

## **ON THE MYTH OF A GENERAL NATIONAL CULTURE**

### *Making Visible Specific Cultural Characteristics of Learners in Different Educational Contexts in German*

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**Abstract.** The concept of a few values that can characteristically explain all units of culture (Schneider, 1968, pp.1-2) within any national context generally sounds promising. In order to take design-oriented decisions on culture-specific research questions, such characteristic values, particularly if already determined for many countries, would allow a massive reduction of effort. However, we were unsure if the contexts of academic and professional education allowed the adoption of such values without losing the characteristic information, which are crucial for designing context-sensitive e-Learning contents. In both educational scenarios we investigated the subcultures 'faculty', 'university', 'enterprise', and 'nation'. In this paper, we exemplarily discuss our study's results regarding one selected topic from our questionnaire, i.e. the 'role of the lecturer'. Actually, we found major differences between the investigated scenarios. Thus, we came to the conclusion that in our context, adapting, e. g. Hofstede's national values, would not lead to a learning design that takes the context-specific cultural differences into consideration.

### **1. Introduction**

In our research on methods to transfer e-Learning resources from one to another context, we investigated culturally motivated attitudes and expectations of learners. The motivation of our research is developing a toolset that supports educators particularly in developing countries, to culturally adapt Open Educational Resources that were produced in Western industrial countries (Richter & McPherson 2012) and more general, for the culture-sensitive (re-)design of e-Learning scenarios for international settings.

Myers & Tan (2002) and Ali et al. (2009) investigated the exposure to culture in journals of Business Administration (BA) and Information Systems (IS) in the North American context and found that the concept of a general national culture, the dimensional model, and the related set of national values of Hofstede (1980) were highly accepted and most frequently adopted: Myers & Tan (2002, p.25) reported in their study that 66% of the analyzed research papers based on Hofstede's dimensions and/or national values. Leidner & Kayworth (2006) analyzed 82 research papers from IS and Business Management that dealt with cultural aspects, and in those papers, approx-

imately 60% of the ‘culture-sensitive’ decision-making relayed on Hofstede’s dimensions and/or national values. As for the study of Ali et al. (2009, p.251), in 88,3% of the analyzed papers, Hofstede’s results were adopted. The authors of all three comparative literature-studies criticized a lack of sufficient argumentation: Why did the authors of the examined papers consider the chosen concepts, values, and/or dimensional models being appropriate for adaptation in their specific research context? Richter & Adelsberger (2011) investigated the exposure to culture-related topics in two European IS-Journals and came to very similar conclusions. As one possible answer, Johnston & Wrigth (2004, p.234) argued that ‘*There are other ways to operationalize culture, but we have chosen this one [...] it is the work usually selected by the researchers*’.

Many authors in the common literature criticize Hofstede’s and others’ approaches to reducing the highly complex nature of culture (Groeschl & Doherty 2000, p.14) to dimensional models and to then, deduce consequences for whole nations and all aspects of life from those very generic excerpts: In such dimensional models, the view on culture often is reduced to cultural values (Jackson, 1995), ignoring rituals, attitudes, and particularly rather short-termed characteristics, like fashion, taste, etc. Further general critique on dimensional culture models is stated on the missing effective selectivity of the dimensions (Cramer 2007, p.24), and the generalization of context-specifically collected data on full nations (McSweeney 2002; Ng et al. 2007). McSweeney (2002) argues that the particular dimensional values, which Hofstede and Hofstede (2005, p.28) claim are persistently valid (because of their relative design), are outdated, and Ng et al. (2007) speak of invalid results because of dependent sample elements (all participants in Hofstede’s study worked at IBM). Also, the concept of national cultures in general is criticized: Leonardi (2002, p.314) dismisses the concept of national culture and claims that a cultural differentiation is needed at least on the level of spoken languages within a country. Raven et al. (1971, p.1213) consider dimensional culture-models as an unacceptable level of simplification. Walters & Bird (1987) are of the opinion that the concept of culture itself is inappropriate because of the high risk to pigeon-hole the people. Pless & Maak (2004, p.130) put into question if culture should be a concept of similarities or rather describe the level of diversity-acceptance.

We adopted the culture definition from Oetting (1993, p.41) who defines culture as ‘*the customs, beliefs, social structure, and activities of any group of people who share a common identification and who would label themselves as members of that group*’. In order to develop and/or adopt e-Learning contents for/to certain contexts, we had to generalize needs and attitudes of individuals within those contexts. But on which level, is such a generalization appropriate in order to still meet the needs of the individuals?

For our research context, we isolated some particular issues regarding Hofstede’s national values that hampered the adaptation:

- We found that his national values are ordinal-scaled (Richter 2010): Thus, it was impossible to deduce concrete differences between national contexts from the size of distances on the scales.
- Hofstede & Hofstede (2005) state that their dimension Power Distance Index is related to the relationship to authorities. They deduced concrete effects on the relationship between learners and teachers. However, it is unclear who the learners consider being a respect-person in certain learning contexts.

