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English for Science and Technology in the German Technical Industry – A Needs Analysis

By

Kristin Hueneburg

A Thesis Submitted in Partial Fulfillment of the

Requirements for the Degree of

Master of Arts

In

English

Teaching English as a Second Language

Minnesota State University, Mankato

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ABSTRACT

In light of the recent financial and Euro crisis, many immigrants have arrived on the German employment market with adequate English, but no German language skills, requiring German natives to use content-specific English in their work environment. This thesis seeks to explore the bases for potential curriculum and course design with a focus on English for Science and Technology (EST) in the German technical industry. This needs analysis in the form of an online survey was administered to a maximum variety sample in the German technical industry, which included different sizes and products/services of companies and position variations of employees within the company. Additionally, informants' background varied in age, education, marital status and family situation, and geographical factors such as work location and place of birth. The results showed that every informant had non-German nationals in their company in all hierarchy levels. In terms of the current state of English language use by German nationals it was found that e-mail, telephone conversations and meetings were most important applications alongside reading and writing as prime language skills needed. The results also showed that many informants use English on average for more than 15% of their day, but that cultural factors for intercultural communication are perceived as less important. On average, informants feel comfortable with their English language use, but feel that strong English language skills are not the average in their own companies. Finally, findings showed that most informants expressed need for further instruction in English for Science and Technology with focus on terminology and reading and writing, as well as communication for private matters alongside business communication.

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CHAPTER 1

Introduction

Background

As economies worldwide are recovering from the most recent financial crisis, Europe is fighting to uphold the Eurozone and rescue struggling southern European economies and unemployment rates are an issue once again. One of the few exceptional examples of a quick and efficient recovery has been the German economy with quickly increasing manufacturing numbers, profits and employment rates. Yet, in recent years, Germany has been seeing a troubling trend of decreasing numbers of graduates in technical and scientific professions. As the age group with a low birth rate is getting ready to graduate high school through college, fewer qualified workers in the fields of science and technology are filling the positions of those retiring.

As this trend is expected to continue, the government has initiated numerous actions that are designed to overcome this gap and fill the positions. On the one hand, numerous initiatives are targeted at students of middle and high school age to raise their interest and awareness of possibilities in sciences and technology by engaging them in projects, and opening universities and laboratories to students. Young women, especially, are being targeted with these initiatives and are encouraged to break the stereotypes and choose a profession in Science or Technology. In the meantime, since there are very few national graduates available to fill the open positions, the government has adjusted the requirements for work visas to allow qualified international workers to enter the country and fill the current gaps (Hönekopp, 2003). These new immigration laws, including easier applications for work visas and short term work visas for citizens of non-EU countries have had significant results and continually more international workers are

entering the country. Particularly in light of the bankruptcies of southern European governments, Germany has seen a wave of immigrants from these countries, eager to work and often highly qualified in their fields such as IT, nursing and technical manufacturing.

While these workers have been trained in the specific field, may not possess adequate English skills to meet demands of the international job market and are willing to work for lower pay than most German workers, their German skills are low or non-existent. This provides one challenge for the current German native employees who mostly have only been trained in General English in High School or College and are therefore lacking the appropriate skills in academic, technical and scientific English. While their current proficiency may be sufficient to some extent for basic communication with other international businesses, it is in most cases not sufficient for effective and successful extended communication with English-speaking colleagues and business connections outside of their own company. This, among other factors, like globalization and the increased publication of EU-related documents in English only, has moved English to their immediate surroundings, compared to before, when English was merely an additional qualification. Therefore, there is a need for improvement to keep companies working effectively on the internal side, as well as communicate with other companies on an international level, making English an important skill for every employee in an internationally operating company.

Purpose of this study

The purpose of this study is to survey a small sample of informants on the current state of English language use by German nationals of the German technical industry and to determine the informant's expressed needs regarding the use of English in the workplace. In this study,

English in the workplace will be defined as German employees' need for English for Science and Technology (EST) as well as basic general English skills. Additionally, for the purpose of this study, Germans with the need to improve their English related to their specific field will be called English for Science and Technology Learners (ESTLs). It is assumed that these learners have a fair to good grasp of General English language skills as a requirement to acquire EST skills. However, these general English language skills are mainly focused on comprehension of simple spoken English and composition of simple and general texts. A more detailed discussion of English in the workplace will be explored in Chapter 2 of this study.

The current study is exploratory in nature and seeks to answer the following questions:

- 1. How often do German employees in the technical industry use English language skills in the work place every day?
- 2. How often are German employees in the technical industry in contact with English-speaking individuals in their everyday work life?
- 3. What are the tasks and situations in their work environment where they have to use English language skills?

The following chapter reviews the literature related to the use of English at the workplace in other countries and in particular the use of English for Specific Purposes (ESP). Chapter 3 presents the data collection method, sampling procedure and analysis procedures. Chapter 4 presents the results and draws general conclusions. The final chapter discusses limitations of the study and the implications of the results for potential course design for teaching EST to adult learners in the German technical industry.

CHAPTER 2

Review of Literature

Introduction

To investigate what these ESTLs need, this chapter will introduce previous common workplace situations with English as a foreign language and how they contribute to the language instruction needs of employees in the German technical industry. Additionally, the history, validity, application and implications of English for Specific Purposes (ESP) and its sub-category English for Science and Technology (EST) will be considered. Other factors contributing to the language knowledge, such as cultural consideration, international technical presentations and e-mail writing, will be considered. Then, the medium of needs analysis will be explored for the methodological purposes of this study.

More specifically, this chapter will look at current issues in language learning and training that apply to the current study. First, the English language category of ESP will be explored. Then, English in the work place on the examples of the current language requirements of workers and graduates in the technical industry, as seen in other countries, and the perception of English as a foreign language or even a lingua franca in the workplace, will be considered. Furthermore, EST as a subcategory of ESP will be explored. Drawing on the research in EST, the influence of technical communication and presentations, intercultural communication, computer-mediated communication (CMC), the role of the EU in EST and the category of academic writing in ESP will be discussed.

To support the choice of EST for the application to the current study, this chapter will follow the concept of the inverted pyramid. Therefore, the broader category of ESP will first be

investigated before continuing with the specialized application of English at the work place. Finally, EST as the subcategory of both formerly mentioned categories of English language will be discussed and further investigated. As a result, this chapter will set the base for this study and the validity of the research and research design.

English for Specific Purposes

The term *English for Specific Purposes* (ESP) is used to convey content focused English language knowledge, tailored to a certain area of interest. As early as the 1990's, researchers have spoken of ESP and stressed its importance in the current worldwide employment market. Particularly for highly content focused areas, like the German technical industry, ESP and its instruction provide employees with the language knowledge to express their content knowledge and perform adequately on the job.

Supporting this argument, many well-known researchers have explored the background and use of ESP. For example, in an article from 1991, Johns and Dudley-Evans already conveyed the message that ESP will become even more important in the future to provide the language education that is needed to maintain today's growth of companies and increasing globalization. In this article, the authors give an overview of the field of ESP and its advancement until the year of 1991, the year of the publication, as well as an outlook on the future development of ESP. According to the Peter Strevens (1988), ESP should meet specific needs and be related "content to particular disciplines, occupations and activities" (Strevens, 1988, p. 298). Central focus is laid on the validity of ESP and training for specific skills, in contrast to General Purpose English (GPE) or "General English" for settings that require specific language and skills. Particularly, ESP should be "centered on the language appropriate

to those activities in syntax, lexis, discourse, semantics etc." (Strevens, 1988, p. 298)The authors recognize that ESP is widely connected with business, but a recent trend also developed towards the use of English in scientific publications as well as for international communication. Hence, English for Science and Technology (EST) and English for International Communication (EIC) have become increasingly important and need to be recognized as vital sub-categories and contributing factors for the future of ESP. Considering the publication date of 1991, this article shows how important ESP was in an early stage of globalization, which has only increased in the new millennium. In the modern work world, ESP has become even more vital, as it does not only teach or use GPE, but also draws on background and content knowledge to increase communication ability and successful business practices.

Prior to this article, Dudley-Evans authored a different article that served as part of The Japan Conference on English for Specific Purposes. As the first article in this publication of selected presenters at the conference, Dudley-Evans provides an overview of ESP and its implication in the 1990's (Dudley-Evans, 1997). The author begins by stating the importance of needs analysis for ESP, particularly when it is not yet established what the learners need to use in everyday life and whether the needs are educational or professional in nature. It is also stated that the activities and consequent language and genres that a learner will use are established to define the expected outcomes of ESP and its instruction. Furthermore, instructional design needs to use methodology that is familiar to users of ESP so no new learning strategies or styles need to be acquired prior to the language skills training. An additional important factor stated by the author is that ESP is not language instruction by itself, but builds on previous knowledge of English and basic grammar and vocabulary skills. Therefore, most ESP learners are in secondary education or adult learners already in the profession of their choice. The learners,

that they will encounter in their language use and evaluates language levels accordingly properly. Dudley-Evans (1997) also states that for many teachers, the prospect of teaching ESP seems "daunting" (p. 8) due to its content specific demands. Therefore, a language teacher has to work with students' content knowledge and the teacher's own language to successfully teach ESP. In order to design courses that achieve this, a proper needs analysis needs to be done to evaluate what the particular language skills are needed for and how they will be used.

In Diane Belcher provides a very appropriate quote from an article by Hutchinson and Waters to introduce the concept of ESP: "Tell me what you need English for and I will tell you the English that you need" (Hutchinson & Waters, 1987, p. 8). However, Belcher focuses more in detail on the issue at hand: the ever-changing needs ESP teachers aim to teach. This and other issues make ESP training an issue that need to be addressed, which the author aims to do by labeling the instructors as needs assessors first and instructors second. A so called "tailored-to-fit" instruction approach is the suggested solution to the issues that a language instruction approach with so many facets is facing. In her exploration of curriculum design, content material, language authenticity, faculty content knowledge and many other issues, followed by solutions such as corpus data, critical pedagogy, genre theory and ethnography, one factor of the design of ESP instruction emerges with more pressing urgency: a constant reassessment of needs. Furthermore, the tendency to learner autonomy needs to be fostered, suggesting that living situations and work environment influence a needs analysis just as much as prior English language instruction and average skills usage.

Since ESP meets the requirements for education of German employees in the industry, it could be used to design content specific instruction for companies and individuals that need

improvement in English. The nature of ESP allows for application of existing content knowledge in students onto the language instruction for successful language learning and improvement. However, specific current needs of employees require assessment, including many contributing factors to the potential future curriculum design. Therefore, the application and subcategories of ESP in the workplace and specific industries need to be explored as well.

English in the workplace

As one category of ESP, English in the workplace specialized even further in terminology and discourse. This category can span multiple sectors of ESP subcategories, which all share the common denominator of having application at the work place. As this study investigates the English language needs and uses of employees, this category greatly influences the research design. The following two studies provide a strong basis for the design of this study.

In a prime example, Kankaanranta and Louhiala-Salminen (2010) have studied the perception of workers in globally operating Finland-based businesses (IT, cargo handling, logistics and intelligence services are named as examples) that are already using English as their everyday communication language at work and evaluated the current proficiency and quality of use by these workers. Particularly, Business English as a lingua franca (BELF) was investigated, with special attention to the factors influencing the communication in specific situations. Through a combination of an online survey, qualitative interviews as well as an examination of original work of the participants (evaluated by co-researchers), the authors intended to find the nature of the communications involving BELF. The authors also stated that they did not conduct a needs analysis, but mainly focused on the perception of these workers of

their use, level and quantity of English in their workplace. The findings of this study showed that on an international level, the mother tongue of the participants was only used slightly more than English when going about their regular work. Participants also estimated that 70% of the communication took place with non-native speakers (NNS) of English that did not share a native language with them. Additionally, participants considered grammar knowledge less important in their communication than content-specific knowledge and cultural knowledge of the other party. Particularly the point of politeness, including small talk, was ranked high within contributing factors for successful communication. As the concept of politeness in Germany is considerably different than in other cultures, this shows the importance of cultural knowledge for success in this type of communication. The findings of this study suggest that many currently working business professionals believe that English is important in their workplace and content-specific knowledge alongside cultural knowledge needs to be the focus of their abilities. In the technical sector in Germany, there are similar circumstances; so the perceived needs of the sector's employees need to be evaluated.

Another study that provides similar findings has been conducted by Kassim and Ali (2010) at a Malaysian engineering university that has found that the industry requires increasingly better trained graduates in terms of English language proficiency. The authors initially state that companies everywhere need graduates with better English knowledge that prepares them for international communication in real-life situations found in the workplace, since a great number of these graduates are unemployed due to poor English language skills. As a result, Kassim and Ali (2010) sought to find the requirements workers have to meet in today's business world in terms of English proficiency, fluency and terminology; specifically, which is needed most and which skills need the most work. To achieve this, the authors administered

self-developed questionnaires to 10 international chemical companies all around Malaysia. The questionnaire focused on the time engineers were employed in the industry, a rating of the importance of the four language skills, the nature of English communication (recruitment, promotion, daily tasks), the level of oral communication at specific communication events with different personnel, the nature of written communicative events, a rating of frequency of certain communicative events in daily tasks and the perception of employees to the advantages of English language skills for themselves. In terms of percentage of participants' use of certain skills, the results showed that productive language skills need to receive more attention, while perceptive skills should not be underestimated and still practiced regularly. Also, results indicated that important events such as formal presentations, internal and external networking as well as teamwork all required English language skills. The greatest importance of this article is that it gives useful insight into the actual requirements of the industry, suggesting that language usage is focused on language production and that in the current market, company internal events also require English language skills. The study also portrays an actual standpoint of English language skills of the work force in a country. This reaction of businesses to the requirements is a model for what will most likely be found in Germany. Hence, a similar needs analysis needs to be done in Germany to acquire important information that will eventually lead to adjustments in syllabi and university language teaching practices, as is also suggested in Kassim and Ali's study. However, the major issue in the German technical industry is that employers often cannot ask for these types of qualifications, since there are few German native graduates with the content knowledge needed to perform the job.

What is even more important, owing to the globalization and outsourcing of many companies, English has not just become a world language for everyday communication, but it

has also become the international business language within companies themselves. As current cases just as the German technical and scientific industry shows, it has also become important to be able to communicate with colleagues within the same company and partially even the same office. There is a definite demand for adequate English knowledge at a more advanced and detailed level.

English for Science and Technology

A subcategory of ESP and English in the workplace is EST, which is the area of ESP applicable to the industry chosen to be investigated in this study. John Swales (1985), a leading researcher in the field, has summarized teaching materials and insights of researchers in the field to provide an insight into the development of EST in a source and reference book. In the introduction, he stated that "EST is the senior branch of ESP – senior in age, larger in volume of publications and greater in number of practitioners employed" (Swales, 1985, p. x). Suggesting that EST, although a subcategory of ESP, is senior to ESP and even more frequently applied in practice, supports the notion of individual instruction of EST as opposed to ESP or GPE. Another important notion provided by Swales is subcategorizing EST. In his remarks on ESP, he suggests three ways of doing so: according to educational levels, subject-matter and activitytypes that are frequently encountered and associated with EST. As this study is focusing on potential adult education, which is not included in his education categories, this cannot be applied. Subject-matter also is not applicable as this study aims to provide an overview of all subject-matters. However, the third way of categorizing provides insights in possible subcategories applicable to this study. Reading scientific articles, writing technical reports, taking part in seminars and tutorials and using technical manuals and other instructional

literature are task areas that employees in the technical industry will frequently encounter and complete (Swales, 1985, p. xi). However, as Swales also mentions, the overall purpose of EST includes all three subcategories and has a *communicative purpose* (Swales, 1985, p. xii), despite its general application in the area of English for Academic Purposes when considering it in terms of frequent applications. All of these factors have influenced Swales choices of excerpts of articles and textbooks concerning EST and its implementation in the classroom practices. Following his introduction, a short definition of EST and classification in ESP, sensitive topics in EST and teaching EST are explored. All *episodes*, as they are labeled, include a setting, an excerpt of the work, activities for teacher training, and an evaluation of the excerpt and related readings to the episode. Among others, these episodes include titles such as Characteristics of Modern Scientific Prose, the structure of technical English, Hard Facts (Notes of Teaching English to Science Students), Writing Scientific English, Grammar and Technical English, Teaching the Communicative Use of English and ESP at the Crossroads. Other more applied episodes that aim at instructional design issues and specific subject-matter issues are included as well. However, as this study aimed to conduct a needs analysis, influencing factors are of greater importance. In addition to the fifteen episodes that connect EST and teaching, Swales concluded the book with a retrospect and a prospect. In the retrospect, it is explained what lessons can be drawn from the episodes. It is stated that EST and ESP are not new categories that eliminate General English, but rather a new section to compliment it. Additionally, ESP should not be separated from language teaching in general, but rather make great use of theories and activities, which also applies when linking linguistic and educational features of language teaching. Swales concludes by stating that ESP and its subcategory EST still undergo constant change and development. The prospect attempts to reconnect EST to the wider field of ESP by

investigating forthcoming studies and issues that were not investigated in the episodes, such as product and its role in ESP, and genre and its importance.

Swales' episodes not only provide a valuable definition of EST as a subcategory of ESP, but also contribute factors for EST and explain how they influence leaners' competency and proficiency. Considering ESP/EST have a communicative purpose, ESTLs will have to possess more than just linguistic skills in EST. Therefore, the following section will investigate skills necessary for effective communication in the workplace beyond knowledge in EST.

