni-hamburg.de/zhw/?page_id=419 (accessed: 21 November 2011; information only available in German).
- See the KoDeS website at http://daf.uni-kassel.de/projekte-1/kodes (accessed: 21 November 2011; information only available in German). The results of this project also hint strongly at a lack of teaching offers in academic writing, which today are not at all common at German universities.
- This is why we use the term 'diversity management' not only when it comes to staff but also with reference to students: It refers to the possibility of being enriched by diversity and of profiting from it, while other terms, like 'equity', seem to stress the idea that disadvantages and deficiencies have to be amended.
- For the survey in 2012, the results from these institution-specific questions were used to develop questions referring to offerings of the HEIs, which are suitable for all HEIs.
- Unless otherwise stated, the significant values reach $\alpha = 0.01$, meaning they are significant at a level of 1%. Significances point out that a correlation (e.g. spreading characteristics across several groups) is more than coincidental; in this case, the probability of a coincidence is 1%.