- We were suspicious if the very concrete attitudes in national educational scenarios, Hofstede & Hofstede deduced (2005, p.53, p.97, p.135, p.178, p.215), actually applied to both, academic and professional education.

In the literature regarding appropriateness of dimensional culture-models and national concepts of culture, we found many doubts, but a lack of empirical evidence. Thus, we collected data in different educational scenarios to compare the results, and define the scope of our own collected data. In the following, the questionnaire and the settings for our studies are introduced in order to show the appropriateness and limitations of our approach. Afterwards, we discuss the results of our studies by choosing the example of the students' perception on the role of a lecturer and comparing the results from the different contexts. We define the following hypotheses and research question:

**H0:** There is a general national learning culture that is valid for all learning scenarios within this nation.

**H1:** Learning culture is specific for different learning scenarios.

**Research question:** If H1 is true, do certain learning scenarios have specific characteristics in common – is generalizing beyond the examined context appropriate at all?

## 2. Questionnaire Design

In the scope of our research on learning culture, several studies have been conducted. All studies used the same questionnaire on Learning Culture, which was given to the participants in their native language. The questionnaire was originally developed in German and has been translated to Korean by locals in order to ensure that the translation was context-sensitive and not literal (Pasick et al. 1996). We conducted a first test-study in the contexts of Germany and South Korea in 2007. This version contained options for free-text answers in which the students were able to state comments on the understandability and appropriateness of the questions. Further phases of refinement were undergone, each ending with test-studies. In those phases, not only textual changes have been made but also questions were taken out of the questionnaire due to a not clearly determinable cultural background (equal distribution in all tryouts and contexts). In cases where open questions remained, further ones were added. In the standardized version of the questionnaire (99 items), four test-questions were additionally implemented in order to ensure the appropriateness of the results. Actually, we did not need to take out any sample-element due to inconsistent answers. Before implementation, the recent Korean version of the questionnaire has been cross-translated by a native speaker.

The standardized questionnaire contains 99+4 items whereas additional seven items have categorical character (sample-element-number, nationality, birth year, gender, studied subject, number of semesters, institution). The culture-related items are answered on a four-point Likert scale. We did not provide a neutral answer-option because we wanted to force the participants to take a position (Garland 1991). However, since the questionnaire was to be implemented in different (national and societal) contexts, a risk remained that items might not apply to a specific context. Thus, we implemented an option to indicate this by providing a visually separated (from the regular answer op-

tions) field. The strategy worked: The ‘not applicable’ option seldom was used. The questionnaire was implemented as online and paper-based versions. For more information on the questionnaire and the results of the studies, please refer to (Richter 2011).

### 3. Study Settings

We conducted the study in its online version in German universities (spring 2010). From a list of all universities in Germany, we randomly chose 25 universities and asked each administration for support by inviting the students to participate in the online-survey using the internal e-Mail distribution system. 3 universities, the University of Cologne, the University of Applied Sciences Bonn-Rhein-Sieg and the University of Potsdam answered our request and sent the invitation with the link to the questionnaire to their students. After having rigorously deleted all incomplete (in the culture-specific section) responses, the following number of responses remained (Table 1):

Table 1. Learning Culture survey – response rates, German universities

	total # of students	responses	response rate	female/ male ratio	# of involved faculties
University of Cologne	42369	1400	3.30%	23.43%/76.43%	18 + ‘others’
FH Bonn-Rhein-Sieg	5621	298	5.30%	56.71%/42.95%	10 + ‘others’
University of Potsdam	20065	119	0.59%	39.50%/59.66%	3 + ‘others’

In a second wave, we invited traditional German enterprises from different sectors to involve their employees in the questionnaire. The implementation proved elusive because the enterprises did not have an own interest in the results and thus, did not want to invest working-time to completing the questionnaire. However, we were able to convince 7 DAX-noted enterprises from different sectors to participate with a small but randomly chosen number of participants. All seven enterprises agreed to randomly invite 25 employees. The agreed condition for participation was that those potential participants had a function in which further professional education was common in order to, e. g., be prepared for new tasks. The non-response rate was quite high, so that in 5/7 enterprises four and less employees completed the questionnaire. In the remaining two enterprises, which were a telecommunication concern and an energy producing concern, we received 7 and 14 responses (out of 25 invitees).