Contributing Factors of EST Proficiency

Technical Communication/ Technical Presentations

An issue that concerns a very important area of communication containing differences between cultures and languages is technical communication (Trush, 1993). In consideration of increasing globalization, the author concerns herself with the differences that exist between different languages and cultures and that are especially important when these work together. Differences in common knowledge, hierarchical structures, rhetorical styles and the organization of graphic materials in technical documents between different cultures and languages are the main issues Trush (1993) lists that can potentially lead to miscommunication and misunderstandings on both sides of the communication. Common knowledge differences can, for example, lead to miscommunication when details are eliminated from a text or conversation, because the speaker or author assumed the knowledge and would think it to be impolite to include what they consider trivial information. However, Trush (1993) mentions Germany as a very low context culture meaning Germans will include all information regarding many details, including supposed obvious background knowledge. This can be seen in technical

and academic writing. Here, the opposite may apply, where the other interlocutor may feel offended by receiving such detailed information. Also, hierarchy structures may differ significantly in writing, especially in emails and letters. Where German uses "du" (informal you) and "Sie" (formal you), many other languages and cultures may have no concept of such. Additionally, Trush (1993) states that the way these written documents are structured and rhetoric is used may differ significantly, suggesting a different hierarchical structure, tone of the document and respect for the interlocutor than intended by the author. The final difference she draws attention to is the visual preference and sequence of graphics that is viewed. While it may be understood in one culture how line drawings convey meaning, other cultures may not be familiar with this concept. The same applies when placing visuals in a presentation (as seen in Figure 1) and assuming that every member of the international audience reads them in the same sequence. According to Trush (1993) not everyone views graphics left to right and top to bottom, but some may read it in a circular motion, which can lead to confusion and misunderstanding.

It can be assumed, that many ESTLs are not aware of these differences that may exist with their business contacts or even colleagues in their own company. Along with email and letter communication, presentations differ between countries as well as on an international level. Changes like these need to be communicated to ESTLs to avoid miscommunications between cultures and, in the case of Germany, between colleagues.

Inter-cultural Communication

Aside from differences in practices in companies employing people from different cultures or working with contacts with a different language background, culture remains a

significant factor when teaching ESP/EST. This inter-cultural communication issue spans over more aspects of everyday business life than many ESTLs and employees, even if they have a good grasp of ESP, are aware.

An interdisciplinary study in this area has been done by Michael Clyne, who investigated the cultural values in discourse found in companies with a technical background (Clyne, 1996). Clyne investigated 7 companies and organizations in Australia that have workers and communication partners with a non-English speaking background. Specifically, he looked at speech acts that were performed by them through audio and video recording and their transcripts for cross-cultural interference in communication in the workplace. The interactions investigated were complaints, directives, commissives, apologies, small talk and foreigner talk. The latter was the only investigated speech act that yielded only one example. In these speech acts, he looked for variations in communication patterns and communication breakdowns in oral communication. Examples where he found this to happen most frequently are turn-taking, backchanneling, negotiations and meetings, where cultures differed in how they approached speaking in these situations. For example, Central Europeans and South Asians were found to be more dominant in turn maintenance than other cultures. Back-channeling varied not only between cultures, but also gender within these cultures. Negotiations showed mainly cultural diversity, which resulted either in polite persuasion by Europeans or direct expression of opinion and by south-east Asians. All of these suggested that knowledge of both culture and power factors of the culture of the interlocutor are important for successful communication and to avoid misunderstandings.

In written discourse, Clyne (1996) dedicates an entire chapter to German/English discourse. He notes that a lot of differences exist between English and German writing, for

example: essay form for upper-secondary answers in English, but note-style, short sentence or even diagram answers for German; topic definition needs to be done in the beginning of an essay in English, while German does not need a clear topic definition; relevance is more important in English, while German essays focus more on the extent and correctness of content; repetition is more desired in German to logically connect the essay, which is detrimental in English (Clyne, 1996, pp. 161–162). In the author's opinion, German scholarly texts are less linear, digress more often, use less advanced organizers, are more asymmetrical, do not use direct definitions of key terms and do not include examples, statistics and quotations directly in the text, but rather at the end in footnotes (Clyne, 1996, pp. 163–164). In addition, a survey done by House and Kasper (1981) is addressed, which suggests that Germans use hedging, impersonal constructions and agentless passives far more frequently than their English peers. Additionally, the notion of unorganized texts and less obvious structure, such as word count, methodology presentation and corpus texts is frequently present in German writing. On the other hand, some content area-specific texts, such as engineering, are quite similar to English texts. In summary, it was said that syntactic complexity and the use of passive define German scholarly writing in contrast to English, and more emphasis on reproaching colleagues than compared to other languages, such as Norwegian (Clyne, 1996, p. 168). This knowledge about writing is important information that is often not communicated to ESTLs in their prior English education.

An important remark of the author can be seen as he 'revises' Grice's (1975) Maxims "in spirit of his Cooperative Principle to extend it to make it more universal" (Clyne, 1996, p. 194). Additional to the traditional maxims, he proposes including cultural norms in 'Quantity' and 'Quality', specifically that the interlocutor should speak in appropriate

quantity/quality in the discourse parameters of their own culture and add what is necessary for other cultures to receive enough information, but only say what is accounted for by adequate evidence. 'Manner' should be aimed for mutual understanding and harmonious, respectful communication.

Finally, Clyne (1996) closes with remarks on the implications and applications of the study. He suggests that awareness of cross-cultural discourse variations should be taught and practiced. In the workplace, this suggests that sometimes a common denominator must be found to achieve successful communication for every party involved, and that stereotypes and prejudices should not, even jokingly, be included in the communication. ESTLs therefore need to be taught language and inter-cultural communication and awareness to have effective use of the English language.

Varner and Beamer (2005) took a similar approach to culture in business and work communication and wrote a textbook that simply focuses on application of cultural knowledge to inter-cultural communication in the workplace. The authors state that the main focus of this book is to provide information about differences in culture and business practices and laws to support effective intercultural communication in a global business world. With this in mind, the authors first address what the terms language and culture mean and how language, not just English, influences a company and its work. Additionally, they recognize interpreters as an efficient medium to help communication outside of the company if sufficient language and culture skills are not present. An important example from influences of language and culture is the notion of a business letter. German letters include information about file number, writer's initials, contact information of recipient and sender and date before the salutation, which may not be included in letters from other languages or cultures. The name of the sender is rarely

included, however, a signature is customary and the company name is included. This may not help to identify the sender, but it shows the unity of a company that is emphasized rather than the individual employee. Even if the name is typed before the signature, the company name is written in larger font, to show the importance of the company before the signer (Beamer & Varner, 2005, pp. 66–67). Additionally, authority is always the first priority within a company, which means that although the letter is sent from an individual's desk, the superior of the sender is the authoritative figure they answer to when approached about an issue or question (Beamer & Varner, 2005, p. 133). This notion of authority has high priority within a company in Germany, but this may not apply to companies or employees from other cultures.

While this text also focuses on the style of communication and how it is influenced by culture, more focus is laid on nonverbal language and how it influences the communication. Prominent German examples here are smiling and touching, particularly during greeting and farewell (Beamer & Varner, 2005, pp. 181, 187-188). Especially older generations of Germans still possess the attitude that life is hard and a smile needs to be earned to be sincere. Other cultures that smile a lot may be seen as insincere or manipulative (Beamer & Varner, 2005, p. 181), although it may have been very well meant. A firm handshake suggests power and confidence as well as respect for the other person involved (Beamer & Varner, 2005, pp. 187–188). Greetings of other cultures may be known, but found weird and may even be perceived wrong. An interesting concept that Beamer and Varner (2005) address is private and public space. It is stated that these two concepts are ever changing and should be investigated constantly (Beamer & Varner, 2005, p. 197). One concept that many Germans are oblivious to is the emphasis on rights. From an early age on, Germans are taught to protect and enforce their rights (Beamer & Varner, 2005, p. 219), which can be perceived very wrong in business

practices. The importance of acceptance and the implications behind all these factors need to be communicated and understood.

Beamer and Varner (2005) also focus on a) intercultural relationship building, b) information sources, c) decision making and solution finding, d) negotiations and particularly, e) how culture may influence the steps that are taken. Especially in companies that work closely with companies or employees from other cultures, differences need to be researched and included in considerations of how to communicate with these companies and individuals. This is also influenced by other factors, such as government and legal regulations. Historically seen, Germany has learned a lot from their past, which has resulted in legal obligations to form a worker's council (Betriebsrat) which governs a company in union instead of a single CEO and the board of directors (Aufsichtsrat), which has to consist of at least one half employees (Beamer & Varner, 2005, p. 315). The idea is that decisions are done as a group and are representative of all employees. However, this concept was ruled to be a violation of law in the US and may pose an issue in business communications and negotiations between these two cultures. Additionally, Germany has very specific employment and employment termination regulations that allow for lengthier employment and harder termination. These social welfare state laws are insisted upon and can complicate intercultural business (Beamer & Varner, 2005, p. 317).

In summary, culture is an important factor in communication between different cultures and language alone cannot be relied on to make communication successful. Beamer and Varner (2005) effectively summarize this in a case example between a German automotive company wanting to merge with an US company (Beamer & Varner, 2005, pp. 378–379). Only through language in combination with knowledge about business hierarchy, laws, the culture's

background and cultural communication strategies can this interaction be consistently successful and satisfying for both.

E-mail and Business Communication

A factor in ESP/EST that has a more practical approach is e-mail communication. Hardly any work communication is more used than e-mail, as it is asynchronous and can therefore be sent and received at different times, making it more practical in a busy work day. In an article from 1997, it is already mentioned that e-mail is an important medium in the business world (Bauman, 1997). Bauman also states that computer-mediated communication CMC is a unique register where spoken and written language can be combined. Specifically, there is a larger tolerance for sentences fragments, expressions such as 'well' and a greater tolerance for misspellings, resulting in a simplified register. However, this can frequently lead to confusion or *flaming* (sudden flare-up of anger and insult) according to Kiesler, McGuire and Siegel (1984), due to the lack of facial expressions, intonation and body language. Especially in intercultural communication this phenomena can occur frequently, so the possible effect of CMC needs to be considered when using it.

Despite the lack of more current research on business CMC, Bauman's (1997) statements on business norms in CMC still hold true today. He suggests using articles from magazines such as *Forbes* and *Business Week* to find out what is wanted in business communication these days. Most importantly, Bauman (1997) suggests business emails be brief and avoid unnecessary information. Looking back at German writing styles as explained by Clyne (1996), this can be an important factor for teaching business CMC to German ESTLs. Length and frequency of e-mail messages are also an important factor, as they can be time-

consuming and therefore become less significant to the reader than a paper note or phone call.

E-mails can also become a dangerous type of communication to use, especially if other countries are involved that have different privacy or security laws. In any case, e-mail is an important part of business communication and ESTLs should be made aware of its use, perception by other cultures and language implications. Nevertheless, advantages for application of known language structure for communicational reasons should also be implied.

The Role of English in the European Union

Another issue that has become a concern in recent years, as the European Union (EU) has become more influential on the legislative level, is the understanding of EU documents, particularly the academic English present in them. Jablonkai (2010) investigated frequent lexical bundles in EU documents that English language learners seem to struggle with as they interpret the documents. Additionally, they are compared to university textbooks and the language that is being used and taught in them. While the results show that there are similarities, she claims that there is still a need for instruction of named lexical bundles at language instruction level, which she provides implications for. This study critically investigates the use of English in EU documents and opposed to language instruction of English for EU purposes. The results provide useful implications for the applicability of EU standards on language use in publications as well as implications for overcoming the language barriers to work towards a better understanding in the EU. The author mentions the frequent use of English as the only language for publications within the EU. Phillipson (2008), even stated that as many as 72% of all EU documents are published in English. This indicates the importance of language instruction for those whose native language is not English in order to work with these laws and

publications. As a company working on an international level, it is therefore important to be familiar with these frequent lexical bundles and the general language used in the documents in order to efficiently and effectively work under and with EU laws. As the EU is increasing the release of documents in English only, learners need to become familiar with the type of language used in these documents and should be provided with ways to decode the lexical units. This can be achieved by discourse analysis and teaching as well as an overall training in academic writing and English.

Academic writing in ESP

While technical writing is of course a priority for employees in the technical industry of Germany, in research and publications, academic writing is another essential factor. Currently, most journals in science and technology are published in English and require adequate academic writing skills. Pearson (1983) states that the most common areas of difficulty for foreigners within ESP and EST are *technical terminology, common language words used technically, strength of claim, contextual paraphrase* and *rhetorical and text structures*. While analyzing the questionnaire of a foreign-born professional she named Mai Chung, Pearson (1983) analyzes common issues with academic writing in technical professions, given that they are working in an English-speaking environment with little prior academic English knowledge. In *technical terminology*, she states that subtechnical terms such as hypothesis, parameters, preliminary, etc. are rarely introduced in a non-English university setting, while technical terminology that professionals are working with are much more frequently known. Additionally, high-density noun phrases are common, but need to be able to be decoded to understand them. Producing these terms poses an even larger difficulty, even if decoding occurs. Finally, abbreviations in

these types of documents can pose an issue for non-native professionals. Common language words used technically also pose a difficulty for non-native technical readers and writers. If regular terms (i.e., host, documentation, tweeter, etc.) become technical terms, somebody from that content-area might understand. However, if these terms compound with non-technical terms or even transfer meanings, it becomes increasingly difficult for non-natives to comprehend. Strength of claim refers to the researcher's commitment to truth, authority, objectivity, or conclusiveness of their statement and whether they accredit information as their own instead of giving thought property to the owner (Pearson, 1983). This issue commonly occurs to writers from different cultures, where guidelines concerning quotations and citations are more lax or not as commonly practiced as others. Moreover, this includes the ability to use hedging appropriately, a very difficult subject for non-natives, particularly when their grasp of GPE is not strong. Appropriate use of hedging strategies may indicate reasonable doubt, but inappropriate use can downplay sound findings. Another issue is contextual paraphrase, which Pearson (1983) explains to be a concept quickly grasped by native speakers, but a great issue for non-native speakers and writers. Repetition is commonly not well seen in English texts, which is why paraphrasing is a good method to avoid the overuse of terms. However, if paraphrasing is used in an exaggerated matter or terms are paraphrased too loosely, misunderstandings and confusion with the reader can occur. Therefore, Pearson (1983) suggests explanation of pronominalization, parallel structure, and related coherence strategies to achieve adequate use of paraphrases and avoidance of repetition of ambiguous phrases or words. Finally, non-native speakers' issue with English rhetorical and text structure is addressed. This includes the subtle implications of what a writer would like to stress, guided by questions regarding content of the particular passage. Additionally, the connection of semantic, syntactic and rhetorical functions

is of essence for the type of document that is being written. According to Pearson (1983), all of these issues are more likely to be found in industry professions; hence it is important to not confuse these ESTLs with university students. They will be more likely to look for more specific learning outcomes related to their field, the repair of certain errors and evidence of significant progress. However, Pearson (1983) warns of self-evaluation of language level and areas that need work, as this can be misleading to the instructor. Underlying issues could be the reason for superficial problems in language, so caution should be applied. However, when ESTLs carefully consider what their issues are, it can be very valuable for instructors and instructional design.

Summary

Specifically when considering the last research reviewed in this section by Pearson (1983), it becomes clear that what the target group of ESTLs need in their instruction and where their current language level is needs to be assessed. Considering factors as described in the chapter so far will define what questions need to be asked to employees in the German technical industry. Especially areas that most ESTLs will not be aware of, such as the format changes in technical presentations and the importance for cultural considerations in communication need to be carefully considered and questioned respectively. The application for ESP/EST and GPE also require statistical analysis of frequency in the workplace, as well as commercial correspondence such as e-mail and business letters. In order to gather data that will address these frequent language learning issues, the proper instrument needs to be chosen.

Needs analysis

In order to design education for companies and ESTLs in the industry, exact requirements, as mentioned in the chapter until now, are important details that need to be communicated to the provider of education. In order to deliver exactly what is needed, needs assessment or analysis (NA) suggests itself as the tool for data gathering. As Kassim and Ali (2010) state, needs analysis is a frequently used tool to investigate ESP/EST requirements in an established field or industry. Kassim and Ali's (2010) approach will be used as a model for this study; however, other approaches to NA will be considered for optimum data collection design.

An exemplary study on how NA is being used for an industry's ESP course design has been done by Spence and Liu (2013). In this study, several engineers from a Taiwan semiconductor manufacturing company took part in a triangular NA process to determine their English needs in the workplace. The parts of the NA consisted of online surveys concerning background, current English language needs and specific workplace related English language needs, as well as follow-up interviews concerning their English language use, consequences of insufficient skills and tasks that had to be performed in English at the workplace. As a result of this study, specific insight was gained in the perceptions of the engineers of how English is used, what their skill level was and how they used the different language skills. Specifically, reading and writing as well as CMC were the most used skills and tasks. It is mentioned that these findings contradict Kassim and Ali's (2010) findings. However, both of these NA studies show how the combination of guided and free questions can provide valuable insight into the English levels and uses in a specific industry.

Using both Kassim and Ali (2010) and Spence and Lui (2013) as example needs analyses, this paper will seek to do the same and assess the ESP level and needs of Germany's

technical and scientific industry. However, as this needs assessment will be on a more large scale basis throughout multiple sectors of the industry and in various companies, a different approach to the assessment has to be taken. The Employment and Training Administration: Office of Adult Services has issued a study in 2000 that deals with assessing the workforce's needs of education in the community (Workforce Learning Strategies, Employment and Training Administration: Office of Adult Services, 2000). This document provides guidelines, examples and basic principles of how NA can be conducted to establish the education requirements of the work force. Particularly, it is stated that the geographic scope should be carefully evaluated and seen from an economic perspective as well. While this publication works with already existing data, this study will collect its own data. However, for the sampling process of the industry, it is suggested to analyze the demand and supply side, in this case which sections the industry spans, what companies are included and what kind of labor is practiced within those companies. This basic profile will help establish what participants will be included in the sample. Additionally, data analysis is discussed to make the audit purposeful and the data meaningful and exact. This includes sector and cluster analysis, occupation and skills analysis, and other mapping or survey methods. While this is done in Minnesota and uses US standards and examples, including geographical data analysis and Minnesota education standards, this is methodology and universally applicable and can easily be transferred onto Germany and its industry.

In conclusion, these exemplary studies and publications show that an online survey can provide sufficient results for an NA if questions are chosen carefully and the sample is adequately representative. However, the scope of this study is not as large as in the published studies and personal interviews would be too time-consuming. Therefore, these interview

questions should be included in the survey that will be administered to the sample chosen for the target population to gain insight into the German technical industry's English language usage and needs.

