

Exploring Digital Reading in the High School German Classroom

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This dissertation explored students' digital reading in a high school German level three classroom. The initial problem of practice was situated around what is done instructionally to support digital reading, the actual digital German texts, and the student perceptions, attitudes, and experiences reading digitally. The research questioned how students perceive digital reading, and how students read digital texts when working on a cooperative task. Students completed a self-reflection after reading digitally and were then grouped for a cooperative video task. During the video task, students used iPads to watch a video and seek meaning. The students' work was observed and recorded. Initial findings showed that students perceived themselves to be confident readers in their L1, found reading in German to be challenging regardless of medium, and that students perceived the importance of employing L1 reading strategies for German and reported using repertoire of reading strategies. Findings from the cooperative task indicated that students managed feelings as they read, used English to support their German language abilities, and consulted material resources to support their reading. Based on the findings it appears that cooperative task design benefited and supported students' reading experience and that humor was a tool that students' use to manage the anxieties associated with L2 reading. Instructional implications could include the use of English as practice to support the learning of a foreign language and increased task repetition in the foreign language classroom. The findings and discussion indicated that emotions played an unexpected role in how students dealt with German reading tasks and further research is recommended.

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Preface

This project would never have been completed without the guidance of my co-advisors Drs. Emily Rainey and Richard Donato. Their professionalism and commitment to their craft and their students was evident through every step of the process. Their efforts made this research viable and achievable. Dr. Donato provided expert knowledge about foreign language learning and teaching. His experiences teaching, researching and mentoring showed throughout the project. Dr. Rainey provided insight into literacy and language comprehension that made this work relevant. Her ability to organize writing is exceptional. This was the first time either professor had co-advised an EdD candidate and it was incredibly successful. Not only was the process academic, it was also enjoyable, relevant and revelatory. I am grateful for their guidance and friendship and look forward to our work together in the future.

1.0 Problem Statement

I have been a high school German teacher for 9 years. As a foreign language teacher, I consistently read texts of varying lengths with my students. The school district I work for phased in their 1:1 initiative three years ago. Since then, teachers are tasked with increasing the frequency of online assessments and activities, gathering empirical data, and implementing a new online learning management system. I now create digital versions of everything we read in class for student use. This led me to ponder the effects of reading almost entirely on a screen within the context of foreign language education.

Unfortunately, I am unsure of my own students' perceptions of reading digitally or what aspects of digital reading are most difficult for them. I do not know how students are experiencing and reacting to reading on a screen. I am also unaware of specific perceptions of students and what tools can best support the digital reading process. Studies have indicated a lack of research in this area. Much of the recent efforts to study digital reading are focused on native language reading and few have yet focused on second language digital reading (See Reiber-Kuijpers, 2020; Van Leer, 2004; Ware, 2017).

As a teacher, I want to know how my instruction affects students and how or if my attempts to improve digital reading actually support students in my classroom. By understanding student perceptions about digital reading and knowing how they support their own reading, I can develop new instruction to improve the learning experience of all my students. Using this as my motivation, my dissertation-in-practice is organized around two questions: How do students perceive digital reading in my German classroom and how do students read digital texts in my classroom when working on a cooperative task?

In Figure 1, I represent the major areas of my problem of practice. How do I, as a German teacher, use the students' experience, my own pedagogical knowledge, and existing resources to support student reading in the foreign language classroom? Directly in the center section of the diagram is the problem of practice.

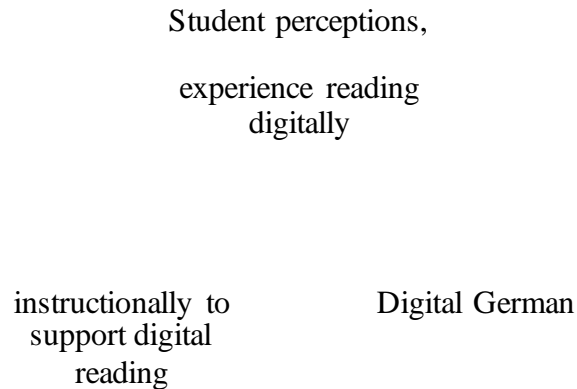


Figure 1 Supporting Students with Digital Reading Tools in the Foreign Language Classroom

1.1 Significance of the Problem of Practice

L Teaching students to read German, including German digital texts, is a matter of equity and justice. One of the essential tenets of social justice work is identifying and addressing students' needs. Similarly, foreign language education aims to give students a specific need; in this case, an in-depth look at cultural perspectives and understanding. Rita Mae Brown said, "Language is the road map of a culture. It tells you where its people come from and where they are going" (Becker, 2017 p. 1). If language is a tool to understand culture, then the language itself becomes emancipating, fostering learning and understanding. Far too often cultures are reified into one

small object or tradition. An example of how language does this is in Germany is trash and waste management. In Germany, recycling is a social movement embedded in the culture. The preciseness of the language allows for unique compound nouns that do not exist in other languages such as, Abfallvermeidung; waste avoidance. This word perfectly describes the feeling of reducing the need for recycling that is so prevalent in the culture. Even the word for recycling has denotations that are lost without knowing the word structure. Wiederverwertung doesn't simply mean to recycle, it is literally to realize worth again. Learning a second language enables connection to a different culture along with a variety of unique perspectives, but the language skills are not complete without the culture, in this case the object of recycling. Understanding how words work in language learning fosters the cultural awareness that is at the core of social justice work.