In a third wave, we implemented the questionnaire in South Korea. We chose South Korea for this comparison, because of the strong cultural differences in relation to the German context and because the technological state-of-the art and the living standard are similar in both countries. Additionally, like Germany, South Korea is a language-homogeneous country<sup>1</sup>. A blurring of the results because of different cultural

<sup>1</sup> Different to South Korea, in Germany, a lot of dialects are spoken. However, those derive from the same “high language”. Actually, the results of the study show that regrading learning culture there seems not to be an impacting difference between the eastern and the western part of Germany)

areas related to the spoken languages<sup>2</sup> (Leonardi 2002) can be excluded. The survey was conducted in Seoul. 40% of all South Koreans live in and around Seoul. Since by law<sup>3</sup>, it was impossible to collectively invite the students via the universities' e-Mail distribution systems, we implemented the survey in its paper form (Summer-Autumn 2010). In order to avoid applying subjective selection criteria, we chose the participants using a random-route algorithm (Kromrey 2006, p.309-310): We entered the subway at a predefined exit and took the first entrance to the right side into the available wagon. Starting in the left rear corner from the entrance, we asked every passenger in a seemingly suitable age-range if he/she were a student and going to stay for at least another six stations (the subway in Seoul takes 2-3 minutes from station to station and completing the questionnaire took 9-14 minutes). If both answers were positive, we invited the person to participate in our survey. About half of the invited students refused the participation in the metro-survey. In autumn 2011, we additionally managed convincing two Korean universities (Chung-Ang University & KGIT) to publish the invitation for our questionnaire on their internal websites. In those cases, we used the online-form of the survey in Korean language. In total, we received the following numbers of responses (Table 2):

Table 2. Learning Culture survey – response rates, South Korean universities

	total # of students	responses	response rate	female/ male ratio	# of involved universities
<b>South Korea</b>	1.5 Mio (Korea)	286	0.019%	53.50%/45.80%	9 + 'others' (total 39)
<b>Chung-Ang University</b>	27000	47	0.17%	61.70%/36.17%	
<b>KGIT</b>	150	14	9.3%	35.71%/64.28%	

In contrast to the German study, which focuses on distinguishing basic characteristics in learning culture between faculties (for the in-depth examination, a large number of students was required per university), the Korean study was meant to cover a large number of universities (broad scenario). To ensure reaching this aim, we chose various different subway-lines that particularly included stations leading to universities. Finally, we received results from a total of 39 universities in and around Seoul. From nine of the universities, we received each 9-47 responses, so that we were able to examine possible differences between those universities. In addition, we determined the national results on learning culture characteristics of the Higher Education (HE) sector in South Korea.

#### 4. Data Analysis Methods

First, we normalized the data (e. g., in the case of 'teacher education', students did not only state their main subject ('teacher education') but also the various possible subject

<sup>2</sup> Right now, within a smaller scale survey, we are examining in Cameroon, how far regions with different languages (English/French) in the same country lead to different results.

<sup>3</sup> This at least was the reason the private universities stated when declining our request to address all students through the e-Mail distribution systems.

combinations – those were reduced to ‘teacher education’) and excluded incomplete samples. Regarding each item we calculated absolute and percentaged values, 40- and 60-quantiles, median, dispersion, distribution between female and male respondents, and mean. For the German samples, we distinguished between faculties within each of the universities and calculated average values for each of the universities and enterprises. Additionally we calculated average national values on the level of universities (HE) and professional training (AE). As for the South Korean sample, we compared the universities where we gathered at least nine sample elements. We included all collected responses for the average national value.

For the comparisons of different contexts, the results from the four-point Likert scale (strongly agree, 1; agree, 2; hardly agree, 3; disagree, 4) were analyzed in absolute values by counting occurrences and binarized to positive (values: 1 & 2) and negative (values: 3 & 4) results. Later on, we calculated everything basing on the positive percentaged values (the percentage of positive responses). In order to avoid increasing rounding errors, all calculations based on the full data set instead of intermediate results.

The method of ‘binarising’ ordinal-scaled results is a recommended method (Baur 2008, p.282) to produce clearer results and prepare ordinal-scaled data for operations that originally are reserved for interval-scaled data. There is a very controversy discussion on applying higher-level calculations to ordinal-scaled data (Knapp 1989). We followed the recommendations of Porst (2008) to case-sensitively check the results: Calculating the variance, co-variance and standard deviation led to inconsistent results. The calculated mean, however, in all cases, was close to the median and between the 40- and 60-quantiles. It provides additional information on the actual answer-distributions, which were lost during the binarising process.

## 4. Results and Discussion

In the following, we present and compare the results of the first question-block of the questionnaire, which represents the perceptions of the participants on the role of the lecturer. We chose this example from the questionnaire for this paper, because Hofstede & Hofstede (2005, p.53) explicitly related the dimension ‘Power Distance Index’ and the results of their survey to the relationship between learners and educators.

In this question-block, we asked the participants to evaluate the following seven statements: In my opinion, a lecturer is ‘an expert’, ‘an idol’; ‘a personal coach’; ‘a respect person’; ‘an unfailing person’; ‘a public figure’; ‘a trusted person’. In the following, each figure shows the results of a certain context regarding the defined items on the role of the lecturer.

### 4.1. ANALYZING LEARNING CULTURE IN GERMAN UNIVERSITIES

First, we provide a look into the faculty results of the three investigated German universities. Afterwards, we compare the university averages with each other.