Conclusion

After review of the literature, it has become clear that due to the nature of ESP, it has become the appropriate language application for work-related communication. Both Swales (1985) and Dudley-Evans (1997) state that ESP and EST are English language focuses that apply to certain content related groups and can be divided into application related categories, such as EST is for ESP. Furthermore, Swales' (1985) episodes, the authors of the proceeding of the Japan Conference on ESP (Orr, 1997), Beamer and Varner (2005), and Clyne (1996) have established important characteristics of successful communicators at work. These include strong GPE skills, a good grasp and sensibility of differences influencing intercultural communication, knowledge of differences in format of presentations and writing, CMC and other work-related communication and, finally, an understanding and ability in academic writing on a foreign culture's level. Kankaanranta and Louhiala-Salminen (2010) as well as Kassim and Ali (2010) have shown that NA is the appropriate research method to approach finding the current state and potential implications of such to design curricula or course for ESTLs. Additionally, the two research teams showed that surveys provide an efficient tool to conduct an NA. Finally, Spence and Liu (2013) as well as the office of Adult Services (2000) showed the importance of demographics when selecting a target audience, sample group, conducting the NA and recruiting participants.

Considering the findings from this section, this study's methodology will be constructed with focus on the contributing factors for content and the guidelines for design of an NA. The following chapter will focus on the data collection design, sampling process, participant recruiting and data collection based on the key findings of the literature reviewed in this chapter. Then, results will be presented and implications drawn based on the data and consequent results.

CHAPTER 3

Methodology

Introduction

This chapter aims to introduce the sampling process and methodology that was used to gather data in this study. In particular, contributing factors to the choice of data collection method, the sampling process, participant recruiting and the consent process will be explained. Additionally, the content, design and process of the data collection will be described and explained. Since this study focuses on getting information from participants rather than having requiring active participation, participants will be referred to as *informants* for the purpose of this study.

Data Collection Method

After review of literature on ESP and ESP instructional design, it became clear that no curriculum or instruction in this area of English language instruction can be achieved without prior needs assessment. Many other researchers that have conducted a needs analysis have chosen questionnaires or surveys that ask participants about their English usage at work, prior language instruction and the importance of individual skills for their profession. The responses often are either statistics or individual's opinions that are analyzed for individualized instruction.

For the purpose of this study, the researcher decided to follow prior researchers and conduct a survey to analyze the current English language use by German nationals of selected German industries and determine the informant's expressed needs regarding the use of English

in the workplace. Since the potential informants were to be employees in companies based in Germany, the issue of administering the survey arose. The researcher therefore decided to use an online survey tool (www.surveymonkey.com) to get immediate and accurate results despite the different locations of researcher and informants. This tool provides the opportunity to conduct the survey despite geographical differences of informants and researcher as the online survey can be sent to participants as a web link that accesses this survey only. It is also easier to design and answer the questions as the tool provides different question and answer types, like multiple choice answers with one or more answers, essay style answers, rankings and ratings. Through this tool, informants can be made aware of how they are expected to provide their answers. Additionally, the tool allows for storage of answers to every question, analysis tools such as comparison and answer statistics and different export formats that make the analysis of data less prone to human error and analysis errors. Furthermore, the online survey tool provides the opportunity of anonymous responses from informants without providing any contact details. Considering that many of the potential informants were currently employed and working with English, recognition by customers, other professionals in the industry or the public could occur, which would lead to revelation of actual English knowledge and personal details. Through this online survey tool, informants' identities were kept anonymous.

Data Security

The online survey tool Survey Monkey provides a plan that allows a researcher to provide participants with an enhanced security web link (https://de.surveymonkey.com/) which uses Secure Sockets Layer (SSL) encryption (Survey Monkey). This option allows for secure data transfer between a user and the server. Additionally, Survey Monkey also uses security

scans, network security scans and hourly backups to ensure secure data storage on their guarded servers.

Sampling process

In order to obtain an adequate sample for this study, characteristics of the target population needed to be defined through contributing factors. The target population of this study was defined as employees in the technical industry in Germany. However, potential participants had to fulfill a few criteria to qualify as informants. The overall group of participants needed to vary in characteristics such as age, company's product or service and position within the company.

According to Jaeger (Jaeger, 1988, p. 217), the most efficient sampling procedure for surveys in education is a stratified random sample with optimal allocation, as it requires the least number of participants. However, strata for this study's identified target group was difficult to identify and random sampling was not possible, as informants had to be approached directly. Within the target population, certain groups can be defined and in such cases a researcher can use a cluster sampling approach (Jaeger, 1988, p. 319). However, it was not possible to survey every member of the group in this case, so an alternative design was selected.

After considerations of the above mentioned sampling procedures, the researcher chose to use a maximum variation sampling procedure (Perry, 2011). According to Perry, a maximum variation sample is "a cross section of cases that representing a wide spectrum" (p. 87). In this study, it is implied that an informant will possess characteristics that will vary from all other informants in this sample group. Hence, the variation characteristics need to be defined to apply them to the target population and reach an appropriate and representative sample for this study.

To maintain an equal factor throughout the sample group, every informant has to be an employee within the technical sector. The informant's employer has to either manufacture technical or technological products, provide service for such products, work in research in this field or work on the administrative, legislative or management level in formerly named companies. The exact position of the informant within this company or organization is irrelevant. Furthermore, the researcher did not want to exclude companies or organizations that never have contact with English-speaking persons to avoid bias.

Within this potential group of informants, additional factors were considered. The informants had to vary in age to avoid differences in standard education to influence the sample. Informants also had to be born and raised in different parts of the country to eliminate influence of education in West Germany and East Germany. The latter only received very limited English language instruction and had very little access to native speakers and materials in English. Additionally, they had to have different prior education in English until this point of participating in the survey. Also, informants needed to have different levels of secondary and/or post-secondary education, as there are several levels in Germany with a large variety of majors and contents of these majors, i.e. certain majors require a semester abroad or a certain level of Business English while others do not require either. Finally, informants' private backgrounds had to vary to potentially make an informed decision about instruction types.

Alongside the variations in criteria of individual informants, variation also needed to exist amongst the companies in which informants were employed. The companies or organizations had to range in size, number of employees, location within Germany (if possible, it would have been beneficial to have two locations of the same company or organization),

product or service and whether they work strictly within Germany or also on an international level.

Informant recruiting

After the factors and requirements of informants were set, the researcher faced the challenge of recruiting participants. When looking at the number of companies that met the above named criteria, the numbers were too great to contact every company. The researcher decided to ask someone in the industry to help with recruiting informants.

Through an online search of organizations and associations in the industry,

Zentralverband der Energie-und Elektroindustrie (ZVEI) (*German Electrical and Electronic Manufacturer's Association*) the researcher found an association that would be appropriate to help with informant recruiting. The reason for choosing this association was based on their mission statement and the variety of member companies. Within the association, there are 23 *Fachverbände* (Divisions) that represent specialized sectors of the industry, for example small electrical household appliances, large electrical household appliances, printed circuit boards (PCB) and electronic systems, medical engineering, consumer electronics, energy technologies, and lighting. The ZVEI describes the association and its mission as follows:

"We are the instance for public and economic politics of the electrical and electronic manufacturer's industry and contribute to further development of the economic and sociopolitical framework in Germany and Europe.

We provide our member companies with a forum for forming opinions as well as competent representation of our members' interests in politics, in society, towards customers and towards net product partners. Through regulations, norms and standards, we help to make

innovations marketable and to succeed in a competitive market.

We support our members through technology- and market-oriented service at the interface between politics, institutions, companies and markets. In dialogue with the public, we provide information about current developments and positions in the electrical and electronic industry." (ZVEI) (Translation by Kristin Hueneburg)

The association also has a history of supporting professional and student research in their member's industry. These purposes and characteristics of the association led the researcher to believe that informant recruiting would be best done with the help of ZVEI.

After initial contact with a representative, the researcher sent an outline of requirements to informants to ZVEI and asked for a list of member companies that could be contacted for this study. ZVEI then provided a list of companies and positions without individual's names that have been known to have participated in studies in the past (see Appendix A). The representative also asked that informants not be contacted directly by the researcher to keep their anonymity and to provide members with confirmation of the authenticity of the survey and the online link. After consideration of the potential informants and personal contact with the representative about informants' potential willingness to answer questions the researcher wanted to include in the survey, ZVEI and the researcher agreed on a list of informants to be contacted. The ZVEI representative then agreed to electronically forward a letter of introduction of the researcher and her institution and the purpose of the study that also included the consent form in German and the online survey link.

Consent

In order to obtain informants' consent to use the information provided in the online survey for the purpose of this needs analysis, informants were provided with a short explanation of purpose of this study, their rights and possible risks of the survey as well as potential benefits from participation. Since informants and the researcher were not physically in the same country, this was done in the letter of introduction that was forwarded to them by the ZVEI representative and additionally in the beginning of the online survey. Informants had to give consent by clicking the appropriate box on the first page of the survey (*Yes, I have read the statement above and agree to the terms and conditions of this survey*). If an informant did not agree to give consent and clicked on the other box (*No, I do not agree to the terms and conditions of this survey*), they were taken to the last page of the survey and not allowed to answer questions. As this survey can be exported as a PDF document through the online survey tool, proof of given consent can be stored in an electronic format for future reference.

Explanation of purpose, rights, possible risks and potential benefits were modeled after the Online Anonymous Survey Consent Form found in Appendix B, and translated into German for the benefit of informants.

Data Collection Design

As mentioned previously, the researcher and informants of this study were physically in different countries and could therefore not come together to conduct an interview or use any other data collection method that requires face-to-face interaction. Therefore, an online survey tool was used to acquire answers to the informants' English language use at the workplace and their background.

Since informants were employed at businesses and worked long days with very little time to spare, the data collection needed to take up only a small amount of their time, yet be long enough to get all the required answers. The researcher therefore decided to give many questions in a multiple-choice format, using the most frequent answers, as predicted by the researcher, or a range of quantity, to make answering as quick and easy as possible. This reduced the time required to complete the survey and left only a few open-end questions. However, in addition to multiple-choice answers, informants were also provided with a comment or 'other' option to give more details if desired.

Additionally to the question types, the researcher decided to divide the survey into different sections to indicate the purpose of the question to the informant and make the type of answer desired more understandable. The first section was *Personal Information* (Appendix D), which collected data on age group, gender, place of birth and living situation. These details were collected to indicate the possible influences of their personal background on the prior English education that informants have received, such as short English education of a younger person compared to an older employer or the English education received by a former GDR (German Democratic Republic) citizen, which was more likely to learn Russian than English, compared to a citizen of the Republic of Germany. Also, the living situation indicates what kind of past instruction was possible; for example, informants with children may have had less time to take courses in English outside of their employment, unless offered by their company. Additionally, this influences future instruction potential. According to Andrew (2012), a more in-depth view of Second Language Acquisition (SLA) and social practices is provided when considering communities of practice. These communities, as defined by Lave and Wenger (1991, as cited in Andrews (2012)) are communities that are bonded together by shared beliefs,

values and ways of talking and acting. Therefore, the instruction of ESTLs could be influenced by marital status, family situations and living situations, as these are characteristics similar to shared values. Therefore, learning may be more effective due to a feeling of community.

The second section of the survey collected information on *Educational Background*, mainly focusing on English language education, but also including informants' general education. The main purpose of this section was to see the background in which informants may have had English instruction and the general educational level they possess, which may influence the opinion on the importance of English and motivation to learn English. Also, the level of prior English education influences the ESP instruction or even GPE instruction that would be needed for individuals or groups within a company, as GPE knowledge is in most cases vital to ESP instruction (Dudley-Evans, 1997). Only in rare and urgent cases will ESP instruction be done for learners with low GPE knowledge. Additionally, informants' opinions towards language knowledge of English in the German industry and German in the global market were explored to determine whether the level of English may be influenced by the attitude towards the language.

In the next section, the informants' *Professional Background* was explored to gain more insight into their work, company and profession. Additional to the company name, participants were asked to provide their official professional title, such as vice president, director of [...], management employee etc. This determined the level within the company hierarchy and department in which employees worked, influencing the need for English usage in the work place. Additionally to their position, the time spent working with this particular company may also influence their knowledge, both of English and the ways in which it is used within the company and their position. Another factor that was examined in this section was the contact

with speakers of English, whether native speakers or non-native speakers, within the company and as company contacts. This factor was predicted to influence their usage of English, whether it is business communication, technical communication or private inter-personal communication. When considering Kankaanranta and Louhiala-Salminen's article, it can be assumed that private communication in English is rare within a company and that the communication that occurs will dominantly be business-related (Kankaanranta & Louhiala-Salminen, 2010). Additionally, the quantitative range of English-speaking employees in the same company as well as the business contacts was asked to determine the urgency of English, particularly ESP, at the workplace.

The final section of the survey concerned the actual *English Usage in the Workplace*. While the previous sections are important when considering the current level of English knowledge and course design, this section addressed the actual use of English, particularly focusing on the purpose of use, the language skills involved and the frequency of use. For these reasons, the initial question to the informants concerned a ranking of most to least frequent use of the four language skills, predicting, based on the reviewed literature, that oral skills will be used more frequently (Kassim & Ali, 2010). Additionally to the skills used, questions were posed about how much English the informants use on average each day as well as for which purposes they use it. A contributing factor here is whether English is used for private or professional purposes. The latter largely influenced the question concerning the frequency of terminology use. As described earlier, ESP is defined as language used for a specific content area, which also indicates the frequent use of discipline-related terminology (Strevens, 1988). Aside from asking about the frequency of particular purposes for which informants may use English, it is also important whether they feel comfortable using the English knowledge they

already possess, which is also explored. Another factor that was explored and may lead to less motivation to use or learn English can be learning success of non-native German speakers. Aside from strictly linguistic English language, cultural factors and informants' knowledge of such are explored in this section, namely their knowledge of English commercial correspondence, such as emails and letters (Bauman, 1997), academic writing skills, such as professional publications, and international technical writing and presenting (Trush, 1993). Finally, as these informants were only a very small sample of employees in the technical industry, they were asked to evaluate whether their own knowledge of the English language and cultural factors are standard within their company or business.

Data Collection Process

In order to reach the informants as quickly and directly as possible, a web link was created for the anonymous online survey and incorporated into the German letter of introduction as found in Appendix C. However, as ZVEI requested to contact the informants directly, the letter was only sent electronically to the representative at ZVEI, who in return forwarded the message to the informants that they had chosen and contacted prior. According to the representative, many were contacted personally prior to the forwarded e-mail, either by phone or in person on various conferences that also involved ZVEI. Informants completed the survey through the web link and, after giving consent. If an answer was not known, the question was not applicable or they did not feel comfortable providing an answer, they were at liberty to skip the question without any explanation.

On the final page of the survey, informants had the opportunity to submit any comments or questions that they had to the researcher after participating in the survey. Furthermore, they

were thanked for their participation and given information about how to contact the researcher for the final copy of the study. On the bottom of the page, they had to click the button labeled 'submit', which sent the information to the online survey tool provider. The information submitted was then visible to the researcher.

Analysis Procedure

Included in the online survey tool is an analyzing tool that allows the user to get statistical and summative data from all participants, as well as for individual submissions. Questions that included ranking, rating or multiple choice answers are displayed in bar graphs with the comment/ 'other' section displayed right underneath. Additionally, these types of questions also were analyzed in a table that displayed the entered data as percentages as well as the number of informants that chose the particular option. Submitted answers to open-ended questions were displayed in order according to the time that informants entered them and responded to the survey. For each submission to each question, date and time were displayed. The survey results as a whole were organized according to the number of the question. Filters could be applied, but for this study, the researcher chose not to use any filters.

Finally, results could be exported in various export formats, including html, Microsoft Excel format and a format for calculation software. As most of the statistical analysis had already been done for this study, the researcher chose to export the data as a PDF file (Appendix E). The export includes all questions, bar graphs, tables and original answers as submitted by the informants, which were all posed and submitted in German to ease the demands of completing the survey.

While the multiple-choice questions were downloaded for statistical data analysis, the open-ended questions were analyzed separately. For questions 4, 10 and 11, no specific analysis is needed as these are strictly numerical data. Questions 7, 18 and 23 were analyzed for commonalities and compared to conclusions from other questions. As there always was the possibility to comment or choose *other* as an answer, these parts of the question were analyzed as open-ended questions and added to the pre-determined answer choices. Additionally, surprises as well as outliers and extreme cases were recorded, evaluated and possible conclusions drawn.

In conclusion, the methodology was chosen to be an online survey and sent to ZVEI for distribution. It contained 4 sections and a total of 23 questions. Informants had the choice to not answer a question. ZVEI distributed the online survey link along with a letter of introduction, explaining the study and the terms of consent. Finally, data were analyzed according to question types and the numerical results exported from Survey Monkey.

CHAPTER 4

Results

Introduction

In this chapter, the data collected in the online survey will be analyzed and results presented. The data presentation will occur according to the four sections of the online survey as indicated in the previous chapter: a) Personal Information b) Educational Background c) Professional Information and d) English Usage at the Workplace. For the full list of questions, please refer to Appendix D. The full results in German are displayed in Appendix E. A total of 20 potential informants were contacted and 18 responded. This accounts for a 90 % response rate, which is sufficient for this study, as response rates over 50% are found adequate (Babbie, 2011). All collected responses were included in the analysis.

Personal Information (Items 2-5)

The informants all responded to items 2, 3 and 5. Item 4 only received 14/18 responses, one response being vague, but of value to the data. All percentages and numbers are based on the tables found in the data export of the online survey from Survey Monkey.

Q 2: Age Group

Of the responding informants, 4 stated to be 18-30 years of age, 7 were 41-51 years of age, 6 were 51 – 61 years and one informant was older than 61 years. Therefore, these numbers represent a sample that has more informants over the age of 40. Considering that the current average retirement age is around 63 years old, this sample is adequate as it shows the current employment group with the most employees. Additionally, as the average university graduation

date is 24 years old, the informants in the 18-30 year age range are strong indicators of the younger generation's level and needs of English language.