2.0 Literature Review

The I conducted a literature review to inform my understanding of my problem of practice.

I organized my literature review around the following questions:

1. How does the act of digital reading change students' reading?
2. How do world language learners read digital texts written in the target language? Are there patterns in how youth language learners perceive digital reading in the world language classroom?

In relation to my first question, I found that digital reading changes how students engage with and pay attention to a text. Their overall behaviors related to the reading also change and lastly, I found that teacher motivation and attitude may have an effect on student attitude and motivation. In relation to my second question, I found that students may draw on their L1 language resources while reading digitally, but that sometimes, students are unable to draw upon these resources.

2.1 How Does the Act of Digital Reading Change Students' Reading?

2.1.1 Digital Reading Changes Attention to Text

Reading online may require more attention than reading a paper book. Research from Buzzett o-More, Guy, and Elobaid (2007), Chang (2010), and Liu (2005) discusses the impact of reading digitally on students' attention spans. Each study determined the attention required to

deeply read a digital text was increased when compared to paper text. Students were more distracted on a screen even if they were working on an E-reader versus a laptop. According to Chang (2010) the variety of actions students face while reading online require a significant amount of focus to find meaning in a text. Chang conducts a review of literature and finds that many studies show a negative bias toward digital reading and that it is somehow inferior to paper reading. One specific point made from the study is that attention and involvement change when students read digitally.

Attention spans may decrease which can cause a decline in literacy ability in teens. For example, Coiro (2011) conducted a study involving 118 seventh grade students. Students were given digital reading samples and evaluated using the Online Reading Comprehension Assessment (ORCA) framework. Students were assessed on their abilities to locate within a text, evaluate a text's meaning, and their own ability to synthesize the text. In her conclusions, Coiro discusses the effects of digital reading. Somewhat candidly she states, "It used to be that there was a pre-reading, the reading itself, and the evaluation at the end of your chapter or at the end of a book," Coiro said. "Now that process happens repeatedly in about 4 seconds: I choose a link. I decide whether I want to be here/I don't want to be here, and then, where should I go next?" (p. 375). This quote demonstrates how simply and rapidly changes occur in the digital context, and from the research we see that digital reading changes the attention of the reader.

2.1.2 Digital Reading Changes Behaviors

Students acquire many behaviors and skills as they learn to read and continue reading. One critical behavior is time spent reading. Readers spend more time reading digital texts because of the access to other forms of media while reading. Readers may read a paragraph and then go to a

website to find historical background for what they just read, therefore spending more time reading. For example, Liu spent ten years tracking and categorizing the changes in digital reading. Liu (2005) found that over eighty percent of readers spent more time reading when reading digitally. These results were similar to Almind and Ingwersen (1997), who also found that time spent reading digitally increased for the majority of participants. Liu also found that specific literacy strategies and resources change. Students browsed and scanned more often when reading digital texts and also relied more on keyword spotting, selective reading, and non-linear reading patterns.

2.1.3 Teacher Attitude and Motivation May Change Student Attitude and Motivation

Motivation and attitude are essential for students' success while reading digitally. Students must believe that using the technologies available to them will make something about their educational experience better and, as experience teaches, people do not resist change so much as loss. Teacher motivation is also a determining factor for the students. Kim et al. (2013) studied 42 teachers using observations and interviews and found that if teachers understand the technology implementation process, then students can engage the content in a variety of new ways for second language learning.

Furthermore, research from Sell et al. (2012) shows that rather than focusing on helping the teachers gain new skill sets, professional development and training should focus on the foundations of instructional pedagogy or knowing how students read. This will in turn guide the students' attitudes toward technology integration and digital reading to a positive outcome. The effects of this are twofold. Research shows while some students are happy to have a more portable medium to read from, they experience more cognitive fatigue and eventually dislike reading on

screen when given the option to read on paper instead. One example is found in Woody, Daniel, and Baker (2010). The authors studied 91 college students over the course of a semester and found through questionnaires, survey data, and interviews, that when given the option between eBooks or print texts, 90% of students chose print texts. The higher student cost of paper texts was also not a deterrent. (Mizrachi, 2015; Hermena et al., (2017). Motivation and behavior are necessary for success in all classroom activities, but especially reading in a second language, where so much achievement is individual and based on singular efforts. To reword a popular concept from adaptive leadership, the more motivated a teacher is, the more empowered the students are (Heifetz, 2009).

2.2 How Do World Language Learners Read Digital Texts Written in the Target Language? Are There Patterns in How Adolescent Language Learners Perceive Digital Reading in the World Languages Classroom?