Table 3. Faculty results of the University of Cologne

Cologne	min	max	max-min	not applic.	40-quantile	median	60-quantile	mean
<b>expert</b>	95.65	100.00	4.35	0.07	1	1	1	1.11
<b>idol</b>	37.78	85.71	47.94	2.71	2	2	3	2.42
<b>pers. coach</b>	26.32	71.70	45.38	2.71	2	2	3	2.38
<b>resp. p.</b>	61.90	84.21	20.57	1.36	2	2	2	2.08
<b>unfailing p.</b>	0.00	23.81	23.81	21.07	4	4	4	3.50
<b>public fig.</b>	41.18	86.79	45.62	2.21	2	2	2	2.21
<b>trusted p.</b>	21.43	58.82	36.60	6.29	3	3	3	2.74

The mean values, displayed in Table 3 take all five answer options into consideration. For the calculation of the Median, the 40-, and the 60-quantile, the answers stating ‘not applicable’ were excluded. Thus, the related percentaged values separately are displayed. Median, 40-, and 60-quantile were used to evaluate the mean.

As for a better identification of patterns, we chose to visualize the percentile positive answers within net-diagrams, where the items are always on the same position. Because of the small size of the figures, this choice meant losing information on the concrete percentaged values per faculty, but the resulting shapes clearly illustrate similarities and differences – which are needed to answer the initial research question. In the diagrams, please note that just the crossings with each axis represent defined values.

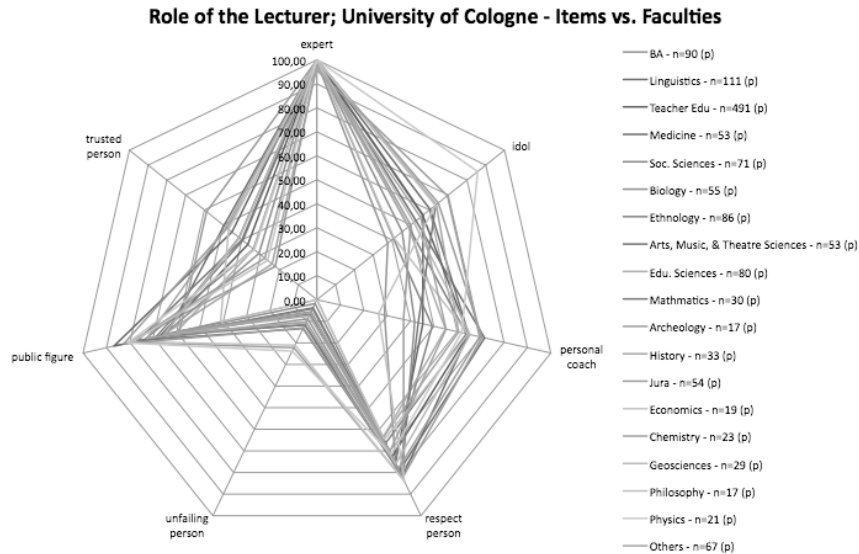


Figure 1. Comparing faculty results of the University of Cologne

Before discussing results, we present the diagrams of the University of Applied Sciences Bonn-Rhein-Sieg (Tab. 4, Fig. 2) and the University of Potsdam (Tab. 5, Fig. 3).

Table 4. Faculty results of the University of Applied Sciences Bonn-Rhein-Sieg

FH Bonn-Rhein-Sieg	min	max	max-min	not applic.	40-quant.	median	60-quant.	mean
expert	96.55	100.00	3.45	0.00	1	1	1	1.14
idol	41.38	75.00	33.62	3.36	2	2	2	2.29
pers. coach	55.17	87.50	32.33	3.69	2	2	2	2.25
resp. p.	61.11	93.75	32.64	2.01	2	2	2	1.95
unfailing p.	0.00	21.05	21.05	24.16	4	4	4	2.83
public fig.	50.00	88.89	38.89	3.36	2	2	2	2.22
trusted p.	33.33	73.68	40.35	3.69	2	2	3	2.41