Q 3: Gender

The gender ratio on the other hand is less representative as a sample. Out of all informants, 88.9 % were male, providing this study with only two (11.1%) of female respondents to consider. However, as stated in chapter 1, the technical industry in Germany is still heavily dominated by male employees, as it is the case in most cultures with successful technical industries. Therefore, this sample is adequate and more representative than it may be in other professions and industries.

Q 4: Place of Birth

In terms of birth places, this group of informants provides a varied range, suggesting a varied approach to educational background in terms of English. Figure 2 shows the places of birth that were recorded as they are in geographical terms.

One response worth noticing is that informant #3 was actually born in the Germanspeaking Austria, which indicates that English language education in school may have been
received starting from grade 1 to 7. At a closer look, this informant is in the age group of 51-60,
so it is more likely that English instruction started at grade 7. Additionally, three of the four
informants that were born in the former GDR, where English was not taught in elementary or
secondary schools, were under the age of 30 and would therefore not have had their complete
education in this school setting. However, it may show the effect of educational change in the
states that joined the Federal republic of Germany after 1990. One informant that was born in
the former GDR was in the age group of 51 to 60 and is therefore expected to have had his
entire education in the GDR school and university system.



Figure 4.1: Informants' birth places

Source: https://maps.google.com/maps/ms?msid=210783451092881253825.0004d80f8876c01f03e9c&msa=0

Q 5: Please describe your living situation.

This question took a closer look at family, marital status, living situation of the informants to relate to other data gathered and indicate possible instructional design options for the industry. Out of all informants, eight were married, six in a relationship and three single. As long-term relationships with a mutual living place without marriage are more socially accepted, marriage is actually not as common in Germany. However, out of the six respondents in a relationship, only three stated to live with their partner, one of them even in a shared apartment. Nine informants responded whether they had children or not. Four did not have children, and all five respondents with children also stated that they were married.

Section Summary

In conclusion, informants in this study are typically either below 30 years of age or over 41, which provides no data for the age group between 31 and 40. Only two informants were female, making this sample dominantly male, which in return is a typical ratio in the German technical industry today. The distribution of birth places of informants was varied, proving this sample with background of varied German culture. Finally, informants provided all levels of marital status and living situations, which will be of value for the discussion of instructional design indication in Chapter 5.

Educational Background (Item 6-9)

As a wide variety was intended in this sample, education had to vary between informants. Most informants were expected to have achieved the highest level high school diploma (*Abitur*) and possibly some kind of university degree. Additionally, a minimum of high school English education was expected and, if possible, some kind of additional English instruction specific to their field of study or employment. It was also predicted that informants would find English to be at any level between *good to have* and *very important* in their work environment. The same outcome was predicted for German in the global work market. All informants answered every question in this section.

Q 6: Please describe the secondary/post-secondary education you have had.

As predicted, all informants had a high level high school diploma (*Abitur*) for either university or community college level. Only informants #5 and #6 had the community college entrance level (*Fachhochschulreife*), but both went on to receive a Diplom in their higher education career. Both were older than 41 years, so it is to be expected that they received their

Diplom (the standard Science, Engineering or Business degree) at a university of applied sciences that allows such entrance qualifications. Only with the addition of "(Univ.)" to the title does the degree indicate to have been acquired at a standard university, which also requires the standard Abitur for admission. With the exception of informant #1 and #13, all other informants received their Abitur and then Diplom (informant #3 states he received an engineer's degree, which is typically a substandard of a Diplom), a Bachelor's and Master's Degree or even PhD. Informant #1, as one of the two female informants, states in item 7 that she has received a degree in vocational training (for economic correspondence), an educational branch that combines practical training in a company as well as theoretical training in a vocational school, similar to community college (Lewis, Schwitalla, & Zitzlsperger, 2001). Informant #13 chose to first complete vocational training before going to university for his state examination. Informant #18 also received state examination. As he is employed in an organization, #13 in the legal sector and #18 in the human resources and financial sector, it is assumed that #13 received the state examination in law and #18 in finance or teaching, as the only other majors that receive this type of diploma are doctors or pharmacists. All of these degrees indicate that, according to German Educational law, at least five years of Basic English education were received and general education knowledge is of an advanced level.

Q 7: How long have you had formal English instruction and what kind of instruction (incl. English Commercial Correspondence/Business English etc.)? (Please elaborate if necessary.)

In this item, informants were asked to provide the extent of their English language education. Most informants reported seven or more years of English during their primary and secondary education, since the number of school years until Abitur varies from 12 to 13 years between states and Fachhochschulreife is only 12 years. Furthermore, there is a variation of

when English classes begin between states and depending on when the informants were in school. One of the exceptions at the lower end is therefore informant 6 who states to only have had four years of English education in school. Therefore, it can be assumed that informants all had different levels of English at the time of high school education. Eleven of the informants also reported additional English language training after high school and six reported to have had English instruction during their time at university. Four informants reported to have had some different type of English instruction after high school and only two reported to have had specialized English instruction (two years of economic correspondence for informant #1 and 1 semester of technical English for informant #10). Only informant two state to have received instruction in an English-speaking country. Informant #4 states to have studied English for a one time period of two weeks in an English speaking country. Informant #12 on the other hand spent the same time period abroad, but with three repetitions, indicating that English language learning progress was maintained. The only two informants to have spent an extended period of time abroad were respondent #13 who reports to have spent a year in the United States as a foreign exchange student, and informant #16, who spent a total of three semesters abroad during their Bachelor and Master studies. The latter is currently the standard for graduation requirements in most majors, although it is not required to choose English-speaking countries. Programs sponsored by the EU, like ERASMUS, are popular and in high demand at universities. In conclusion, except for the low number of extended periods abroad, these results match the approximate outcome prediction of the researcher for informants' previous English language instruction.

Q 8: How important to you think English is in the current job market? Please explain your reasons.

The informants' opinion of English in the informants' own branch in the industry was reported in this item. As predicted by the researcher, the average rating on a scale from 1 to 9 came to be as 8.39. Two informants rated English knowledge at 7, four rated it at 8 and eleven rated it at the highest importance possible. Only one informant rated English language knowledge as low as 6. Additionally, informants had the opportunity to comment and give reasons for their choice. Eleven informants chose to take advantage of this option. Five of them reported that English is essential because their company or companies in general work on an international level, where English is the official language or correspondence. One stated that especially on the management level, English is indispensable. Additionally, three informants reported that they believe English to be important due to literature that can often only be found in English, requiring good reading and writing skills. One of these informants stated that this is importance even if the company does not work on an international level. Another reports that due to high export rates for products made in Germany, particularly in engineering, it is also important to be able to understand or discuss technical matters in English. For cooperation with international partners, English is especially essential according to two informants. One of them even states that English is essential for all tasks, whether as perceptive or productive skill. Another informant, who appears to be mainly working within the EU, states that although German is the common language of communication within Germany, as soon as the communication is on an EU level, English is still dominant, despite the possibility to use French. Finally, one informant, an employee in IT, commented that English is the official language of IT and is therefore indispensable. Finally, one summarizes the statements, by claiming that English is becoming increasingly important.

Q 9: How important to you think German is currently in international business practices? Please explain your reasons.

However, as this study is also analyzing communication with non-German nationals working in Germany, this question analyzed the informants expressed opinion on German in the global market. In this item, the answers were more varied than in item 8. On a scale from 1 to 9, an average of only 5.0 was reached, putting German skills just at good to have. Out of all 18 respondents, only two found German to be very important and rated it with a 9. The majority of six informants rated it at 5, good to have, and three rated it at a 3, indicating that it is not important to have German skills. Two informants rated it at 7, which is rather high in comparison to the others, and two just a bit lower at 6, one below good to have at 4. Five informants total rated it at the lower end of the spectrum; three at 3 and one informant respectively even rated German skills at a 2 and a 1, indicating that it is not at all important to know German. However, in this item informants also had the opportunity of giving reasons or comments for their choice of rating. Informants that rated German skills above 5, so as important to some extent, stated that German is important due to the good reputation of German products and the resulting communication items such as trade fairs, company internal publications and possibly interpretations/translations. It was also stated that Germany is still the central market in the European Union. Additionally, German government and authorities still heavily rely on German and do not communicate and allow presentations in English. Furthermore, informants stated that within Germany and German locations of international companies, it is still best and most common to communicate in German. In item 19, the progress of non-German natives in their German language instruction will be analyzed for this reason. However, informants that rated German skills lower than 5 stated that for this exact

reason, German is only applicable in Germany, or central Europe, as expressed by one informant. One informant also stated that due to Germans' good knowledge of English, it is not necessary to know German. Furthermore, most informants that commented on this item and ranked it low, said that despite English being more important, German should not be neglected for work within Germany.

Section Summary

In conclusion, employees in the German technical industry have received high secondary and post-secondary education as well as a reasonable amount of English language training. Some even receive training after their university studies and actively seek language education. English language knowledge is hence very important to most employees, especially considering that many think German is less important and if so, then only within the German and European market.

4.4 Professional Information (Item 10 – 15)

Q 10: What is the name of the company you are currently employed at and what is your official job title?

In order to establish the informants' company size, location and their level within the company, they were asked to provide their employer as well as their official occupational title within the company. Seventeen informants responded to this question. To establish an approximate view of the distribution of informants within the above named categories, the table below was developed for this analysis. Corporations were grouped according to size or number of employees and where their main target market was situated, i.e. Germany, Europe or global.

Within these companies, the hierarchies were grouped into levels within the company.

Employee refers to an informant that has no or little leadership function within the company.

Table 4.1: Informants' distribution in terms of hierarchy and company size

	President/ Vice President	Director of subsidiary	Director of department	Project Manager	Employee	Assistant/ Admin. Assistant	Intern/ Temporar y employee
		Informant					
Large,		#10					
international	Informant	#6		Informant			Informant
corporation	#8	#5		#11			#2
Large,							
European corporation			Informant #12				
Large national corporation		Informant #14	Informant #18	Informant #13	Informant #16	Informant #1	
Medium,		Informant					
international	Informant	#15	Informant				
Corporation	#3	#17	#4				
Small					Informant		
corporation					#9		

Additionally, the geographical distribution was researched after informants had submitted their answers to the surveys. Based on informants' provided company and position information, the researcher attempted to provide geographical distribution information to refer back to in later findings. Additionally, a broad distribution of locations for various companies could provide a more diverse need and use of English in the workplace. The following figure shows a German map with indicators of informants' companies' locations within Germany. As it can be seen from the map, the representation of Southern and Western Germany as well as the city of Berlin is dominant. However, this is also a representation of common population and economy distribution with Eastern Germany having a very low population density excluding Berlin, additional to Western Germany having a high population density and Southern Germany having a high economic value and wealth additional to a high population density. Furthermore,

the company names gave an insight into products or services provided by the informants' companies.

Figure 4.2: Geographic distribution of informants' companies



Source: https://maps.google.com/maps/ms?msid = 210783451092881253825.0004d80 feed 6e64667126 &msa = 0.0004680 feed 6e646670 feed 6e646670 feed 6e646670 feed 6e6466

These included transportation technology, IT solutions, automotive technologies, electricity metering, research and design, government relations, architecture and innovations, electrical engineering, automation and telemetry, semi-conductor production, energy grid management and more. With these sectors of the industry, the sample provides a representation of the design, theory, application and legal departments of companies in the industry.

Q 11: When did you start working for this company?

A factor contributing to the estimated liability of expressed opinions and data provided is the time spent in the industry and company, as stated in this item. With an average of 13.125 years of experience, the 16 informants that answered this question provide a strong source for this study. The shortest period reported was 17 days for informant #12, who also is in the age range of 41-50 and can be assumed to have worked in the industry longer. The longest reported time is 40 years by informant #4, who also states to be a Senior Vice President of the company. It can be assumed that the initial employment also was at a much lower position within the same company.

Items 12 through 15 concern the actual numbers and positions of English-speaking individuals. This will show the immediacy of application of ESP/EST and potentially the urgency of improvement and instruction.

Q 12: How many English-speaking persons are employed in your company with whom you frequently interact?

As this item shows the majority of informants states to work with more than 50 English-speaking employees within their company. Four state that there are more than 100 employees, which the researcher mainly accounted to the subsidiary directors of a large, reputable company that prominently works on an international level. Four informants were recorded to work with more than 50 but less than 100 English speakers. Another four informants state to work with between 10 and 50 English speakers and five informants work with less than 10. In item 12, the informant that did not respond to the multiple choice part of the question reports that there are no English speakers in their company. However, considering that seventeen out of eighteen informants responded to this question, it shows that contact with English speakers within their own company is very common in the industry.

Q 13: What is your professional relationship to them?

This question reports the relationship of informants to the company's English speakers. All of the responding 17 informants reported that the English speakers that they work with are co-workers, which supports that English is needed on all levels, considering the different positions of informants. Nine informants report to have English-speaking employees working under them and eight informants report to have English-speaking superiors. This strengthens support of the presence of English speakers at all levels within a company.

Q 14: How many English-speaking business connections (of any kind) outside of your company do you usually work with in an average week?

In comparison to English speakers within the company, this question investigates informants' contacts outside of their own company. Seventeen answers were recorded and one comment given. Unlike in item 12, informants state to have a maximum of 50 business connections outside of their company. Eight claim to have less than ten English speakers that they work with and nine informants report to have between 10 and 50 business connections. One informant reports that outside of the company, contact to English speakers is as rare as 5 times a year. While these numbers on average are smaller than in item 12, it still shows that the majority of the informants have English-speaking business contact.

Q 15: What is your professional relationship to these business connections?

According to this item's responses, 14 informants' business contacts are customers or potential customers, making it the most common type of contact. The next most frequent contact type are employees or potential employees, which supports the statement made in chapter 1 that many foreign workers are now being employed in the German industry. Eight informants report that their supplier or subcontractor is an English speaker, which is common

within the EU. Additionally, nine informants state that they are in contact with contacts at organizations that primarily speak English. These results show a wide range of contact types and support the notion of the necessity of English for successful companies.

Section Summary

In this section, the basis was set for analyzing English in the work environment, focusing on the quantity of English speakers, the company and level of employment and the years of experience in this company or sector. A variety of companies and positions were represented in this sample and a geographical variation has been noted. It has also been found that within one company, there are often large numbers of English speakers in all levels. Finally, it was found that despite smaller numbers of business contacts outside of the informants companies, a large variety of contact types is present.

English usage at the Workplace (Item 16-25)

In this section of the online survey, informants were asked to evaluate the frequency of their use of certain English language skills and the tasks in which they are used. Additionally, the percentile of usage per day and the informants' opinion of the English standard in their company are explored.

Q 16: Please rate these 4 language skills from most used to least used in your average work week:

The first item asked informants to rank the importance of the four language skills from most to least important. Contrary to the researcher's expectation that productive or oral skills would be more important to all informants (Kassim & Ali, 2010), all skills received the average

ranking between 2 and 3, providing no skill with a significant lead above the others. However, the breakdown of rankings and responses to this question shows some patterns within these averages. First, one informant only rated speaking and writing, but did not provide a ranking for listening or reading, which can be assumed to mean that that informant did not find the latter important at all. The first item to rank, Speaking, received the most votes (6) to be in second position in terms of importance. The second item, Writing, received 8 votes second position, outranking Speaking. The third item, Reading, received most votes (6) for first position. Listening, the last item on the list, was most commonly voted to be in fourth place in terms of importance (8 votes). This would put the ranking by most votes from first to last: Reading, Writing, Speaking, Listening. Additionally, when looking at the decimal points of average ranking, which includes all other votes, the importance, from most to least, would be perceived like this: Writing (2.72), Reading (2.71), Speaking (2.61) and Listening (2.06). This ranking by average votes provides a different position of Reading and Writing, however, the decimals show how similar they are in average ranking. Overall, it can be seen that this evaluation by this study's informants puts the written skills before oral skills, which contradicts Kassim and Ali's findings.

Q 17: If you had to estimate, how much do you use any English language skills at work on an average day?

Next, informants were asked to estimate the percentile of their day where they used any English language skills. The expectation was that informants use any skills at least 15% of their day for one specific task. Findings showed that the majority of five informants used English between 25% and 40% of their day. Additionally, two informants use English between 40% and 55% of their day, two use it on average between 55% and 70% and one informant even uses it

between 70% and 95%. Additionally, four informants use English between 15% and 25% of their day, which is still at the expected level. Therefore, the majority of the sample with fourteen informants uses English skills over 15% in an average day. Only four informants claimed to use English less than 15% of their average work day. However, these last four informants either worked in lower level positions or with small or medium, mostly nationally operating corporations. In the comment part of this item, one informant also states that the English language usage changes depending on location and that in the past 6 months of 2012, they used English approximately 95% of their day. However, it is not stated where the said location is, whether national or international.

Q 18: What is the nature and type of communication that you have with English speaking colleagues and/or business connections?

This item explores the nature of communication with English speakers through a multiple choice question with elaborations in the comments section. The researcher expected mostly business communication to occur, but also a few private conversations with contacts that informants frequently worked with. However, only one informant stated in the multiple choice section that they use English privately at the workplace. Despite that, four informants answered that alongside the main business communication, a few private conversations or small talk may occur, but always depending on the relationship with the interlocutor. The most frequent answer, explicitly stated by fifteen informants, was that e-mail communication is the prime application for English in the workplace. Nine informants stated that telephone conversations or conferences also were a frequent application of English. Meetings and presentations were additional occasions where English was used. One informant stated that for international visits, meetings or similar English was the most frequent medium of communication. Another

comment stated that the forwarding of information was the application for English, which also implies e-mail, letters or telephone conversations. One informant stated that English was mostly used during sale and quote processes with customers, while another reported technical matters to be a frequent application.

Q19: How many of your English speaking colleagues have knowledge in German or are learning German with substantial progress?