2.2.1 Sometimes Students May Draw Upon their L1 Resources While Reading Digitally

There are many skills and strategies that world language learners apply as they read on paper or digitally in their own language (L1) and also in the target language (L2). Most of the research however focuses on what readers do in their L1. Anderson (2003) and Grabe and Stoller (2011) both determined that there is lacking research for what youth language learners do as they read and how they perceive reading in the classroom. For example, Anderson (2003) studied 247 L2 learners and how learners apply reading strategies while reading digitally. His study showed that 67% of all the strategies utilized for digital reading were problem solving skills. Because of

these findings and others, it appears that researchers focus on determining whether or not L1 reading skills can be applied to L2 reading. The research indicates that this is the case. Students tend to apply their same L1 skills and strategies to reading in the L2. (See Day & Bamford, (1998); Grabe & Stoller, (2011); Hudson, (2007). The skills from L1 reading to L2 reading can include strategies such as: using cue words, decoding, reasoning and background knowledge, and skimming and scanning. These skills are transferable and research indicates that students do apply them, albeit at times with difficulty or irregularity.

2.2.2 Sometimes Students Cannot Draw Upon their L1 Resources While Reading Digitally

Many skills and strategies students possess in their L1 are not simply transferred to the L2 while reading digital texts. There are many similarities in digital reading when looking at the L1 and L2. Some skills and strategies do change, but many also stay the same across languages and media. In a study focused on reading differences, Grabe and Stoller (2011) focus on three main areas that challenge L2 learners. Their claim is that the linguist and processing differences, individual and experimental differences, and socio-cultural and institutional differences facing language learners are the most challenging differences between reading in an L1 versus and L2 In their findings they conclude that because of these differences from L1 to L2, reading strategies and skills are often not transferred from language to language in the digital reading learner's repertoire.

2.2.3 Participants of the Studies

In the majority of studies summarized in this literature review, the participants were digital natives of the Millennial era with a few studies branching into Generation Z. Yet, current students are more likely to be considered digital natives, having grown up in the electronic age with the onset and use of the internet. For example, Reiber-Kuijpers (2020) evaluates mostly millennials (1981-1996) studies and a few involving those born in Generation Z (1997-2012), but calls for more comprehensive studies that focus on Generation Z and end users of technology.

2.2.4 In Sum

The literature has clear suggestions about how students react and adapt to digital reading. Students tend to change their behaviors based on the attitudes and motivations of not only themselves, but also their teachers. Students also rely on their L1 as they learn an L2, but this can be challenging and some students are unable to use skills and strategies they may have in their L1 as they read in the L2. While research indicates these findings, I am unsure of how this looks in my classroom. This is why I need to research my own students' perceptions on reading digitally in German and how they support or do not support themselves while reading in the L2.

3.0 Applied Inquiry Plan

Grounded in my review of the literature and my own classroom-based problem of practice of my students' digital reading, I conducted a small-scale qualitative study in Spring 2022. I set out to study my students' meaning making and perceptions of reading digital German texts in my German 3 classroom. The motivation for this study was to gather findings that help me understand what I can do instructionally to support digital reading in my classroom. The inquiry questions guiding my study were:

1. How do students perceive digital reading in my German classroom?
2. How do students read digital texts in my German classroom when working on a cooperative task?

3.1 Participants and Classroom Context

My study involved 24 adolescents, ages 15-18 years old, all of whom were students in my 2021-2022 German 3 classroom. It was the first year that I had worked with this group of students. In our district's language program, there are potentially five levels of German classes for students to take. Students can take level one German in a two-year middle school course or in a one-year high school course. From there students' complete levels two and three before entering the International Baccalaureate (IB) high level language program for one year. Upon completion of year one of the IB program, students can choose to complete year two or switch to the Advanced Placement (AP) German class. Within this progression, level three is a transition year. Level three

focuses heavily on interpersonal, interpretive, and presentational language use, i.e., the three modes of communication in the communication goal area of the National Standards in Foreign Language Education Project (2015). My goal in level three is to prepare students to meet the rigorous standards of the IB and AP programs. It is also the first year that students are required to read full German texts, and we invest a great deal into students' reading which makes it an ideal year for study.

3.2 Data Collection

My data sources were: a pre-reading self-reflection, observational field notes, audio and screen recordings of a digital reading task, and a student produced graphic from the digital reading task. All 24 students completed the self-reflection and were included in the analysis. For the observational field notes, audio and screen recordings, and graphic organizer, I elected to only gather data from two focal groups of three students each.

3.2.1 Self-reflection

I utilized a self-reflection sheet to answer the first research question: how do students perceive digital reading in my German classroom? To begin, students each completed a digital reading task. I gave them a short German article to read about Grimm's Fairy tales from the Goethe Institute website (appendix A). This task took approximately twenty minutes of class time. Students used their school issued iPad to read the excerpt which was made available to them from a website. Immediately following the reading, I administered a self-reflection to the students

questioning their perceptions about the German reading task, digital reading, and general feelings about iPad use in the classroom (appendix B). This allowed me to interpret the responses based on the fact that students just completed a digital reading task. Questions were Likert scales, multiple choice, and some short answer questions. The questions focused on gathering student perceptions related to digital reading and not on the actual content of the reading.