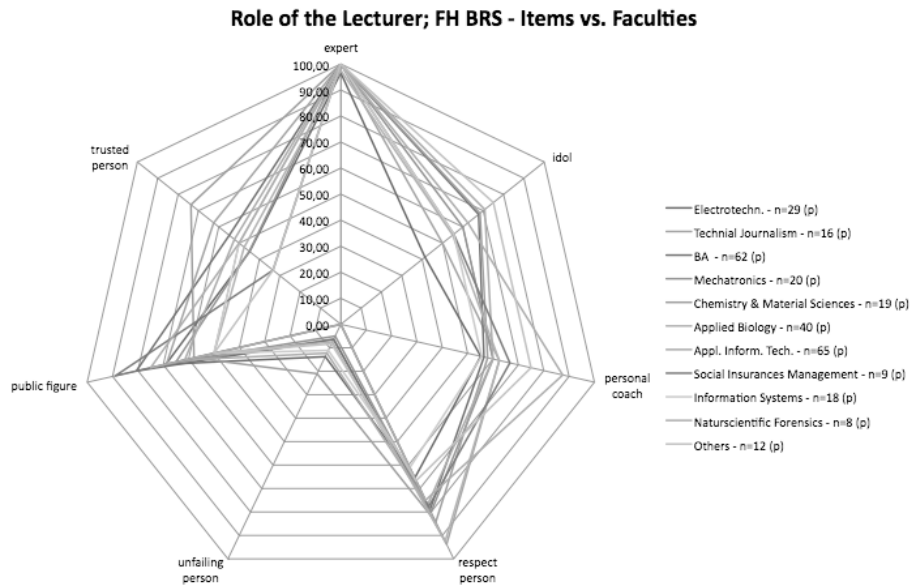


Figure 2. Comparing faculty results of the Univ. of Appl. Sciences Bonn-Rhein-Sieg

In figures 1 and 2, three phenomena are important: At the University of Cologne, in the faculty 'Physics', the characteristic of the item 'Idol' represents a very specific perception. With a deviation of 35% from the core field of answers, it needs to be understood as an extreme outlier within the context of the University of Cologne. The reason for this particular characteristic is unclear but might be related to very prominent professors. Further, at the University of Applied Sciences Bonn-Rhein-Sieg, in the faculty 'Nature-Scientific Forensics', the item 'personal coach' (27.50% distance to the core



field) and in the faculty ‘Chemistry- and Material Sciences’, the item ‘trusted person’ (23.68% distance to the core field), are agreed on a much higher level than in the rest of the faculties of this university. The reason might be the very small size of those faculties, and the resulting higher level of personal contact between professors and students. Also, those two characteristics from FH BRS must be understood as extreme outliers.

Table 5. Faculty results of the University of Potsdam

Potsdam	min	max	max-min	not applic.	40-quant.	median	60-quant.	mean
expert	100.00	100.00	0.00	0.00	1	1	1	1.09
idol	47.06	68.18	21.12	2.52	2	2	2	2.36
pers. coach	54.55	82.14	27.60	0.00	2	2	2	2.24
resp. p.	57.14	68.18	11.04	1.68	2	2	2	2.21
unfailing p.	6.67	11.76	5.10	5.10	4	4	4	3.47
public fig.	63.33	84.09	20.76	20.76	2	2	2	2.15
trusted p.	39.29	50.00	10.71	10.71	2	3	3	2.64

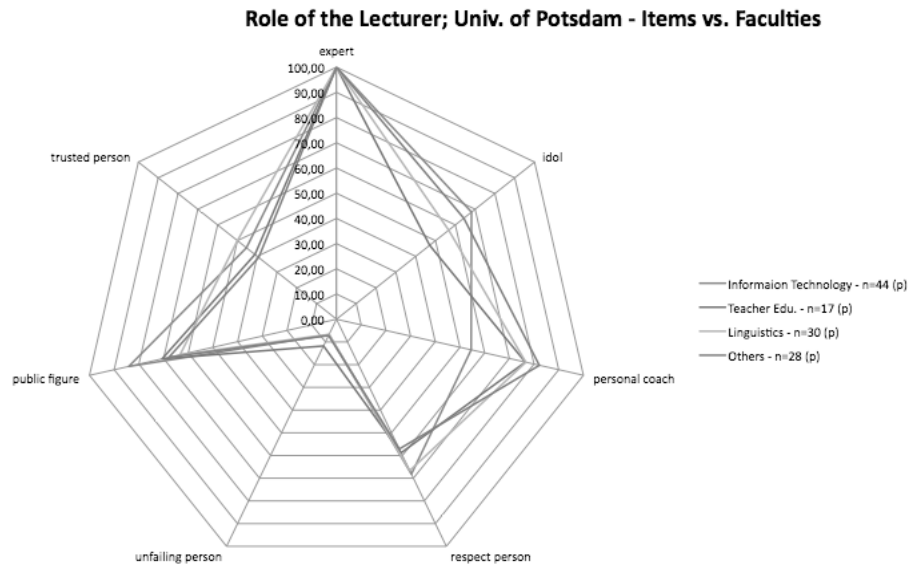


Figure 3. Comparing faculty results of the University of Potsdam

Although there is a remarkable spectrum of possible answers between the characteristic curves of the faculties, a similar shape can be found throughout all displayed scenarios.

In Figure 4, we display the average values of all three German universities (thin, black) and the extremes (fat, light grey – outside and inside). The consolidated average of all three German universities is displayed in dark grey color (fat). It partly is overlapped from the lines that represent each university-average.

The average results of each university are close to each other (max. deviation below 20%). We finally found a pattern that represents the average opinions of the students in German universities: But is the pattern specific for all kind of German learners?