As mentioned previously in the *Educational Background* section, item 19 sought to find levels of German in English speakers within the same company to investigate the reasons of potential lack of English use. Alongside the percentile multiple choice options, informants could also comment on their choice. However, many chose not to use the multiple choice option, as there were only 8 answers in this part of the item. Four informants stated that all of their English-speaking employees learned German and made progress. Two informants reported that about 25% of the English speakers learned German with substantial progress. More than 50% was only chosen by one informants and another reported that about 50% learned or spoke German. These numbers met the expectations of the researcher to an extent, as it was assumed that not many German nationals had substantial English knowledge and that the foreign employees needed to adjust. However, the comment section showed that eight informants stated that either no English speakers learned German or only very few. Specifically, statements contained answers that suggested that for five informants, below 10% or below 5% would have been a more adequate answer choice.

Q 20: Do you enjoy communicating with your English speaking colleagues and business partners in terms of the English language use?

In this question, informants were asked to rate their level of comfort with their English skills. It was expected that many informants were not quite comfortable with their English skills, if they answered honestly. However, only three informants stated that they did not feel very comfortable with their English. Furthermore, six said they feel relatively comfortable, while the majority of nine informants said they are very comfortable with their English skills. Elaborations to these choices provided more detailed reasoning behind these choices. One informant stated that mostly vocabulary knowledge and pronunciation are issues in their English language, which is why they were less comfortable. Another informant answered that in terms of technical English he possesses strong knowledge, but the GPE knowledge, especially for small talk, is not present. Another informant stated that it is also a matter of nationality, as in their opinion British speakers tend to use more complex language than Chinese or American speakers of English. Another informant that rated to feel very comfortable with their English commented that it is always a pleasure to use and improve English skills. However, this statement was given by informant #13, who stated to have spent considerable time abroad. Age also seemed to be a consideration factor, as one informant states that twenty years of consistent use make a confident speaker. However, others stated that it depends on the interlocutor. One said they felt comfortable with everyone except native speakers. Another informant claims that it also depends on the topic and that especially conversations with more technical background influence confidence, as technical vocabulary is missing in these situations.

Q 21: How often do you use English terminology related to your field of employment in communication with English speaking colleagues and business connections?

As the last informants stated, content-specific terminology is an important part of ESP/EST and is therefore explored in this question. Informants were asked to state the

frequency of use of content-specific terminology, phrases or expressions. The majority of informants used these features *often* (6 informants), *relatively often* (4 informants), *almost always* (3 informants) or *always* (2 informants). Only 1 informant chose to answer *rarely* and two chose *sometimes*. No informant chose to answer that they never use these features. This provides results that strongly suggest that terminology is essential in informants' work environment.

Q 22: When using English in your work environment, how often do you have to...

This item was a more extensive analysis of the application of informants' English knowledge and skills and included tasks that the researcher expected informants to complete frequently. For the purpose of this study, the researcher chose to list the tasks according to frequency instead of analyzing each task separately. Tasks that were completed daily include understanding spoken English (10 votes), understand written English (12 votes), speak English (7 votes), use content-specific terminology appropriately (9 votes), write English e-mails or letters (8 votes) and compose general English texts (3 votes). Multiple times per week, informants have to understand spoken English (2 votes), understand written English (2 votes), speak English (4 votes), use content-specific terminology appropriately (3 votes), write English e-mails or letters (3 votes) and compose general English texts (3 votes). Once per week, three informants had to compose general English texts and one informant had to understand written English and write English e-mail or letters. Every two weeks, three informants stated that they had to understand spoken English, two had to understand written English, use content-specific terminology appropriately or compose general English texts. Four informants had to speak English and three had to write English e-mails or letters. In the next category of frequency, one informant had to understand written English or speak English, while two had to compose

general English texts *once per month*. Three only had to understand spoken English or use content-specific terminology appropriately *once per month*. A few times per year, two informants had to speak English, while one needed to use content-specific terminology appropriately or compose English e-mails or letters. Three informants had to compose general English texts a few times per year. Finally, three informants stated that they never had to compose general English texts. To conclude, the tasks performed most frequently are to understand written and spoken English, which many informants had to do on a daily basis. Many also had to write English e-mails or letters and use content-specific terminology on a daily basis or at least once a week. Informants did not have to speak English themselves as often, but as many as seven still had to do it daily. The task least performed in terms of frequency is to compose general English texts.

Q 23: Aside from language use, do you adjust format/presentation of documents, presentations and written correspondence when targeting an English speaking audience? If yes, please explain how.

Additionally to these tasks, it was expected that the informants had to alter their previously composed documents, presentations or publications in order to provide an English-speaking audience with it. It is explored how, aside from translating the language into English, informants changed format, visuals or structure of these files (Beamer & Varner, 2005; Clyne, 1996; Pearson, 1983; Trush, 1993). Fifteen informants total answered this question. Ten of these respondents stated that they did not alter format or structure of these file types. Four informants accounted this to the fact that they only use English language presentations or documents within the company, even for a German-speaking audience. Two informants stated that they only translate the files without any further changes. Another informant stated that they

do not change the format specifically, but that it is adapted to the nationality of the target audience, which is not further explained. Only one informant answered that they adapt the files to the culture of the audience.

Q 24: How often to you write, edit or proofread English publications of any kind for your company?

In lieu of the changes that are suggested for adaptation to different cultures, this item explores the frequency of editing, proofreading or composing English documents or publications. Out of the seventeen informants who responded, two respectively *never* composed, edited or proofread English documents. Two respondent only composed English documents *one or more times a year* and three proofread English documents *one or more times a month*, seven informants edit and eight compose English documents, while only five proofread. *One or more times a week*, four proofread English documents, three compose documents and two edit documents. Finally, four informants edit, three compose and two proofread English documents *one or more times a day*. Considering these outcomes, these tasks are completed most frequently one or more times a month. While this is not as frequently as the tasks in the previous items, it is still present in the informants' work environment.

Q24: In your own opinion, are your English language skills the standard in your company?

The final item of the online survey concerned the informants' perception of the standard of English language knowledge in their own company compared to them to account for an estimate of average English knowledge in the industry. In this item, only 47% responded that yes, my own knowledge is the standard and the other 53% states that no, my own knowledge is not the standard in my company. Five informants commented, of which one stated that yes, it is

the standard for younger employees, but not for older employees, and another said it is on the management level. Another informant commented that it is the standard for the administrative section of a company, but in production not many employees need English skills. Two judged their own English knowledge to be better than the average employee in their company.

Section Summary

In conclusion, this section showed that English is, in fact, frequently needed to interact with English-speaking colleagues, as they often do not learn or speak German. Also, it is frequent that informants use English language skills more than 40% of their day, of which they perceive writing and reading to be of the most importance. Furthermore, English business communication, such as e-mail, telephone conversations and meetings as well as presentations and meetings, is more dominantly used over private English communication at the workplace. Informants also use content-specific terminology frequently at the workplace and on average feel confident in their English knowledge and skills. Also, except for composing general English texts, informants complete tasks daily that use all of their English production and perception skills. However, considering that most informants edit, proofread or compose English documents or publications at least one or more times a month, they only rarely change the format or structure when transferring these from an existing German template. Generally, the opinion of informants' English knowledge as the standard in their company was not conclusive.

Unexpected outcomes

In this final section of the data analysis, some of the unexpected outcomes of the study are noted and discussed.

Low GPE skills

During the data analysis, the researcher frequently looked through the individual informants' answers to search for patterns or explanations for certain abnormalities to the average. One informant's responses particularly stood out from the others. Informant #5 stated that not only does his company provide English instruction throughout the day for employees of any level, but that he also has a stronger grasp of technical English than of conversational or GPE. The informant himself attributes this to the fact that he interact with Chinese and Indian business partners and had to learn the technical component of his work in English to do so. His general English skills got neglected in the process, as the instruction in his company focuses on English for the workplace. This phenomenon has been stated and analyzed in an article by Odgen Lindsley, who states that the concept of generalizing specific terminology or using language with low complexity can be a difficult task to master once the certain proficiency in ESP is achieved (Lindsley, 1991). However, this skill is necessary in today's business world, as Lindsley describes and informant #5 states. In his article, the author describes the process of translating between difficult, technical language and general English to make it easier and more accessible to everyone. This is achieved through the description of steps that can be taken, as well as the use of acronyms for processes to make these steps memorable and applicable. Technical jargon is the central focus of EST, however, this article shows the other side to communicating with others, especially with customers or interlocutors not familiar with the area of specialization. In the case of informant #5, it may help his ability to socialize with his

business contacts. This reverse process is important for understanding how he can choose his language in situations to match the audience as well as the level of background knowledge.

Additionally, this process can help other ESTL's understand how the knowledge they already possess can be used to express what they want to express before acquiring the language knowledge and terminology.

English speakers and the German language (item 19)

After analyzing item 19, it was surprising to see that very few informants had Englishspeaking colleagues that were learning German. The expected outcome of this question was that due to the low level of English in German nationals, many English speakers would be learning German. However, this item's results showed that this is not often the case. Reasons for this could be that it is often reported that many Germans speak English and that one does not need to know German to get by in everyday life situations. However, this does not hold true to all areas of Germany and is only valid to a certain extent. For many Germans, English education is limited to their secondary school education and often there is no contact with native speakers. Additionally, as very few universities require English language credits from their graduates in other majors than English or languages, it was expected that the English language knowledge of informants was limited. Additionally, it is reported in the media that German is increasingly a requirement for foreign nationals when applying for work in Germany. In an article from October 2012, Handelsblatt, a renowned German economic newspaper, reports that many foreign nationals graduating with an MBA degree that want to stay in Germany will have to possess excellent German language skills (Hofmann, 2012). The paper quotes the director of career services at the Leipzig Graduate School of Management, who states that non-German students at the school are always told that German language training is essential, if they plan to

take on a position in Germany. A student at the same university even reported that many companies in Germany claim to work internationally, but nevertheless mainly recruited employees with German language skills. Many economic schools therefore offer night classes in German for their international students. While this article focuses on the MBA degree and economic schools, the situation of companies reflects the average company in Germany, regardless of the sector of industry. For these reasons, the small number of English speakers in informants' companies learning German is an unusual outcome in this study and may warrant further investigation.

Comfort in Language Use (item 20)

When the researcher initially decided to investigate this topic, it was communicated by professionals in the industry that many employees of the German technical industry had asked for English instruction due to their discomfort with English language use. However, this study's data showed that most informants were very comfortable with their English language knowledge. Therefore, a closer look was taken at the reasons behind this unexpected outcome. As a result, the notion of German pride was found as a contributing factor (Beamer & Varner, 2005). Varner and Beamer explore the concept of pride in Germany and state that "Germans find it difficult to say that they don't know or admit that they were wrong. [...] Insecurity often leads to exaggerated assertiveness." (Beamer & Varner, 2005, p. 219). This could account for the number of informants that rate their comfort level as high without any comment, quite contrary to the expectations and experiences of the researchers.

Summary of Results

This chapter presented the results of this study. A total of 18 informants provided responses to the online survey. Most participants were between 41 and 60 years old and had geographically varied birthplaces, marital status and living situations.

All of the informants had achieved the high level high school diploma (Fachhochschulreife/Abitur) or higher and most had completed at least a Bachelor's degree. On average, informants had six or more years of high school English language instruction, but only some had further English language education beyond high school. Only a few actually spent extended periods in English speaking countries or had content-specific English instruction. Most informants thought English to be of importance in the German industry, while the opinion of the importance of German on the global market was divided.

When it comes to informants' employment, companies in which informants were employed in, varied in size, number of employees, product or service and location within Germany. Additionally, informants held different positions in terms of hierarchy within the company. The majority of informants work with more than 10 English speakers, while some work with fewer or no English-speaking colleagues. These work in different positions, but on average every informant had at least one English speaker on the same level of hierarchy. Furthermore, informants had contact with up to 50 English speakers outside of the company, with a majority of those being customers or potential customers. However, other types of relationships were also quite commonly reported.

In terms of English language usage at the workplace, Reading and Writing were ranked as the most important language skills in informants' work environment. Additionally, all

language skills were on average used more than 15% of the day, up to 95% of the day. Furthermore, most of the communication in the workplace that requires English use is business communication with private communication only making up a very small part of conversations. Most of this communication is through e-mail and telephone; however, meetings and conferences also make up a large portion of the usage. Small talk or personal conversations do not occur frequently. It was also found that very few English speakers in German technical companies speak or learn German. On the other hand, German nationals felt relatively to very confident in their English, with only a few concerns primarily in terms of their pronunciation, or limited contact with native speakers. Most informants used content-specific terminology often in their communication with English speakers. Furthermore, informants had to perform various tasks in English on a daily or frequent basis with the exception of composing general English texts. Editing, proofreading and composing of English documents of any kind also occurred frequently. Despite the frequency of tasks involving English, only a few actually altered communication according to the receiver's culture. However, many used uniform English communication for all audiences. Finally, informants rated English language skills of other employees in their company, providing a divided result that indicated that high levels of English are mostly present in higher positions within a company or younger employees.

CHAPTER 5

Discussion and Conclusion

Introduction

This chapter presents the key findings of this study, the implications for the state of EST and GPE in the industry and potential instructional design, and discusses limitations of the current study as well as directions for potential future research. The current study attempted to provide an overview of the current state of EST in the German technical industry and informant's perceived needs for further instruction. In particular, three main research questions were explored:

- 1. How often do German employees in the technical industry use English language skills in the work place every day?
- 2. How often are German employees in the technical industry in contact with English-speaking individuals in their everyday work life?
- 3. What are the tasks and situations in their work environment where they have to use English language skills?

As discussed in Chapter 2, along with these important questions the study investigated the impact of intercultural communication knowledge and educational and personal background on English language knowledge.

The current study provides support for some of the expected outcomes and key findings reported in the research reviewed in chapter 2. First, the results demonstrated that employees in

the German technical industry are in all age groups. Most of this sample was male and all informants had different birth places, influencing their prior education.

Secondly, it was shown that most employees in the industry have earned high level high school diplomas (*Abitur* or *Fachhochschulreife*) followed by post-secondary degrees, indicating a high academic knowledge. Also, most have had long standing experience with English and English language instruction, supporting the notion that strong general English knowledge is preferred in businesses. Finally, all informants recognize the importance of English in their sector of the industry, particularly for trade and business, while German seemed less important, and informants do not expect non-native communication partners to know German.

Furthermore, it was shown that most German native employees in the industry have multiple colleagues, co-workers, superiors and employees that are English speakers, whether as their native language or as a fluent foreign language. It was also supported that informants had business contacts of all types outside of their company which mainly spoke English. However, only a small percentage of informant's English-speaking colleagues spoke or learned German.

Finally, it was found that reading and writing skills are more important to employees in the industry than listening or speaking skills. Furthermore, many tasks involving all four major language skills find frequent application in informants' work environment. This includes productive and perceptive skills, as well as improvement of others' work. These tasks involving English take up a large portion of informants' average work days.

Key Findings

The results of this study provide an overview of English usage in the workplace in the German technical industry. However, it is important to bear in mind that all informants were volunteers that agreed to provide information in the online survey after being chosen to be contacted by ZVEI. Nevertheless, these volunteers provided significant detailed insights into English language use in selected German companies, tasks to be completed in English and employees' attitudes towards English in the workplace.

Research Question 1: How often do German employees in the technical industry use English language skills in the work place every day?

While the present study primarily focused on the needs analysis for future course design, it was also intended to present the average amount of time informants spent with tasks involving English during a work day, as addressed in research question 1 and 3. As predicted by the researcher, it was found that most informants use English for at least 15% of their day, if not more. In an average 8-hour work day, this would account for approximately one hour or more a week, when work related tasks are being performed in English. This is a significant factor when considering needs of ESTLs for further education.

Research Question 2: How often are German employees in the technical industry in contact with English-speaking individuals in their everyday work life?

Research question 2 addressed the contact with English speakers of German nationals during their everyday work life. An expected outcome of this study was that a significant number of English speakers were employed in the German industry, particularly the technical

industry (Hönekopp, 2003). Additionally, it was expected that many informants would be in contact with other English speakers outside of their company. The current study shows that informants are in touch with English speakers outside of their company on a regular basis for business, trade and employment. Despite small quantities of these contacts, it has been found that there is a large variety of contact types, ranging from customers to suppliers. It can therefore be assumed that strong English skills are needed at the workplace to achieve effective business communication with these English speakers, whether native or non-native. Additionally, it was found that every informant except one had English speakers employed in some part of their company, with whom they frequently had to interact. This, again, supports the need for effective English language skills on a professional and personal level without exception, especially considering the findings that only a few of these English speakers are learning or proficient in German. The above findings show the applicability of English at the workplace on an everyday level.

Research Question 3: What are the tasks and situations in their work environment where they have to use English language skills?

Kassim and Ali (2010) had found that most employees in technical or scientific industries tend to need more training in oral skills. Their findings were based on participants' expressed opinions and tasks they had to complete. However, in the case of the German technical industry, informants expressed that reading and writing skills are more important to their work than speaking or listening skills. Considering that many express work-related communication to be mainly through email communication, the current study shows a different focus than was found by Kassim and Ali (2010). Presentations and telephone calls were also

frequent communication types in the both studies. However, contrary to Kassim and Ali's (2010) findings, it appears that informants in the current study found these tasks to be completed with more ease than those involving writing or reading skills.

In terms of application of language skills, it was found that many informants had to complete short, but specific tasks involving English every day, such as e-mail and letter writing and answering, as well as short conversations, many of which involve use of content-specific terminology. Tasks such as writing longer texts, academic papers or publications were performed with less frequency and should hence receive less focus during potential instruction to current employees in the industry. However, many informants stated that they frequently edit or proofread documents or texts that use English, which suggests that text analysis for errors in grammar, vocabulary and style would be beneficial in specialized instruction to current and future employees.

General English Knowledge

As a general prerequisite to ESP, it was assumed that informants possessed a good grasp of GPE (Dudley-Evans, 1997). This knowledge would be used in current communications in the workplace and to build on during future ESP instruction. In the current study, it has been found that most informants have had between five and seven years of English instruction during their secondary education. According to the Common European Framework of Reference for Languages, German higher level high school graduates can be classified as either level B2 (independent users - vantage) or C1 (proficient user/effective operational proficiency) in English (*Common European framework of reference for languages*, 2009, p. 24). Judging from the length of English instruction the informants received, this also applies to the current study.