3.2.2 Observation

Observational data was essential to understanding what students actually did as they read digitally. My students completed a digital reading task separate from the self-reflection as I observed their experiences working in small groups, discussing, and using German or English. To complete this, I enlisted the help of a German teacher colleague at my school. He and I observed the groups and used a field notes guide (Appendix E) to guide our notes and observations. He understood the study and was briefed on the observation protocol before the administration of the task.

3.2.3 Digital Reading Task

For the first task students watched a video version of Little Red Riding Hood from the YouTube channel, Deine Märchenwelt - Märchen, Geschichten & Sagen (Your fairy tale world – fairy tales, stories, and sayings). This channel takes fairy tales and creates short narrative videos telling the story in language accessible for young native learners. Fairy tales and fantasy play important roles in German culture and upbringing. Understanding them is part of understanding a larger cultural tradition and discussion of this is part of our curriculum. I grouped all students into

groups of 3 or 4, but only evaluated data from 2 focal groups (labeled G1, and G2). I organized groups based on students who typically work well together.

Once students started the task, I needed to see what they were actually doing. In order for this to be effective, the entire group shared one iPad for the activity. During their reading, I used the native screen capture tool on the iPad to record what students said and did on their iPads while reading. I used a second iPad to collect the audio from their conversations. This iPad was not available to the students for any other purpose. I purposefully did not give specific instructions about what was or was not allowed during the task so I could observe what students did on their own while reading digitally. I wanted to know if they used Google Translate, online dictionaries like dict.cc or dic.leo.org, or Wikipedia to support their reading.

Understanding the text was essential for students. We completed a story unit prior to this activity and I also provided key vocabulary to the students before watching the video (appendix C). The word selection was based on new vocabulary and previously studied vocabulary that was relevant to our curriculum. I encouraged students to stop and discuss the video anytime they would like. The students filled in a story arch on paper with the main ideas and contextual information from the video (appendix D). This helped them organize and categorize the information and compare the story with a version they knew. It also served as observational data for me as an assessment of students' comprehension. In addition to this, I took field notes. I used three main questions and a guide sheet with a checklist (appendix E) to make notes. The purpose of this portion of the task was to understand the story and it took approximately one 50-minute class period.

See Table 1 for an alignment of the data sources and analysis to their corresponding research question.

Table 1 Applied Inquiry Plan Chat

Research Question	Data Sources	Data Analysis
How do students perceive digital reading in my German classroom?	-24 Student Self-reflections from pre-reading. (1 per student)	-Questions 1,3,4, 9-12: evaluate frequency -Questions 2,5,6,7: determine themes, ideas, content, patterns across groups, and outliers
How do students read digital texts in my German classroom when working on a cooperative task?	-Task 1&2: Fairytale video retelling, recorded conversations and iPad use (2 groups of 3, estimated 30 min per audio recording), also observational notes -Graphic Organizer Use (1 per group per task)	-Observation analysis: patterns, differences, similarities, and improvements -1 set of teacher notes for each task and each group

After students completed the task, they created a modernized retelling of the story for dramatization in future classes. I hoped to encourage student creativity and enjoyment with this portion of the task while focusing students' ideas on how the stories can be re-interpreted in a modern-day setting. Students reworked the story as they liked to practice their intrapersonal and presentational language skills. While fairy tales do play a role in Germany's cultural identity, that same identity is continually changing. By updating the fairy tales for the modern age, students fostered a greater sense of the current German identity in an increasingly global climate. After students created a modern take on the tale, we held a fairy-tale-fest and each group presented their productions to the class. After each presentation, the students led a brief discussion explaining their modernization to the class and answered any questions. I used these as secondary data.

Because this study surrounds the meaning making of student work, my second task was the same as the first. Students again received a fairy tale and created a brief modernization. In keeping with the cyclical nature of improvement science, this will happen a few days after the first so I could adapt the task as needed to improve the students' experience or data collection. My second research question aimed to understand student learning and perception in the actual act and was designed for qualitative inquiry. By adding a second phase I was able to have more data points and experiences to evaluate and to better discuss and draw conclusions about the research.

3.3 Data Analysis

3.3.1 Research Question One: How do students perceive digital reading in my German classroom?

To answer question one, I gathered and compared students' responses to the self-reflection. I began by looking only at questions 1, 3, 4, and 9-12. Each of these questions were quantified by frequency. Using Microsoft Excel, I calculated frequency percentages for each question.

Then, I analyzed answers from questions 2, 5, 6 & 7. These were each short-answer questions. I identified themes, patterns, and also outliers that were positive or negative in nature.

After that, I created a crosswalk of information from the previous stages. I began by comparing and contrasting the data from stages 1 and 2 to find meaning. I identified trends and used these trends to explain what happened during the study. This data allowed me to show student perceptions on digital reading and what they actually did while interacting with a text in my German classroom.

3.3.2 Research Question Two: How do students read digital texts in my German classroom when working on a cooperative task?