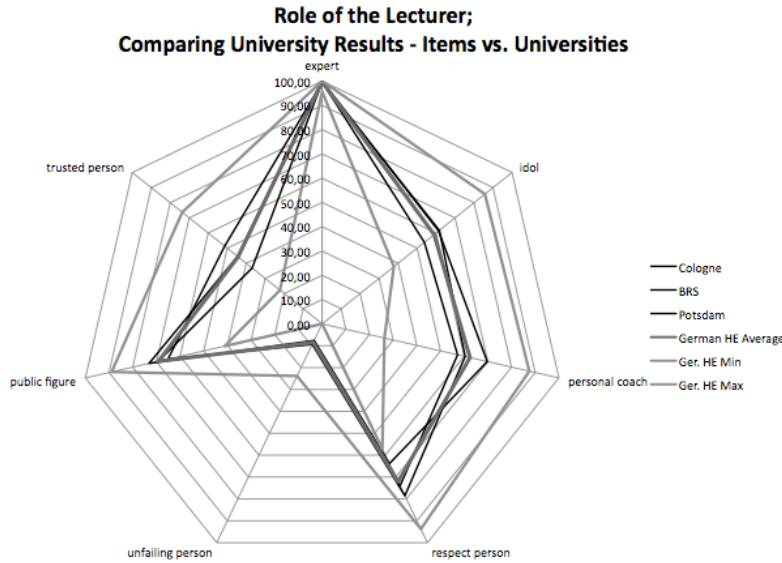


Figure 4. Comprehensive results of the German universities

4.2. ANALYZING LEARNING CULTURE IN GERMAN ENTERPRISES

In contrast to the German higher educational context (HE) we chose the context of professional training (Adult Education, AE). We will discuss the conditions of this sample and the differences to the HE-results after having presented the AE-results in Figure 5.

Table 6. Results of the German enterprises

Enterpris-es	tele-com.	ener-gy	not applic.	40-quant.	median	60-quant.	mean
<b>expert</b>	100.00	100.00	0.00	1	1	1	1.19
<b>idol</b>	57.14	42.86	9.52	2	3	3	2.53
<b>pers. coach</b>	57.14	85.71	0.00	2	2	2	2.10
<b>resp. p.</b>	42.86	35.71	0.00	3	3	3	2.76
<b>unfulfilling p.</b>	14.29	7.14	19.05	4	4	4	3.41
<b>public fig.</b>	14.29	42.86	0.00	3	3	3	3.00
<b>trusted p.</b>	42.86	57.14	0.00	2	2	3	2.67

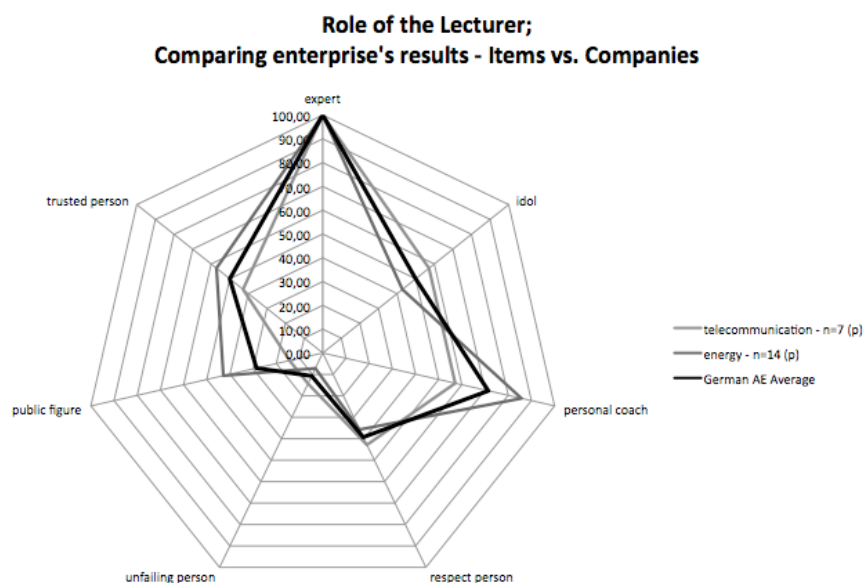


Figure 5. Comparing the results of the German enterprises

The (fat) black line (Figure 5) represents the average results of both enterprises. The dark grey line is related to the energy supplier while the light grey line shows the results from the telecommunication service provider. The spectrum between both shapes lies within a similar range than between the faculties in the German universities.

Both investigated enterprises are traditional German enterprises and have more than 50.000 employees. Because of the very specific characteristics, found in the AE-samples which intuitively are explainable by considering the differences between the professional and the academic contexts (discussed below), we assume that although the sample sizes were very small, the results, in their tendency, are characteristic for German enterprises and particularly significant to answer our initial research question.