A small percentage of the informants have received further English language instruction during their post-secondary education or during employment. It can therefore be concluded that the level of GPE is sufficiently high for specialized EST education at the workplace.

Language ratings

In order to link the expressed levels and needs of informants to the attitude of language learners to their native and foreign language, the informants' opinion of German on an international level and English in Germany had to be determined. It was found that English in Germany received a high importance rating by informants. Reasons for this rating were the necessity of English for trade and business on the international market and for understanding professional literature or publications. However, German on an international level was ranked much lower than English, which was mostly attributed to the perception that English is more important for international trade and more present on the European market. However, reasons were also given for the importance of German, such as the language of communication within a German location of a company and Germany as an industry of quality and strong economic standpoint. The latter reason was attributed to the notion of German language pride, which expects communication with a serving entity, such as suppliers, to be proficient in the language of the higher entity (Beamer & Varner, 2005). In summary, the ratings of language support the idea of high motivation to learn English for competitiveness on the German and international market. German was found to be of less importance for this purpose, but still the standard within German companies located in Germany.

Intercultural communication

It was expected that German nationals have little to no knowledge of cultural differences in written communication or presentations. As Beamer and Varner (2005) suggested, German and English business communication, particularly letters, vary significantly, particularly in format and style. Thrush (1993) suggests that the way presentations are viewed also depends on cultural context. In the current study, the majority of informants reported that they are not aware that cultural differences should result in changes in format or register of documents. Some say they use formats that are used universally for all cultures, while only a few suggest that they vary their format or style according to the audience's culture. These findings suggest that in this particular field of EST and intercultural communication, employees in the German technical industry appear to be unaware of these cultural differences.

Instructional design indications

When considering all of the above mentioned results of this study, implications for potential course design can be drawn. An important factor that concerns the management of the course stresses the social factors of ESTLs on course design. As mentioned in Chapter 4, it might be important to provide current employees with communities of practice that fit the learner's life style and social environment (Andrew, 2012). This indicates the necessity of choice for online learning, individual instruction and small group instruction based on content. All of these factors may contribute to a comfortable learning environment to lower the affective filter (Krashen, 1981) that can be found in adults. This filter can be considered particularly high in German adults, due to the notion of German pride (Beamer & Varner, 2005), suggesting that

many employees in higher positions in the company will have difficulties showing that they do not possess certain knowledge, and may be worried about losing face.

Implications for Potential Course Design

Based on the key findings of this study, general conclusions about the current level and needs, in terms of EST instruction, of German nationals in the German technical industry can be drawn. While drawing generalizations from the results of this type of study is not recommended (Jaeger, 1997), this section will attempt to provide suggestions for curriculum and course design of EST in companies of the German technical industry.

When considering the findings in terms of informants' opinions of the importance of language skills, it can be assumed that future course design should especially consider reading and writing tasks to be of greater importance in the course than listening and speaking skills. However, as was found in Kassim and Ali (2010), other nations found oral skills to be of greater importance. Hence, oral skills should also be incorporated in the course, but written skill tasks should primarily be integrated in the course in the case of German nationals.

Additionally, it was found that short everyday tasks involving all English language skills, such as short conversations, writing emails or letters, are frequently used as much as on a daily basis. Longer tasks such as composing, editing and proofreading documents or texts are less frequently performed and only a small number of informants do this on a daily basis. However, all of these tasks involve the knowledge of cultural factors that influence the tasks, yet German employees are rarely aware of such factors. Therefore, aside from the training of language skills and content-specific terminology knowledge and use, cultural differences in

English and intercultural communication need to be addressed and should be implemented in the curriculum and course design.

Finally, it can be said that most employees feel comfortable with their English skills, yet would like to receive more formal instruction and feedback on their English language use rather than using English to their best knowledge and risking miscommunication during important work-related situations. While many seek this instruction outside of their company, it may be more beneficial for employees' knowledge and employee relationships to provide this kind of instruction at the workplace or within the company to achieve a common English knowledge basis that will help the efficient and effective communication within and outside of the company.

Limitations and Further Research

Several limitations apply to the design and implications of this study. It is important to note that this study was exploratory in nature and conclusions and implications of the collected data were not intended as the only basis for course design. Therefore, the following limitations need to be considered and further research is warranted.

First, the informants were all chosen through one channel, ZVEI, and are therefore only representative of companies that are members of this organization. However, as ZVEI is an organization with a wide variety of companies in many technical industry sectors, it has the potential to still represent the state of English at similar, non-member companies. Additionally, informants' English knowledge was only self-evaluated and not confirmed by samples of language use in the current study, as done in other previously conducted studies (Kassim & Ali, 2010). Therefore, this study and its implications are only based on the expressed opinions of

informants and conclusions drawn by the researcher. These may, however, not match the actual state of English in the German technical industry. Furthermore, the online survey design was based on the researcher's perception of importance of certain skills, which may not match the perception of informants. Despite the opportunity to comment at the end of the survey as well as after every question, informants may not have chosen to reveal their own perception of English usage and need outside of the issues proposed in survey questions. Finally, the current study does not address informants' specific level of grammatical or vocabulary knowledge, hence only making assumptions at GPE knowledge that course and curriculum design is building on.

Second, in terms of limitations of implications, the terms *English-speaking* and *English* Speakers could have been understood as colleagues that are native Germans, but highly able in the English language and may have included German nationals. While this could be of importance when considering lower quantities (1 to 10), the findings that suggest higher quantities can be representative. Also, due to the lack of the age group 31 to 40, results may only provide insights regarding the use of English by younger respondents and employees that have had substantial work experience. While the latter may suggest constant use of English throughout the informants' career, it does not address the issue that they may not have had the chance or requirement to study English during their post-secondary education. Furthermore, meaning and implications could have been influenced by loss of pragmatics or meaning on both sides of the translation process between German and English. Particularly, questions could have implied a different meaning to German natives than it would to English natives. Additionally, answers stated in German could suggest a different meaning when translated into English. However, as the researcher has provided translations and is a certified translator, it is assumed that these inter-cultural miscommunications were limited.

Finally, this study represents a single example of research into the German technical industry and the level and needs of EST. Future research that may be conducted should therefore include a larger and broader sample of informants that also includes the production level of the industry. Furthermore, different research designs could be applied to verify data found in the current study. These designs may include interviews of the informants, language sample collections, and shadowing or observations of average work days of informants.

Despite the design and limited size of the study, the obtained results offer useful insights into the current state of EST in one context in Germany.

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Appendix A: Potential Informant list ZVEI - 4 verschiedene Abteilungen Altstom ABB PSI Landis + Gyr Siemens – 3 verschiedene Abteilungen/Standorte König + Neurath AG Indus IDS Prysmion Infinion Atos IT Telemotive AG

Dr. Collin GmbH

Appendix B: Informant Consent Form – English

ONLINE/ANONYMOUS SURVEY CONSENT

You are requested to participate in research supervised by Kristin Hueneburg on the current state of English language use in selected German industries as well as needs regarding the use of English in the workplace. This survey should take about 10 to 15 minutes to complete. The goal of this survey is to understand the current level of English in the workplace, the frequency and type of language use and the potential needs for further education, and you will be asked to answer questions about that topic. If you have any questions about the research, please contact Kristin Hueneburg at kristin.hueneburg@mnsu.edu.

Participation is voluntary. You have the option not to respond to any of the questions. You may stop taking the survey at any time by closing your web browser. Participation or nonparticipation will not impact your relationship with Minnesota State University, Mankato. If you have questions about the treatment of human participants and Minnesota State University, Mankato, contact the IRB Administrator, Dr. Barry Ries, at 507-389-2321 or barry.ries@mnsu.edu.

Responses will be anonymous. However, whenever one works with online technology there is always the risk of compromising privacy, confidentiality, and/or anonymity. If you would like more information about the specific privacy and anonymity risks posed by online surveys, please contact the Minnesota State University, Mankato Information and Technology Services Help Desk (507-389-6654) and ask to speak to the Information Security Manager.

The risks of participating are no more than are experienced in daily life. All data gathered in this survey will only be used for this study and any publications from this study. No personal information beyond the data entered in the survey link will be released.

There are no direct benefits for participating. Society might benefit by the increased understanding of English language levels in employees in the German technical industry. Submitting the completed survey will indicate your informed consent to participate and indicate your assurance that you are at least 18 years of age.

Please print a copy of this page for your future reference.

MSU IRBNet ID# 427556-3

Date of MSU IRB approval: 2/27/2013

Appendix C: Introduction to Informants – German

Sehr geehrte Damen und Herren,

vielen Dank für Ihre Bereitschaft an dieser Umfrage teilzunehmen. Die Beantwortung des Online-Fragebogen sollte maximal 15 Minuten Ihrer Zeit in Anspruch nehmen.

Ich möchte mich kurz vorstellen. Mein Name ist Kristin Hüneburg und ich bin Masterstudentin an der Minnesota State University Mankato und plane einen Abschluss in Lehramt Englisch als Fremdsprache (Teaching English as a Second Language). Für meine Masterarbeit habe ich mich auf Fachenglisch, insbesondere auf Englisch für Wissenschaft und Technik, spezialisiert. Nach dem Abschluss meines Studiums möchte ich diese Kenntnisse gern in der Erwachsenenqualifizierung von Unternehmen einbringen.

Das Ziel dieser Studie ist eine Bedarfsanalyse für Englisch für Wissenschaft und Technik in Unternehmen der technischen Branche. Dabei konzentriert sich die Studie vor allem auf den Stand der vorhandenen Sprachkenntnisse, den Kontakt mit englischsprachigen Personen, die vorhergehende Ausbildung und Kenntnisse im Umgang mit internationalen, englischsprachigen Medien (Emails, Präsentationen, andere Veröffentlichungen). Meine Masterarbeit ist ein Teil der Studie, die ich unter Leitung von Dr. Stephen Stoynoff der Englisch Fakultät an der Minnesota State University Mankato anfertige.

Ich bitte Sie daher den als Link beigefügten Fragebogen nach bestem Wissen und Gewissen auszufüllen.

Nach amerikanischen Vorschriften bin ich angehalten Sie über eventuelle Risiken bei der Teilnahme ausführlich zu informieren. Sollten Sie also Fragen als unangenehm empfinden oder aus jeglichen anderen Gründen nicht beantworten wollen, ist Ihnen das selbstverständlich gestattet. Ihre Daten werden absolut vertraulich behandelt und nur zum Zweck dieser Studie

verwendet. Die Auswertung der Ergebnisse erfolgt anonymisiert. Es ist möglich, dass anhand Ihrer Daten ein gewisses Personenprofil abgeleitet werden kann. Die Verwendung der Daten für andere Studien oder für andere Veröffentlichungen jeglicher Art wird nur nach Ihrer ausdrücklichen Zustimmung erfolgen.

Mit dem Absenden des ausgefüllten Fragebogen erklären Sie, dass Sie die Konditionen und Risiken der Teilnahme an dieser Studie verstehen und anerkennen. Desweiteren erklären Sie sich einverstanden, dass Ihre Daten aus dem Fragebogen zum Zweck dieser Studie verwendet werden dürfen.

Sollten Sie weitere Informationen zum Fragebogen, der Studie oder meiner Person benötigen, schicken Sie bitte eine email an: kristin.hueneburg@mnsu.edu oder rufen Sie mich an: 001-651-263-9456.

Ich danke Ihnen noch einmal vielmals für Ihre Teilnahme. Sollten Sie jegliche andere Fragen haben, können Sie mich gern jeder Zeit kontaktieren.

Mit freundlichen Grüssen,

Kristin Hüneburg

Appendix D: Online Survey – English

Welcome and thank you very much for participating in this survey. Please read the following conditions and risks carefully. Should you have questions prior to participation, please kristin.hueneburg@mnsu.edu

According to American regulations, I am required to inform at length you of potential risks of filling out this online survey.

Should you be uncomfortable with any of the questions or choose not to answer it, you are of course permitted to do so. Your data will be treated as absolutely confidential and will only be used for the purpose of this study. The data analysis will be in anonymous form. It is possible that a certain personal profile could be derived of your data. The use of data for other studies or for other publications of any kind will only be permitted after your explicit consent prior to use.

- 1. I understand and consent to the conditions and risks of participation in this study. Furthermore, I agree to the use of my data entered in this survey for the exclusive purpose of this study and any publications of the study.
- Yes, I have read the statement above and agree to the terms and conditions of this survey
- No, I do not agree to the terms and conditions of this survey.

Personal Information

2.	Age	Group	p

- 18 to 30 years
- 30 to 40 years
- 40 to 50 years
- 50 to 60 years
- over 60 years

3. <u>Gender</u>

- male
- female

4. <u>Place of Birth:</u>

- 5. <u>Please describe your living situation.</u>
- I am single
- I am married
- I am in a relationship
- I am widowed
- I live alone
- I live in a shared apartment/house
- I live with my partner

(question continues on next page)

- I live with my family
- I have no children
- I have children

other (please specify)

Educational Background

- 6. Please describe the secondary/post-secondary education you have had.
 - Abitur (high level high school diploma: university entrance level)
 - Fachhochschulreife (high level high school diploma: community college

entrance level)

- Realschulabschluss (medium level high school diploma)
- Hauptschulabschluss (low level high school diploma)
- Vocational Training
- Bachelor
- Master
- PhD or similar
- Diplom (similar to Master)
- state examination

Comments:

7. How long have you had formal English instruction and what kind of instruction (incl. English Commercial Correspondence/Business English etc.)? (Please elaborate if necessary)

8. How important to you think English is in the current job market? Please explain your								
reasons.								
Not at all important				Good to have				Very important
0	\bigcirc		0	\circ	\circ	\circ	\circ	\bigcirc
Comments:								
9. <u>How</u>	<u>importan</u>	t to you thi	nk Germa	n is currently	in interna	ational busi	ness prac	tices?
Please expla	in your re	easons.						
Not at all important				Good to have				Very important
0	\bigcirc	\circ	\bigcirc	\circ	\circ	\circ	\circ	0
Comments:								

Professional Information

10.	What is the	name of the	company	you	are currently	employ	yed at	t and	what i	is y	your
				•	-					-	
official	job title?										

- 11. When did you start working for this company?
- 12. How many English-speaking persons are employed in your company with whom you frequently interact?
- 1 to 10
- 10 to 50
- 50 to 100
- more than 100
- 13. What is your professional relationship to them?
- colleague
- employee
- superior
- other

14.	How many English-speaking business connecti	ions (of an	y kind)	outside of	your
		•			
compa	ny do you usually work with in an average weel	<u>k'?</u>			

- 1 to 10
- 10 to 50
- 50 to 100
- more than 100
- 15. What is your professional relationship to these business connections?
- customer/potential customer
- supplier/subcontractor
- employee/potential employee
- organizations
- other (please specify)

English Usage at the Workplace

- 16. Please rate these 4 language skills from most used to least used in your average work week:
- Reading
- Writing
- Listening
- Speaking
- 17. If you had to estimate, how much do you use any English language skills at work on an average day?
- between 0 and 15%
- between 15 and 25%
- between 25 and 40%
- between 40 and 55%
- between 55 and 70%
- between 70 and 95%
- almost exclusively
- other (please specify):

18.	What is the nature and type	of communication the	at you have with Engl	ish speaking						
colleag	gues and/or business connect	tions?								
•	private									
•	business									
Please	elaborate here:									
19.	. How many of your English speaking colleagues have knowledge in German or are									
learnin	ng German with substantial p	orogress?								
•	about 25%									
•	about 50%									
•	about 75%									
•	all of them									
•	other (please specify)									
20.	Do you enjoy communicati	ng with your English	speaking colleagues a	nd business						
partner	rs in terms of the English lar	iguage use?								
	not at all confident	somewhat confident	confident	very confident						
I feel	0	0	0	\bigcirc						
Comm	ents:									

21. How often do you use English terminology related to your field of employment in communication with English speaking colleagues and business connections?

never	almost never	rarely	sometimes	rather often	often	almost always	always					
\bigcirc	0	\bigcirc	0	0	\circ	0	\bigcirc					
Comm	nents:											
22.	2. When using English in your work environment, how often do you have to											
a)	understand spoken English?											
b)	understand wr	itten Engl	ish (texts, ema	ils, profession	al publicat	ions etc.)?						
c)	use your Engli	sh speakir	ng ability?									
d)	use of content specific terminology?											
e)	use English en	nail/letter	writing skills?									
f)	use general En	nglish writ	ing skills?	(qu	estion con	tinues on next pa	ge)					

	daily	multiple times per week	once a week	appr. every two weeks	once per month	a few times per year	appr. once a year	never
a)	\bigcirc	\bigcirc	0	0	0	0	\bigcirc	0
b)	0	0	0	0	0	0	0	0
c)	0	0	0	0	0	0	0	0
d)	0	0	0	0	\circ	0	0	0
e)	0	0	0	0	0	0	0	0
f)	0				\bigcirc	\circ		\bigcirc

Comments:

23. <u>Aside from language use, do you adjust format/presentation of documents, presentations</u> and written correspondence when targeting an English speaking audience? If yes, please explain how.

24.	How	often	to y	you	write,	edit (or	proofread	Eng	lish	public	<u>cations</u>	of	any	kind	for	your
			•					-			_						
	_																
compai	<u>ny?</u>																

	one or more times a day	one or more times a week		one or more h times a year	never
I write documents.	0	0	0	0	0
I edit documents.	0	0	0	0	0
I proof documents.	0	0	0	0	0

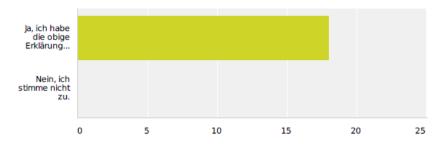
Comments:

- 25. <u>In your own opinion, are your English language skills the standard in your company?</u>
- Yes
- No
- 26. Please state any additional comments you would like to make here.

Appendix E: Online Survey Results - German

Q1 Hiermit erkläre ich, dass ich die Konditionen und Risiken der Teilnahme an dieser Studie verstehe und anerkenne. Desweiteren erkläre ich mich einverstanden, dass meine Daten aus dem Fragebogen nur zum Zweck dieser Studie und deren Veröffentlichung verwendet werden dürfen.