To answer question two, I again utilized a three-staged approach. I began by reading and listening to everything I collected from recordings, student organizers, and from field notes which took time. I wanted to be able to understand everything that was said or not said because all of this information was relevant. This process revealed the cognitive and affective states of the students in the task. At this point, I made general notes about improvement from task to task, challenges those students faced, and patterns that emerged throughout the process.

Then I turned to individual group observation. I looked for challenges students faced and patterns that emerged throughout the process. I used the themes and ideas collected generally from task one to focus on specific improvements, challenges, and patterns of groups and individuals. It was important to know how students interacted with one another throughout the task and how they derived meaning from the text.

I compared my observational notes checklist from each task to the audio recordings. Since each task was divided by theme: improvement, challenge, and pattern, I compared and contrasted my notes from each stage. I asked, what was included and what was missing when looking at the compiled data? This enabled me to see what happened in each round of the task and better understand what students actually did during group work. work.

3.4 Study Limitations

The nature of this study had a few limitations. First, I decided not to video record students because of their possible discomfort and inability to adapt to a camera in the room. Students would have needed time to adjust to being recorded. Some students may have also tried harder or behaved differently if they knew they were being recorded, but I wanted to gather the authentic perspectives and reactions of my students. By only recording audio and screen activity I did not have access to other dimensions of student activity that could have provided insight, such as students' body language and physical responses to the task. I sought to take detailed field notes in order to attend to this limitation.

Another limitation to this study was that I only observed my level three students and that I only had one section of students to observe. I believe it would have been beneficial to look at multiple language levels, but that was not feasible.

A third potential limitation was my close proximity to my students. Because I was so invested in the success of my study, there was a risk that I would see what I wanted to see in the data. I warded against this threat by consulting with my advisors for this project. Their experience and perspective guided my writing and analysis. They provided ongoing feedback and helped to interpret the data with me. Although my proximity to my students is a potential limitation, it could also be considered a strength of the study. It connects me to the students who provide the data.

4.0 Findings

Based on my data analysis, I assert that students have strong perceptions about digital reading in German and support their own learning using a variety of methods. They know that reading in German is challenging regardless of the medium even though they are confident readers. Additionally, students recognized the importance of using L1 reading strategies as they learn German. I also found that students engage with their feelings as they read a German text and use English to support their learning. Lastly, I assert that students consult a variety of material resources to support their German reading.

4.1 Research Question One

My first research question was, how do students perceive digital reading in my German classroom? To answer this question, I created a self-assessment survey aimed at gathering student perceptions. Some data from the second phase of the study, a YouTube video task and graphic organizer for each focal group, is also helpful in answering this question. The survey findings revealed that 18 of 24 students who responded to the survey indicated that they preferred reading on paper compared to a screen. The survey data suggest three major themes that indicate students' perceptions of digital reading in my German III classroom.

4.1.1 Students perceived themselves to be confident readers in their first language (L1).

The survey data suggest that students consider themselves very capable readers. All students surveyed answered that they were confident. In response to the survey item, “how confident of a reader are you in general,” all 24 students answered that they were confident or very confident. In response to the survey statement, “I am comfortable reading digitally”, 17 students answered that they agreed and were comfortable reading digitally.

Students also indicated their confidence in other places on the survey. For example, in response to the survey item, “describe how you react while reading digitally in German,” one student wrote, “I can figure it out but it takes more effort than I’d like.” Another student wrote, “it’s kind of difficult, but I can usually make it out or understand sentences.” In short, the survey indicated that my students perceived themselves as capable readers.

4.1.2 Students found reading in German to be challenging regardless of medium.

The survey findings show that most of my students find reading to be challenging in German. In response to the survey statement, “While reading in German digitally, I feel like I get a lot out of the reading.” Thirteen of 24 students responded that they disagreed. Of these 13 students, all of them also responded that they were challenged or overwhelmed when answering the question, “describe how you react while reading digitally in German.” In response to survey item 7, “Imagine that I just assigned you to read an article about travel on your iPad completely in German. We have been talking about travel for a week and this article is all about what actual Germans think about traveling,” 18 out of 24 students wrote they would react negatively if given an assignment to read in German. Of the students who responded negatively, 16 were

overwhelmed or challenged, two indicated they would be confused, and two students replied that they would be annoyed while reading in German. One student wrote, “I want the English version” and another reported, I would feel, “overwhelmed, open google translate, find words I don’t(sic) know and then give up.” The students know how they feel and the data support that they struggle while reading German, which is not a surprising reaction when reading in a foreign language (see Saito, Garza, & Horwitz 1999).

Additionally, when questioned, “Imagine that I just assigned you to read an article about travel on your iPad completely in German,” students were apprehensive. For instance, one student reported that if given a task to read in German he would feel, “dreadful, I know it would be difficult” and four other students reported being stressed out or unhappy when faced with reading in German. Others reported being overwhelmed, wishing for paper, and feeling forgetful of vocabulary. One student’s reaction to question 7 summed up these feelings well. She wrote, “I would feel overwhelmed, and I would forget a lot of words that I should easily know.” According to the findings and in response to question 7, 13 out of 24 students feel bad about reading in German. These reactions suggest that student apprehensions are real and may need to be more fully addressed by teachers. I will return to this point in the discussion chapter.