In Figure 6, we now contrast the AE average results and the HE average results. The black line in Figure 6 represents the AE average results, the grey line the HE average results. We can clearly distinguish the patterns regarding two items: The employees in the enterprises do not expect their lecturers to be public figures. They are expected to be specialists (experts) in the particular field of the related course content and able to share their experiences. The lecturers in the field of professional education have no further responsibility beyond preparing the employees (learners) for a concrete task. In contrast, lecturers in universities also have the subsidiary task to educate their students, e. g. regarding the achievement of soft skills. Thus, different to the HE context, lecturers in AE are not supposed to be respect persons. In the professional context (in Germany), respect is a characteristic that needs to be earned through achievements – it is not naturally given through a certain position. Another argument for this different understanding may be the difference in age between lecturers and learners: In the consoli-

dated universities' sample, the average birth year was 1985, in the enterprises' sample it was 1970.

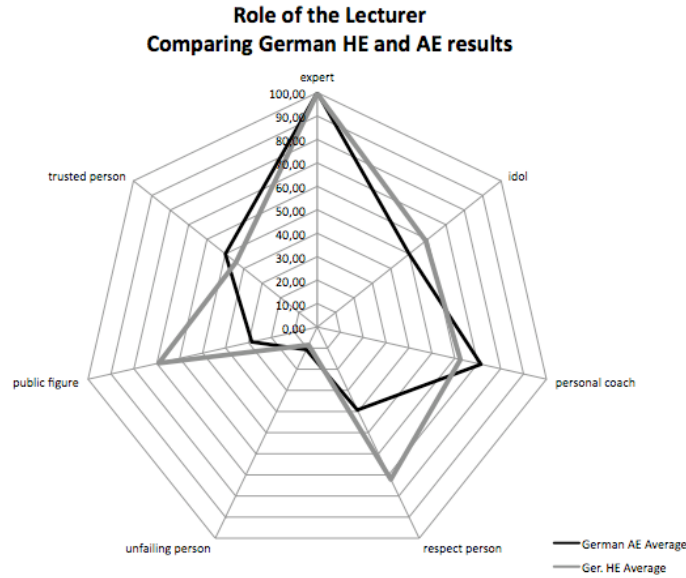


Figure 6. Comparing the German AE and HE sectors

#### 4.3. ANALYZING LEARNING CULTURE IN SOUTH KOREAN UNIVERSITIES

In Germany, we found obvious differences between the contexts of HE and AE. In the following, we present our results from the South Korean universities (Table 7, Figure 7)

Table 7. Results of the South Korean universities

SK universi- ties	min	max	not applic.	40-quant.	median	60-quant.	mean
<b>expert</b>	85.71	100.00	1.40	1	1	2	1.42
<b>idol</b>	21.43	66.67	3.15	2	3	3	2.73
<b>pers. coach</b>	59.52	100.00	1.75	2	2	2	2.10
<b>resp. p.</b>	21.05	77.78	4.20	2	3	3	2.71
<b>unfailing p.</b>	64.29	100.00	1.05	2	2	2	2.11
<b>public fig.</b>	34.78	77.78	3.50	2	2	3	2.58
<b>trusted p.</b>	69.05	100.00	2.10	2	2	2	1.96