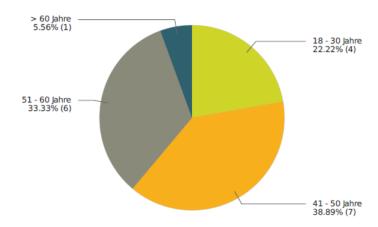




Answer Choices	Responses	
Ja, ich habe die obige Erklärung gelesen und stimme den Bedingungen zu.	100%	18
Nein, ich stimme nicht zu.	0%	0
Total		18

Q2 Altersgruppe

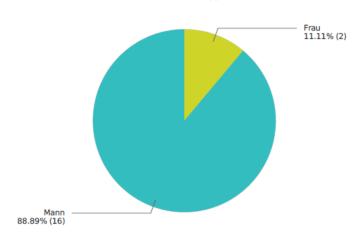
Answered: 18 Skipped: 0



Answer Choices	Responses	
18 - 30 Jahre	22.22%	4
31 - 40 Jahre	0%	0
41 - 50 Jahre	38.89%	7
51 - 60 Jahre	33.33%	6
> 60 Jahre	5.56%	1
Total		18

Q3 Geschlecht

Answered: 18 Skipped: 0



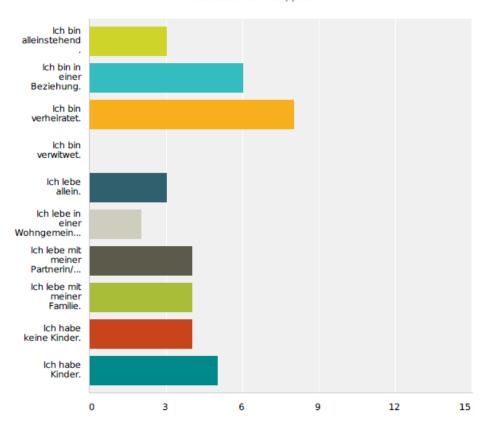
Answer Choices	Responses	
Frau	11.11%	2
Mann	88.89%	16
Total		18

Q4 Geburtstort:

Answered: 14 Skipped: 4

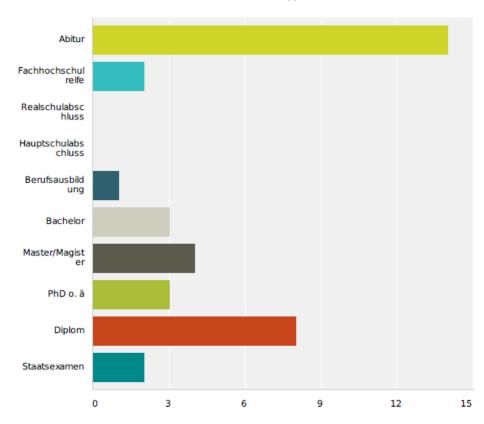
#	Responses	Date
1	Bad Lausick	3/25/2013 8:06 AM
2	Oberkirch	3/25/2013 7:20 AM
3	Brey	3/23/2013 5:58 AM
4	Oldenburg i.Ol.	3/20/2013 4:04 AM
5	Deutschland, Lüdenscheid	3/18/2013 4:45 AM
6	Cottbus	3/15/2013 11:11 AM
7	Bayem	3/14/2013 7:01 AM
8	Cottbus	3/13/2013 12:56 PM
9	Schweinfurt	3/8/2013 2:28 AM
10	Neustadt an der Weinstrasse	3/7/2013 12:45 PM
11	Olpe (DE)	3/5/2013 10:55 PM
12	Wolfsberg/Österreich	3/5/2013 1:18 PM
13	Dinslaken	3/5/2013 8:24 AM
14	Berlin	3/5/2013 7:27 AM

Q5 Bitte beschreiben Sie Ihren Familienstand und Wohnsituation.



Answer Choices	Responses	
Ich bin alleinstehend.	17.65%	3
Ich bin in einer Beziehung.	35.29%	6
Ich bin verheiratet.	47.06%	8
Ich bin verwitwet.	0%	0
Ich lebe allein.	17.65%	3
Ich lebe in einer Wohngemeinschaft.	11.76%	2
Ich lebe mit meiner Partnerin/meinem Partner.	23.53%	4
Ich lebe mit meiner Familie.	23.53%	4
Ich habe keine Kinder.	23.53%	4
Ich habe Kinder.	29.41%	5
Total Respondents: 17		

Q6 Bitte beschreiben Sie Ihre Schulund Berufsausbildung (Mehrfachnennungen möglich)



77.78%	
77.7070	14
11.11%	2
0%	0
0%	0
5.56%	1
16.67%	3
22.22%	4
16.67%	3
44.44%	8
11.11%	2
·	
	0% 0% 5.56% 16.67% 22.22% 16.67% 44.44%

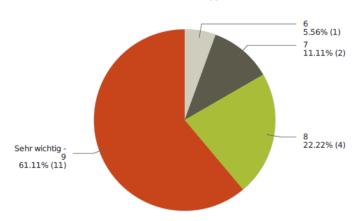
#	Sonstiges (bitte angeben)	Date
1	Ing	3/5/2013 1:22 PM

Q7 Wie lange und welche Art von Englischunterricht hatten Sie bis heute (inkl. englischer Handelskorrespondenz und Business English)? Bitte erläutern Sie!

#	Responses	Date
1	Schulunterricht (513. Schulklasse)	3/25/2013 10:55 AM
2	Schule und Studium 10 Jahre/ ohne Praxis Praxis seit 1990	3/25/2013 8:10 AM
3	5 13. Klasse Gymnsium 2 Austauschsemester während meines B.A. 1 Semester Englisch während meines M.A. 6 Monate Praktikum in englischsprachigem Büro von Zeit zu Zeit Business-Emails und - Telefonate auf Englisch	3/25/2013 7:22 AM
4	9 Jahre Gymnasium, naturwissenschaftlicher Zweig. zwei Wochen Business English an der Bornemouth Business School	3/23/2013 6:04 AM
5	6 Jahre im Rahmen Abitur	3/22/2013 1:57 AM
6	9 Jahre Schulunterricht in Englisch 1 Jahr Gastschüler in den USA	3/20/2013 4:17 AM
7	Schulenglisch 4 Sprachkurse im englischsprachigen Ausland über jeweils 2 Wochen	3/18/2013 4:46 AM
8	Grundkurs Englisch bis zum Abitur Business Englisch in Ausbildung und Studium	3/15/2013 11:14 AM
9	7 Jahre im Gymnasium 1 Semester Technisches English an der TU	3/14/2013 7:04 AM
10	Schulenglisch (5 bis 13 Klass)	3/13/2013 12:59 PM
11	Schulunterricht einschl 12te Klasse Gymnasium, dann abgewählt	3/8/2013 8:31 AM
12	7 Jahre	3/8/2013 3:53 AM
13	Englischunterricht während der Schulzeit (4 Jahre). Anschließend div. Englischkurse außerhalb der Arbeitszeit.	3/8/2013 2:33 AM
14	7 Jahre Schulenglisch, danach 4 Jahre während des Studiums. Im Anschluss wenig genutzt, da Siemens, mein Arbeitgeber, damals noch nicht so global aufgestellt war. Seit 2003 wurde die Projektsprache in der Firma Siemens im Bereich Energy auf englisch umgestellt, Ab 2006 bieten wir den Mitarebeitern wöchentlichen Englischunterricht während der Arbeitszeit an, an denen ich anfangs teilgenommen habe. Durch intensive tägliche Zusammenarbeit mit chinesischen und indischen Kollegen ist englisch täglich in Gebrauch, jedoch ziemlich auf ein technisches englisch eingegrenzt.	3/7/2013 1:02 PM
15	Schule (Gymnasium) 9 Jahre, später Intensivkurs in England 2 Wochen, Rest "Lernen in der Praxis"	3/5/2013 10:56 PM
16	während des Studiums und die gesamte Berufslaufbahn	3/5/2013 1:22 PM
17	8 Jahre, 2 Jahre Leistungskurs, Masterstudium auf Englisch	3/5/2013 8:25 AM
18	ab der 7. Klasse bis zum Abitur, später Ausbildung Wirtschaftskorrespondenz Englisch (2 J.)	3/5/2013 7:31 AM

Q8 Wie wichtig sind gute Englischkenntnisse Ihrer Meinung nach in Ihrer Branche? Bitte erläutern Sie!

Answered: 18 Skipped: 0



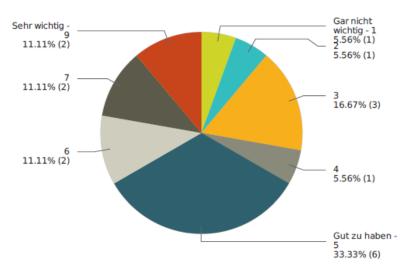
	Gar nicht wichtig - 1	2	3	4	Gut zu haben - 5	6	7	8	Sehr wichtig - 9	Total	Average Rating
(no label)	0% 0	0% 0	0% 0	0% 0	0% 0	5.56% 1	11.11% 2	22.22 % 4	61.11% 11	18	8.39

Kommentar (11)

#	Kommentar	Date
1	In internationalen Firmen ist das Voraussetzung für eine Führungstätigkeit	3/25/2013 8:10 AM
2	Da der Exportanteil der deutschen Industrie in allen Branchen sehr hoch ist, ist Englisch absolute Voraussetzung. Dies gilt besonders für den Maschinenbau, da hier alle, meistens auch komplizierte technische Sachverhalte in Englisch verhandelt werden müssen.	3/23/2013 6:04 AM
3	Die berufliche Kontakte finden überwiegend in Deutschland statt, aber bei Kontakten zu EU- Institutionen und europäischen Mitgliedsländern ist Englisch unverzichtbar (trotz der Möglichkeit auf Französich auszuweichen)	3/20/2013 4:17 AM
4	wird immer wichtiger!	3/18/2013 4:46 AM
5	Im Umfeld von globalen IT Dienstleistern ist englisch Essentiell da es sich um die Geschäftssprache in dieser Branche handelt.	3/15/2013 11:14 AM
6	Ohne Englisch geht es gar nicht, weil viele Doku gar nicht mehr in Deutsch existiert und wir international arbeiten müssen	3/14/2013 7:04 AM
7	Unternehmen sind global tätig	3/13/2013 12:59 PM
8	Enge Zusammenarbeit mit internationalen Partnern erfordert gute Englischkenntnisse. Korrespondenz läuft ausschließlich in Englisch.	3/8/2013 2:33 AM
9	Durch viele Merger arbeiten wir täglich mit ausländischen Kollegen zusammen und sind viel dienstlich ausserhalb Europas unterwegs. Englisch ist mittlerweile Grundvoraussetzung für alle Tätigkeiten in unserem Umfeld - in Schrift und Wort!	3/7/2013 1:02 PM
10	wir agieren international, daher ist es grundlegende Voraussetzung sehr gute Englischkenntnisse zu haben.	3/5/2013 1:22 PM
11	Die allgemeine Wirtschaftssprache ist Englisch. Auch für Firmen, die global nicht aktiv sind, ist das Lesen von Fachartikeln etc. und die Beoabchtung des Weltmarkts ein notwendiges Instrument, um langfristig Erfolg zu haben	3/5/2013 7:31 AM

Q9 Wie wichtig sind Deutschkenntnisse Ihrer Meinung nach auf dem heutigen globalen Markt? Bitte erläutern Sie!

Answered: 18 Skipped: 0



	Gar nicht wichtig - 1	2	3	4	Gut zu haben - 5	6	7	8	Sehr wichtig - 9	Total	Average Rating
(no label)	5.56% 1	5.56%	16.67%	5.56% 1	33.33% 6	11.11% 2	11.11% 2	0% 0	11.11% 2	18	5.00

#	Kommentar	Date
1	Deutschland ist der wichtigste europäische Markt	3/25/2013 8:10 AM
2	s. oben	3/23/2013 6:04 AM
3	In einigen Industriesegmenten sind deutsche Unternehmen dominierend an den Weltmärkten.	3/22/2013 1:57 AM
4	Da nahezu alle Deutschen auf Englisch gut kommunizieren können, ist es nicht notwendig, Deutsch zu sprechen	3/20/2013 4:17 AM
5	Nur eingeschränkt in Zentraleuropa anwendbar, aber es ginge auch ohne.	3/15/2013 11:14 AM
6	Technische Details lassen sich noch immer besser in der Muttersprache erörtem. Behörden lassen sich oft nicht auf Vorträge in Englisch ein.	3/14/2013 7:04 AM
7	Deutsch nur zu anderen deutschen Firmen im globalen Markt wichtig, sonst englisch	3/13/2013 12:59 PM
8	Da ich in einer globalen Firma arbeite, der Hauptsitz jedoch Deutschland ist, ist es gut Deutsch zu können. Die Priorität liegt jedoch klar bei englisch!	3/7/2013 1:02 PM
9	Deutschkenntnisse zusätzlich zu den Englischkenntnissen sind in deutschsprachigen Standorten ein muß	3/5/2013 1:22 PM
10	Deutsche Produkte geniessen weltweit einen guten Ruf, insofern ist eine Bereicherung, um ggf. auf Messen o.ä. dolmetschen zu können oder deutsche Fachartikel zu übersetzen.	3/5/2013 7:31 AM

Q10 Bei welchem Unternehmen sind Sie momentan angestellt und wie ist der offizielle Titel Ihrer Position in diesem Unternehmen?

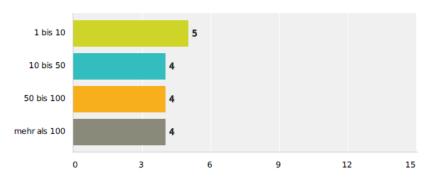
#	Responses	Date
1	ZVEI e. V. Leitung Bereich Personal, Finanzen, Recht & Compliance	3/25/2013 10:56 AM
2	Prysmiangroup/ Sales Director German Utility Business	3/25/2013 8:11 AM
3	ZVEI Referent Political Affairs	3/25/2013 7:23 AM
4	Dr Collin GmbH, Technischer Leiter	3/23/2013 6:05 AM
5	Top Management	3/22/2013 1:57 AM
6	ZVEI Zentralverband Deutschen Elektrotechnik - und Elektronikindustrie Geschäftsführer ESCO Forum / Referent Energiepolitik	3/20/2013 4:18 AM
7	ids, Ettlingen Leiter Vertrieb	3/18/2013 4:47 AM
8	IT Projekt Manager Atos S.A.	3/15/2013 11:16 AM
9	Siemens, Director Innovation and Architecture	3/14/2013 7:06 AM
10	Firma: Telemotive AG Titel: Projektingenieur	3/13/2013 1:00 PM
11	ABB Senior Vice Praesident	3/8/2013 8:34 AM
12	Siemens AG, Director R&D	3/8/2013 2:35 AM
13	Siemens; Leiter einer globalen Software Entwicklung	3/7/2013 1:05 PM
14	PSI AG Geschäftsbereich PSI Energie EE Bereichsleitung Vertrieb	3/5/2013 10:58 PM
15	Landis+Gyr Vice President	3/5/2013 1:24 PM
16	Praktikant Government Relations	3/5/2013 8:26 AM
17	ZVEI e.V. Assistenz der Bereichsleitung Energie	3/5/2013 7:33 AM

Q11 Seit wann sind Sie bei ihrem jetzigen Arbeitgeber angestellt?

#	Responses	Date
1	2007	3/25/2013 10:56 AM
2	2000	3/25/2013 8:11 AM
3	2011	3/25/2013 7:23 AM
4	2007	3/23/2013 6:05 AM
5	2011	3/20/2013 4:18 AM
6	01.03.2013	3/18/2013 4:47 AM
7	2006	3/15/2013 11:16 AM
8	1985	3/14/2013 7:06 AM
9	1 Jahr und 4 Monate	3/13/2013 1:00 PM
10	1994	3/8/2013 8:34 AM
11	1984	3/8/2013 2:35 AM
12	1990	3/7/2013 1:05 PM
13	1973	3/5/2013 10:58 PM
14	30 Jahre	3/5/2013 1:24 PM
15	2 Monaten	3/5/2013 8:26 AM
16	Januar 2010	3/5/2013 7:33 AM

Q12 Wie viele englischsprachige Mitarbeiter, mit denen Sie regelmässigen Kontakt haben, arbeiten in Ihrem Unternehmen?

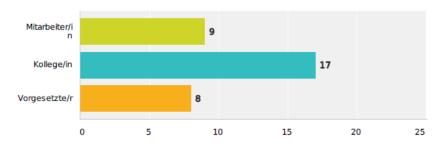
Answered: 17 Skipped: 1



Answer Choices	Responses
1 bis 10	29.41% 5
10 bis 50	23.53 % 4
50 bis 100	23.53 % 4
mehr als 100	23.53 % 4
Total	17

Q13 Relativ zu Ihnen, wie ist deren berufliche Beziehung zu Ihnen?

Answered: 17 Skipped: 1

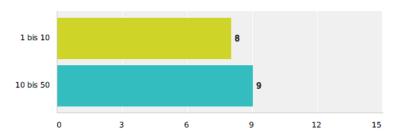


Answer Choices	Responses	
Mitarbeiter/in	52.94%	9
Kollege/in	100%	17
Vorgesetzte/r	47.06%	8
Total Respondents: 17		
Sonstiges (bitte angeben) (1)		

#	Sonstiges (bitte angeben)	Date
1	keine englischsprachigen Kollegen	3/5/2013 7:33 AM

Q14 Mit wie vielen englischsprachigen Geschäftspartnern o. ä. ausserhalb Ihres Unternehmens kommen Sie in einer durchschnittlichen Woche in Kontakt?