4.1.3 Students perceived the importance of employing L1 reading strategies for German (L2) and reported using a vast repertoire of reading strategies.

The survey data suggest that while students read digitally, they employ many strategies from reading in their first language. When asked how they approach and orient themselves to a text written in German (item 6), 12 of the students reported using known reading strategies from reading in English (their L1) such as skimming and scanning. Two students also indicated that

they look for main ideas in the text. Eleven students reported using a dictionary in preparation for the reading task. One student wrote, “I’ll first skim the text to look for things I understand, then go back and reread things with more context after identifying things I recognize. I do have a German dictionary, but I prefer to look words up online, since it’s just more convenient for me.” Students are aware that they have strategies from their L1 that will help them learn the L2.

4.2 How do students read digital texts in my German classroom when working on a cooperative task?

My second research question was, how do students read digital texts in my German classroom when working on a cooperative task? To answer this question, I created a YouTube video task that allowed me to see and hear what students did while reading digital German texts. To create a purposeful sample, I created two focal groups of three students. The students completed this task twice in two phases (differentiated only by the actual video) to improve familiarity and gather more data points.

I found that students constructed meaning while working cooperatively. The data collected from these phases show three main ideas: 1. Students manage feelings as they read a German text. 2. Students use English to support their German language abilities. 3. Students consult material resources to support their German reading.

4.2.1 Students managed feelings as they read a German text.

During the digital reading task, students spoke together often to help process how they were feeling about the task. Multiple data point to the same finding: Students have strong feelings when reading a German text. From the self-assessment I learned that 13 students have negative feelings about reading in German, and from the YouTube task we learn that students use others to feel better about the task. Both focal groups remarked that the task “wasn’t so bad” (Focal Group 1, Phase 1). The students used the collaborative activity to lighten their mood and feelings about the task, thus helping reduce their apprehensions about reading digitally in German.

Additionally, each focal group also relied on humor as they completed the task. Students joked about the story as they watched in each phase. While watching the Princess and the Pea, one student in focal group two asked, “When was this story written?” To which another student replied, “Hopefully a long time ago!” (Phase 2, Focal group 2). Students managed their feelings as they navigated the learning process.

4.2.2 Students used English to support their German language abilities.

Everything the groups said while completing the YouTube task is relevant and revelatory. Their words show their own cognitive state in the task: meaning making, growth, and engagement. It is all a function of language learning. The students in each focal group and in each phase spoke to each other almost exclusively in English. They used their L1 to support the learning of the L2. For instance, students discussed what to write on the graphic organizer in English, then talked about how to construct the German sentence in English, and finally wrote the sentence down in German. The findings from the task phases show that students often sure up their foundations

about the content of what they want to say before they put it into German simply because they are not at the level to do this in German yet. They communicate in English before they have the ability to communicate in German.

4.2.3 Students consulted material resources to support their German reading.

Both focal groups used an online dictionary during each phase of the task to support their learning. During phase one, neither group opened an online dictionary until after the video finished. They then used the dictionary (www.dict.cc) to find the meaning of unfamiliar words in German. Additionally, only focal group two used the provided vocabulary sheet (Appendix C) to see what words meant while completing both phases of the task. In phase two neither group waited until after the video was finished to open the dictionary. They each paused the video while watching and looked up words to complete the graphic organizer and also looked up the meanings of words they heard in the video.

The students also involved the teachers as a resource. As we moved around the room, both groups asked each of us questions, but only in phase two of the task. Focal group one asked about wording a sentence with prepositions and the declension of nouns and focal group two asked how to conjugate the verb können (to be able to) and how to say “Once upon a time.”

Students also utilized comprehension strategies as they read. The findings indicate that they did this to solidify their shared comprehension. For instance, one student in focal group two clearly adopted the role of questioner. This student asked all of the clarifying questions during the second round of the task. Focal group one was similar, but the students shared the role of questioning. Students also paused the video often in the second phase to perform a simple comprehension check, or “reread” the text.

In conclusion, the students used a variety of functions to support their cooperative reading in my German classroom. Evident from the findings is the notion that the use of digital tools promotes the mentioned functional behaviors. Being able to pause, rewatch, look up words and grammar structures only promoted interaction. There was not simply one interaction between students as they read, they were instead a richness of interactions that stemmed from the use of digital tools and functions as students managed feelings, used their L1 to support their L2, and consulted material resources.

5.0 Discussion and Conclusion

5.1 Summary of General Findings

After reviewing the findings, I found that students have anxieties about reading in German both in a digital format (e.g., on an iPad) and on paper. While the initial literature supported the idea that digital reading may cause negative student perceptions about digital reading, the findings indicate that the medium appears to have very little effect on the attitudes and perceptions of students when tasked with digital reading. For instance, the findings showed that almost one third (29%) of the students felt negatively about reading in German, regardless of medium. I found two students' responses to a German reading task particularly interesting. They reported that they felt forgetful and anxious, as if they couldn't remember anything they had ever learned. It has been found that anxiety in language learning can create forgetfulness (Saito et al. 1999). The anxieties of students need to be more fully addressed during instruction to meet students reading needs in the target language, digital or otherwise.