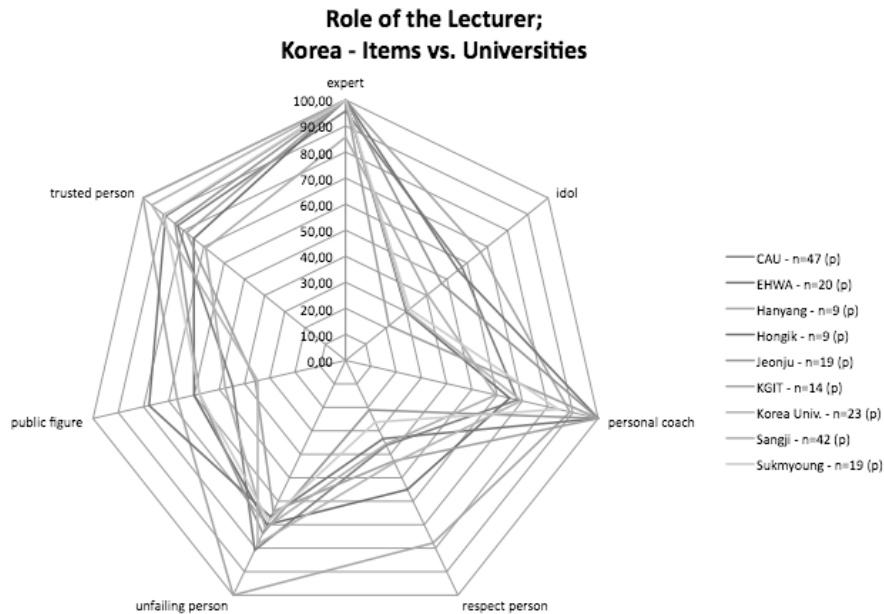


Figure 7. Comparing the results of South Korean universities

The basic shape of the Korean universities is similar to each other and also, a similar large spectrum of variety is shown as already monitored within the German HE context. The extreme outliers to the maximum in the items *unfulfilling person* (100%), *trusted person* (100%) and *respect person* (77.78%) are related to the Hanyang university. There is no hint why such extreme values have been found here. The 'KGIT' provides extreme minimum value in the items *idol* (21.34%) and the second lowest value regarding the item *public figure* (35.71% – lowest is Korea university). In contrast to all the other examined universities, the KGIT does only provide master courses and is designed for professionals. Most lectures take place at nighttime and over weekends. All taught subjects are related to media production and arts. Thus, there is some kind of parallel to the AE context in Germany. The university itself and also, many of the lecturers there are very young (and did yet not reach a high level of prominence).

For the South Korean average value, we consolidated all sample-elements (total 286 responses) – the 202 responses that were included in the nine university results displayed in Figure 7 and additionally, 84 responses of students from 30 other South Korean universities, where the total sample size per university was below 9 sample elements.

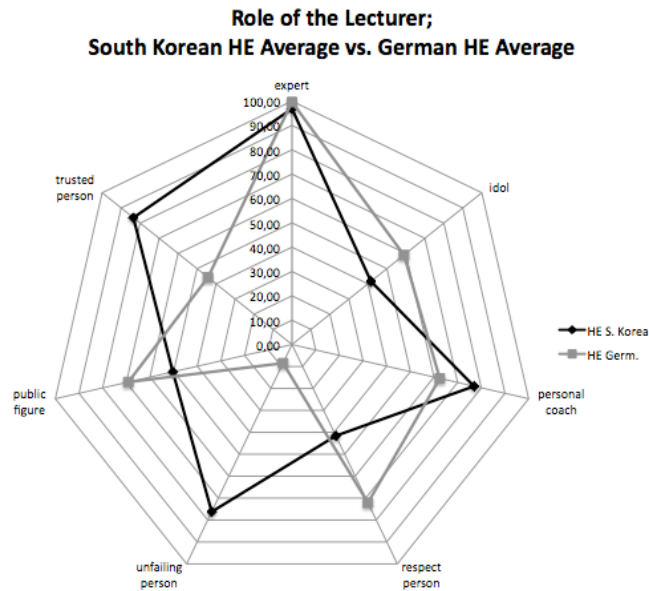


Figure 8. Comparing the average results of South Korean and German universities

The differences between the two contexts are obvious, particularly regarding the opinion that lecturers are unfaultable and/or trusted persons.

Those two revealed extreme differences are very meaningful to be understood as well for German guest students and educators in the South Korean HE context as also for South Korean students and educators in the German HE context. German students in the South Korean context may violate the local professors by openly putting them into question. In the German context, they are encouraged to do so. In contrast, South Korean students need strong encouragement to act against their basic understanding of politeness. Critical reflection is a basic ability taught in German universities. The extreme difference regarding the item *trusted person* could reveal being an issue for South Korean students in Germany. Their expectations on personal relationships and assistance might not be met. For German students in the South Korean context, this difference rather might be a welcome alternative to the more anonymous treatment in Germany.

## 5. Conclusion

We have been able to clearly distinguish between faculties within the German universities. Thus, the existence of faculty-related learning cultures is evident. Although there was a wide spectrum of different answers, all German faculties showed similar patterns. It was possible to build average values that reflected the specific patterns of the faculties within a university. The university averages between each other also showed very similar patterns. It was possible to build an average value for the German higher educational sector. The results from the German enterprises were sound although the sample

sizes from the two enterprises were very small: Specific expected differences between the HE and the AE sector were reflected in the results and, even if not covering the variety of possible answers in the AE sector, tendencies could be determined. The results of the German AE sector clearly revealed different patterns than those, found in the German HE sector. Thus, H0 is an untenable hypothesis and needs to be rejected. In contrast, since it was possible to distinguish between the two investigated German educational contexts, H1 is admissible and should be accepted.

As for the research question, the results showed that the specific characteristics of each distinguished context (HE/AE) are preserved after building context-related national values. Also, specific characteristics have been found in the German and the South Korean HE sectors that clearly distinguish both from each other. Thus, a generalization of context related national results seems to be appropriate. However, the national values are much more useful if at least, the possible variety of answers is known. The spectrum of differences could be an indicator for the level of accepted diversity. This needs further investigation. We recommend not to just focus on the mean but to also consider the full spectrum of answers. It is unclear if other educational contexts (e. g., different types of school education) provide similar different patterns and when specific expectations/attitudes are developed. The question on different cultures within a single nation also is still open. We focus on the latter issue in our further research.

In our research, the investigations were limited to learning culture and educational scenarios. The concept of a general national culture would not have been appropriate to deduce specific cultural characteristics in our context. The found differences between AE and HE can be understood as a hint that data, determined within a single enterprise, cannot be interpreted as being representative for whole nations and all aspects of life.

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