Answered: 17 Skipped: 1

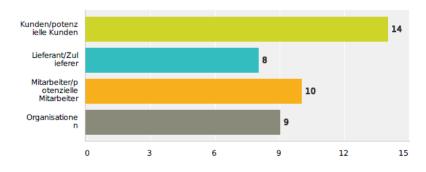


Answer Choices	Responses	
1 bis 10	47.06%	8
10 bis 50	52.94%	9
Total		17
Sonstiges (bitte angeben) (1)		

#	Sonstiges (bitte angeben)	Date
1	Kontakt zu ext. englischsprachigen Geschäftspartnern ist selten. Ca. 5 pro Jahr	3/8/2013 2:35 AM

Q15 Wie ist ihre berufliche Beziehung zu diesen Geschäftspartner?

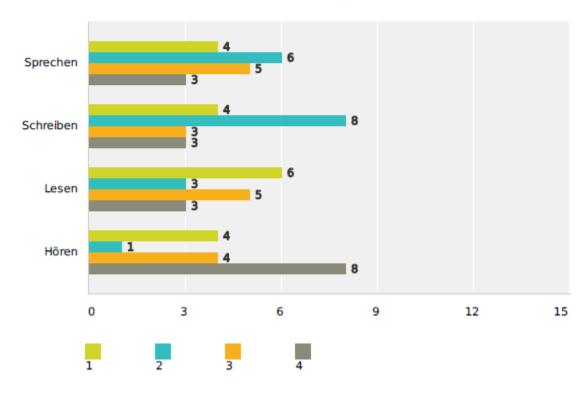
Answered: 18 Skipped: 0



Answer Choices	Responses
Kunden/potenzielle Kunden	77.78% 14
Lieferant/Zulieferer	44.44 % 8
Mitarbeiter/potenzielle Mitarbeiter	55.56 % 10
Organisationen	50% 9
Total Respondents: 18	

Sonstiges (bitte angeben) (0)

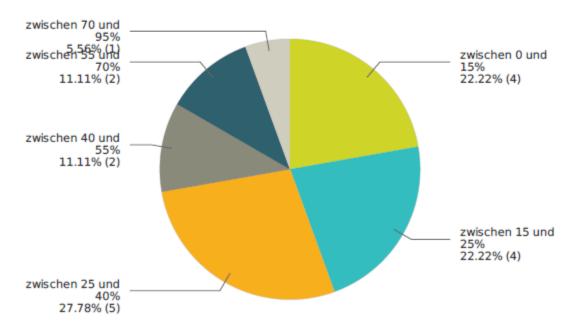
Q16 Bitte ordnen Sie die folgenden Formen der Sprachkenntnisse von 1 (am meisten) bis 4 (am wenigsten) nach Ihrer eigenen Nutzung am Arbeitsplatz: Sprechen, Schreiben, Lesen, Hören.



	1	2	3	4	Total	Average Ranking
Sprechen	22.22% 4	33.33% 6	27.78% 5	16.67% 3	18	2.61
Schreiben	22.22% 4	44.44% 8	16.67%	16.67% 3	18	2.72
Lesen	35.29% 6	17.65%	29.41% 5	17.65%	17	2.71
Hören	23.53% 4	5.88%	23.53% 4	47.06% 8	17	2.06

Q17 Nach ihrer eigenen Einschätzung, wie oft nutzen Sie jegliche Englisch Sprachkenntisse (Schreiben, Sprechen, usw.) in einem normalen Arbeitstag?

Answered: 18 Skipped: 0

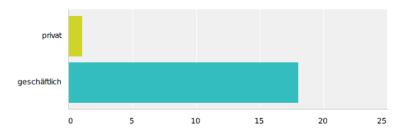


Answer Choices	Responses	
zwischen 0 und 15%	22.22%	4
zwischen 15 und 25%	22.22%	4
zwischen 25 und 40%	27.78%	5
zwischen 40 und 55%	11.11%	2
zwischen 55 und 70%	11.11%	2
zwischen 70 und 95%	5.56%	1
fast ausschliesslich	0%	0
Total		18
Sonstiges (bitte angeben) (1)		

#	Sonstiges (bitte angeben)	Date
1	Kommt darauf an wo ich bin, das letzte 1/2 Jahr 2012 95%	3/14/2013 7:17 AM

Q18 Wenn Sie mit englischsprachigen Kollegen oder Geschäftspartnern kommunizieren, was ist der Anlass und welcher Art von Kommunikation ist es vorranging (emails, Briefe, small talk usw.)? Bitte erläutern Sie in der Kommentarbox!

Answered: 18 Skipped: 0



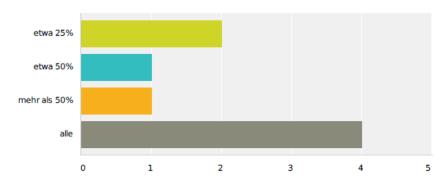
Answer Choices	Responses
privat	5.56 % 1
geschäftlich	100% 18
Total Respondents: 18	

Art(en) der Kommunikation (18)

#	Art(en) der Kommunikation	Date
1	Gremien-Sitzung, E-Mails	3/25/2013 11:01 AM
2	e- mails; dienstl. Telefonate; Briefe	3/25/2013 8:17 AM
3	Meist Emails, ab und an Telefonate oder Telefonkonferenzen. Wenn Telefonate, dann auch immer ein bisschen Small Talk. Alle Korrespondenz eig. ausschließlich geschäftlich.	3/25/2013 7:30 AM
4	Technische Sachverhalte, small talk, mails	3/23/2013 6:11 AM
5	Email Telefon	3/22/2013 1:59 AM
6	Mails / Telefonate	3/20/2013 4:20 AM
7	Mails und Telefonate	3/18/2013 4:51 AM
8	Hauptsächlich geschäftlich, randgesprache sind aber auch privat	3/15/2013 11:21 AM
9	Kommt auch wieder auf den Ort an. Solange ich in Deutschland bin, überwiegend telefonisch oder per mail. Wenn ich im Ausland bin überwiegend in einer Besprechung oder änlichem.	3/14/2013 7:17 AM
10	email	3/13/2013 1:06 PM
11	Emails, Meetings, Vorträge	3/8/2013 8:47 AM
12	email	3/8/2013 3:57 AM
13	Emails überwiegen gefolgt von LiveMeetings und Telefonkonferenzen.	3/8/2013 2:47 AM
14	Fast ausschliesslich geschäftlich: Meist per email, aber auch viele Telcons/Livemeetings. Bei Besuchen, passiert öfters, auch small talk	3/7/2013 1:16 PM
15	Alle geschäftlichen Anlässe in Angebots- bzw. sonstigen Vertriebsprozessen; "privat" kommt dabei auch vor, je nach Beziehung zum Gesprächspartner	3/5/2013 11:03 PM
16	e-mails, sprache, Präsentationen, small Talk	3/5/2013 1:30 PM
17	Emails, Telefonate, direktes Gespräch	3/5/2013 8:28 AM
18	Weiterleitung von Informationen	3/5/2013 7:35 AM

Q19 Wieviele Ihrer englischsprachigen Kollegen haben Kenntisse in Deutsch oder lernen momentan Deutsch (mit sichtbaren Fortschritten)?

Answered: 8 Skipped: 10



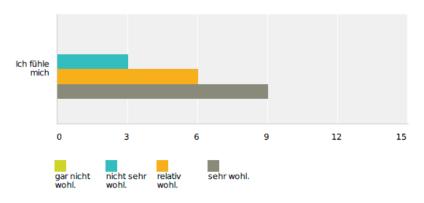
Answer Choices	Responses	
etwa 25%	25%	2
etwa 50%	12.50%	1
mehr als 50%	12.50%	1
alle	50%	4
Total		8

Sonstiges (bitte angeben) (8)

#	Sonstiges (bitte angeben)	Date
1	weniger als 2%	3/23/2013 6:11 AM
2	Keine	3/15/2013 11:21 AM
3	weniger als 1%	3/14/2013 7:17 AM
4	Weniger als 10%	3/8/2013 8:47 AM
5	keine ausreichenden Deutschkenntnisse vorhanden	3/8/2013 3:57 AM
6	2 % geschätzt.	3/8/2013 2:47 AM
7	deutlich weniger als 25%	3/7/2013 1:16 PM
8	sehr wenige < 10%	3/5/2013 1:30 PM

Q20 Wie wohl fühlen Sie sich bei der Kommunikation mit Ihren englischsprachigen Kollegen und Geschäftspartnern? Bitte erläutern Sie!

Answered: 18 Skipped: 0



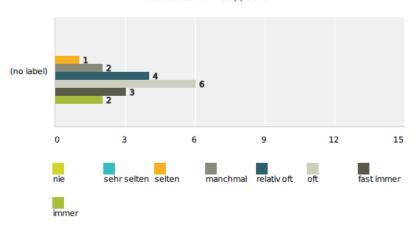
	gar nicht wohl.	nicht sehr wohl.	relativ wohl.	sehr wohl.	Total	Average Rating
Ich fühle mich	0% 0	16.67% 3	33.33% 6	50% 9	18	3.33

Kommentar (7)

#	Kommentar	Date
1	Mit allen, außer native speakers	3/25/2013 8:17 AM
2	Kommt auf den Kommunikationspartner an. Allgemeine Gespräche, die nicht zu technisch sind, sind kein Problem. Manchmal fehlt aber Spezialvokabular.	3/25/2013 7:30 AM
3	20 Jahre ständige Anwendung, obwohl in der Schule Englisch mein schlechtestes Fach war, machen sicher.	3/23/2013 6:11 AM
4	Man freut sich, seine Sprachkenntnisse anwenden / verbessern zu können	3/20/2013 4:20 AM
5	Solange es kein Brite ist, da die viel mehr Wörter nutzen als Chinesen, Amerikaner, etc fühle ich mich mit denen nur noch relativ wohl.	3/14/2013 7:17 AM
6	es fehlen Vokabeln und die Aussprache ist nicht so gut	3/13/2013 1:06 PM
7	Umgangssprache für small talk fehlt, technisches englisch OK. Vorträge könnten mit besserem englisch deutlich besser laufen!	3/7/2013 1:16 PM

Q21 Wie oft nutzen Sie fachspezifische Vokabeln, Ausdrücke oder Phrasen in Kommunikationen mit Ihren englischsprachigen Kollegen und Geschäftspartnern?

Answered: 18 Skipped: 0

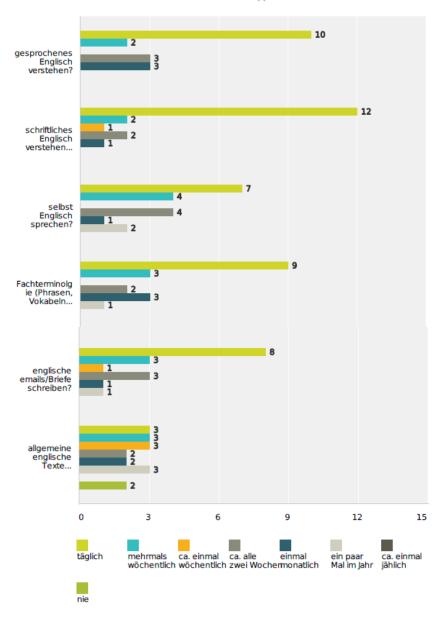


	nie	sehr selten	selten	manchmal	relativ oft	oft	fast immer	immer	Total	Average Rating
(no label)	0% 0	0% 0	5.56% 1	11.11% 2	22.22% 4	33.33% 6	16.67% 3	11.11% 2	18	5.78

Kommentar (1)

#	Kommentar	Date
1	Ich bin in einem technischen Geschäft aktiv	3/25/2013 8:17 AM

Q22 Wenn Sie Englisch in Ihrem beruflichen Umfeld nutzen, wie oft müssen Sie...



	täglich	mehrmals wöchentlich	ca. einmal wöchentlich	ca. alle zwei Wochen	einmal monatlich	ein paar Mal im Jahr	ca. einmal jählich	nie	Total
gesprochen Englisch verstehen?	10	11.11% 2	0% 0	16.67% 3	16.67% 3	0% 0	0% 0	0% 0	18

schriftliches	66.67%	11.11%	5.56%	11.11%	5.56%	0%	0%	0%	
Englisch verstehen (emails, Artikel, Pressemitteil usw.)?	12 ungen	2	1	2	1	0	0	0	18
selbst Englisch sprechen?	38.89% 7	22.22% 4	0% 0	22.22% 4	5.56% 1	11.11% 2	0% 0	0% 0	18
Fachterminol (Phrasen, Vokabeln usw.) angemessen verwenden?	9	16.67%	0% 0	11.11% 2	16.67%	5.56%	0% 0	0% 0	18
englische emails/Briefe schreiben?	47.06% 8	17.65%	5.88% 1	17.65% 3	5.88 %	5.88% 1	0% 0	0% 0	17
allgemeine englische Texte verfassen?	16.67% 3	16.67% 3	16.67% 3	11.11% 2	11.11% 2	16.67% 3	0% 0	11.11% 2	18

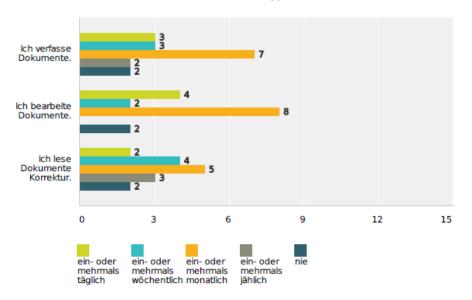
Kommentare (0)

Q23 Sie bereiten sich auf eine Präsentation für ein englischsprachiges Publikum vor oder bereiten ein Dokument/Publikation für ein englischsprachiges Publikum vor. Verändern Sie Format oder Organisierung von Dokumenten, Präsentationen oder anderer schriftlicher Kommunikation, wenn Sie es einer englischsprachigen Zielgruppe anpassen? Wenn ja, erklären Sie bitte kurz diese Veränderungen.

#	Responses	Date
1	Noch keine Kenntnisse der anderen Ansprache in Stellenanzeigen, daher bislang keine Veränderung, nur reine Übersetzung des Textes	3/25/2013 11:01 AM
2	Nein, wir verwenden global einheitliche Präsentationen	3/25/2013 8:17 AM
3	Nein.	3/25/2013 7:30 AM
4	nein	3/23/2013 6:11 AM
5	Keine Veränderungen / nur sprachliche Anpassungen	3/20/2013 4:20 AM
6	nein	3/18/2013 4:51 AM
7	Ich übersetze meist 1:1 ohne auf weitere Anpassungen zu achten	3/15/2013 11:21 AM
8	Wir verwenden grundsätzlich nur englische Präsentationen. Daher sind alle gleich, solange sich in der Zielgruppe nur die Sprache ändert	3/14/2013 7:17 AM
9	Nein	3/13/2013 1:06 PM
10	Kommunikation erfolgt i.a. entsprechend einer englischsprachigen Zielgruppe - die englischspr. Präsentationen werden so auch für ein deutsches Publikum verwendet	3/8/2013 8:47 AM
11	Kulturelle Anpassungen	3/8/2013 3:57 AM
12	nein, ich mache keine Formatanpassung. Wir verfassen die Präsentationen gleich in Englisch auch für internen Gebrauch. Eine nachträgliche Übersetzung ist dann nicht erforderlich.	3/8/2013 2:47 AM
13	nein	3/7/2013 1:16 PM
14	I. a. keine spezifische Gestaltung nur aus Sprachgründen; ggf. spezifische "Länderorientierung"	3/5/2013 11:03 PM
15	nein ich nutze für Englische und deutschsprachige Präsentationen das selbe Format	3/5/2013 1:30 PM

Q24 Wie oft verfassen, bearbeiten oder lesen Sie englische Dokumente oder Veröffentlichungen Korrektur?

Answered: 17 Skipped: 1

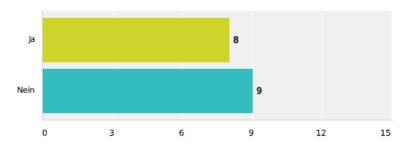


	ein- oder mehrmals täglich	ein- oder mehrmals wöchentlich	ein- oder mehrmals monatlich	ein- oder mehrmals jählich	nie	Total
Ich verfasse Dokumente.	17.65%	17.65%	41.18% 7	11.76% 2	11.76% 2	17
Ich bearbeite Dokumente.	25% 4	12.50% 2	50% 8	0% 0	12.50% 2	16
Ich lese Dokumente Korrektur.	12.50% 2	25% 4	31.25% 5	18.75% 3	12.50% 2	16

Sonstiges (bitte angeben) (0)

Q25 Nach Ihrem eigenen Ermessen, sind Ihre Englischkenntisse der Standard in Ihrem Unternehmen?

Answered: 17 Skipped: 1



Answer Choices	Responses	
Ja	47.06%	8
Nein	52.94%	9

Total Respondents: 17

Sonstiges (bitte angeben) (5)

#	Sonstiges (bitte angeben)	Date
1	in Führungspositionen	3/25/2013 8:17 AM
2	Kenntnisse bei einigen Kollegen besser, allerdings beim Durchscnitt vermutlich schlechter.	3/25/2013 7:30 AM
3	Meine sind besser	3/22/2013 1:59 AM
4	Bei jungen Kollegen ja, bei alten nein.	3/15/2013 11:21 AM
5	Von Standard kann man so nicht sprechen, denn ein Mitarbeiter in der Fertigung muß im allgemeinen kein Englisch können. Ein Ingenieur wie ich schon.	3/14/2013 7:17 AM

Q26 Bitte hinterlassen Sie jegliche Kommentare/ Anmerkungen/ Anregungen an die Autoren hier.

#	Responses	Date
1	Viel Erfolg. :-)	3/25/2013 7:31 AM
2	Viel Erfolg & beste Grüße aus	3/20/2013 4:21 AM
3	Viel Erfolg bei der Masterarbeit!	3/8/2013 8:48 AM
4	Viel Erfolg bei der weiteren Studienarbeit.	3/8/2013 2:48 AM
5	Die Fragen sind teilweise ziemlich schräg formuliert und gramatikalisch falsch! Solltet ihr nochmals checken :-)	3/7/2013 1:17 PM
6	Viel Erfolg mit ihrem Studium.	3/5/2013 1:31 PM
7	Viel Glück bei der Masterarbeit, das Thema ist ganz hervorragend gewählt!	3/5/2013 7:36 AM