Additionally, the students clearly used English (L1) to support their learning of German (L2). The findings from this study, particularly the video task, showed that students talk a great deal about what they read and experience in the L2 in their L1. The students in this study made use of English for the majority of the time during the video task. Students focused on the video and worked diligently to complete the task, albeit largely in English. As a practitioner, I found this insightful. All too often, I find myself believing that students are off task when not communicating in German, but the reality is that they are taking action to support their learning of the L2. In the literature review, I discussed that students may not be able to readily draw on their L1 reading

skills, but that was not what my findings suggested (Gabe & Stoller, 2011). In fact, my findings were the opposite. Students readily drew on their L1 reading skills to negotiate for meaning and understand the task. Their ability to do this was essential and helpful. The observation that students use L1 reading strategies also suggests that a certain threshold for reading another language is necessary for this strategy transfer to occur. As García and Leiva (2014) suggest, students translanguage and we want them to. We do not want to prohibit the use of the L1. Using the L1 in a cooperative setting creates an environment of discussion that allows students to use their L1 to support their L2 reading of digital texts. Translanguaging is not simply returning to using translation as a tool for all language learning, but rather a means of clarification in the learning process.

5.2 Unexpected Results

As I reviewed the students' discussion of the video task, I found that the cooperative nature of the task greatly benefited and supported the students' experience. As previously mentioned, the students spoke freely with one another in their L1. They used English as the tool for comprehension and to negotiate for meaning. The findings indicated that the students worked so well with each other that their cooperative work was essential not only for meaning making of the German text, but also for overall task completion. I saw students taking on certain roles in the group like the questioner, information provider, or word definer. Students repeatedly asked clarifying questions to each other to ensure that they understood the text. Because students were able to collaborate, they could seek assistance and support from each other rather than engage only in self-talk. I did not intend to learn this from my study, but because interaction with others is the fundamental

environment for language learning, collaboration became a key finding to this study (Donato, 2004; Schegloff, 2003; Tarone, 2000; Thorne, & Poehner, 2014). Students worked together and employed many language tools to be successful in a cooperative task.

Another emergent idea is that emotions play a much larger role in cooperative student digital reading than I may have originally imagined. When designing the inquiry plan and completing the literature review, I did not account for how emotions might impact students' learning during a digital reading cooperative task. From the research, we know that students draw on many L1 tools, but I did not research or anticipate emotions as a tool. From the findings, I realized that humor is one such emotion. I heard students saying things like, "stupid autocorrect" followed by laughter at what the iPad wrote for them in English as they attempted to write in German (phase 2, focal group 2). Other students joked about marriage roles in the feudal system and gender roles now. When they discussed the moral of the Princess and the Pea they joked, "get yourself a lady who's sensitive" to which another student replied, "Physically, not emotionally," followed by laughter. The last student in the group then said, "Offentsichtlich!" which is German for obviously (phase 2, focal group 1). Either the students were relaxed enough to joke, or the jokes made them relaxed, but likely it was a combination of both. These sorts of statements relate to multiple studies of humor in the foreign language classroom which show the function of humor in students' L2 learning (Canagarajah, 2004; Tarone, 2000). Humor is, therefore, another tool to help students engage with the new language and reduce the anxiety that is often associated with foreign language learning. The findings of this study aligned with the findings of many others in that humor in the classroom environment can act as a safety zone that helps students relax and enjoy the challenges of second language acquisition (See Canagarajah, 2004; Popescu, 2010; Swanson, 2013; Tarone 2000).

5.3 Instructional Implications

One clear instructional implication of this study is that teachers need to explore and understand how students' use of the L1 supports learning the L2. As a foreign language teacher, I have not purposefully looked at the use of English to help my students learn German. In the future, I can explicitly teach my students about translanguaging and how to use it as a tool in the learning process. I can encourage it in certain situations and not in others. For example, when we read a short story, it is appropriate to discuss the story in English because students lack the ability to do so in German, and all my students are native English speakers. An additional example may also be when students are listening to a podcast or video in the L2. It makes sense to take notes in the L1 and L2 because it helps them spend more time working on comprehension of what they hear and less time focused on what they want to record in writing. Conversely, there are situations where translanguaging is unhelpful. For instance, when students are writing a letter, it is better to write in the L2 than translate from a previously written text in their L1. Understanding how students use L1 to support their L2 should lead to teachers adapting their practice and a more informed understanding of why and when the L1 is used during the learning of an additional language other than the students' first language.

Another implication is to increase the use of task repetition. During the second round of the task, students were much more relaxed and more conversant with each other. Their speech was more relaxed and they were more engaged with each other and the task. Task repetition is necessary but many teachers dismiss tasks when they see students struggling on their first attempt (Brooks, Donato & McGlone 1997). From the findings, I can begin to create classroom activities that build on each other and repeat similar structures and task procedures. The use of task repetition

improves student L2 learning and is supported by research beyond the literature review. (See Croockes & Gass, 1993; Foster & Skehan, 1996; Qiu & Lo, 2017).

5.4 Recommendations

Based on my observations of the findings I would make certain suggestions at the district and department levels. To the principal and administrators of the school I would advocate for an additional strategy of professional development (PD). The findings indicated to me that task ownership for both student and teacher is powerful. When students were familiar with the task and knew what to do, or owned it, they were more successful. The same idea could be applied to teachers. As briefly mentioned in the literature review, there is great benefit to be had by allowing teachers to take ownership of their professional development (Sell et al., (2012). I certainly could lead a PD session about my findings and how students use reading strategies and digital tools to support their digital reading in a cooperative task. The tasks my students completed redefined and augmented what I do in my classroom based around digital reading. A few years ago, the Substitution, Augmentation, Modification, and Redefinition (SAMR) model was part of a district technology initiative (See Terada 2020 and Chapter 2). At the core of the initiative are activities like the one that happened in my study. Students were able to do something they could not before. The findings are applicable to most classroom settings regardless of content area because they are based on and make use of digital reading, not solely learning German. Other teachers likely have similar experiences and anecdotal findings that would be useful to share and instruct about in a PD setting. Few understand more about what being a classroom teacher is like than teachers. There are studies that evaluate the concept of teacher's tacit knowledge and show that this knowledge

embodies a wisdom in practice that needs to be valued (Freeman, 1991; Klette & Carlsten, 2012). Teachers have agency and are capable of deciding their own needs for professional development based on their lived experiences in the classroom.

If I were to conduct the study again, I would have recommendations to change and challenge the study's findings. The design of the video task was very helpful for my classroom, but does not need to be limited to a video about fairytales. Although fairytales are culturally relevant to learning German, many other topics are presented and discussed in class. For instance, I could change the video to a news clip or a Vlog but have them complete the same task. I could easily change text types to further challenge and engage students while keeping task familiarity paramount. I could also change group sizes or complete the task with individuals instead of groups. This would be well suited to the cyclical nature of improvement science and would allow for further inquiry (Lewis, 2015). I am also curious about asking students to gather data rather than the teacher or observer. I see no reason why students could not keep track of how often a dictionary was used or which language was spoken and for what purposes. Virtually the entire observational checklist from my study could be gathered by the students themselves. This would allow me to utilize the second teacher observer in different ways. I could also create cycles and make incremental changes each time to gather different data points. In the nature of improvement science, the task lends itself to multiple cycles and can yield results of benefit beyond the foreign language classroom.

Further studies beyond my classroom about the role of emotions in language learning could be beneficial to the foreign language teacher community. While my findings showed evidence of humor and anxiety playing a role in the students' experience, these emotions are part of a much larger umbrella of emotions that affect how students perceive, respond to, and engage with a

foreign language text. As mentioned, foreign language learning anxiety is real, as is student and teacher use of humor to support language learning. Each of these topics could easily be their own independent study. My practice would benefit from more deeply understanding the role of humor in my classroom. How do I as a teacher use humor and how do students use humor to support their own learning? This concept seems fascinating and could lead to specific helpful topics to implement in my own classroom and elsewhere. Additionally, I would also like to investigate how to help change students' perspectives around digital reading so that a large number of my students would not express negative feelings about reading German. Learning how to cope with and overcome the anxieties associated with foreign language reading could be studied in my own classroom and district, and in fact, could become part of the foreign language curriculum. Research also advocates that anxiety is an important language construct in how students learn and grow in a language and so it could be beneficial for future study (Horwitz et al., 1986). Studies of this type would likely benefit the overall foreign language and digital reading communities.

5.5 Limitations

As with any study of this type there were certain limitations. Some could have been avoided, while others happened naturally as part of the learning process. The findings from the self-assessment suggest that my questions may have prompted the responses of the survey. For example, in self-assessment item seven, I listed opening a dictionary as a possible answer on the form. This may have prompted certain reading actions during the study. While students may have likely written this response on their own, it is also likely that my suggestions impacted what they

wrote and what they did at a later time. The same could be said for other responses from the self-assessment.

Additionally, because I did not record videos that included faces of my students, certain data points may have been lost. While intentionally choosing not to gather video recordings of my students, I may have missed out on many kinds of information and data. The study lacked any exploration of body language or physical response to the tasks and texts. This could be an area for a larger study that would allow students to become comfortable being on camera.

A final limitation was also the type of text used for the tasks. Many fairytales are very familiar to students. I selected fairy tales because of their familiarity to my students, simplicity, and cultural relevance. Most students were able to easily engage with the fairytales. They already knew the stories and so that may have changed the findings from the task and even the perspectives of some students. I would like to rerun the same task with a news clip, current event clip, or an unfamiliar story to see if there is any major difference in student efforts and what they do while reading digitally. While there were many limitations to this study, the findings and data remain relevant to what I do as a teacher and useful to my own practice.

5.6 Personal Statement

This study started with anecdote. As a classroom teacher, I survive on anecdotal observations. I look at what my students do during class, the work they produce, and I try to adapt and teach to their needs. Most of the adaptations that I make are based only on this process. I look at what I think is going on and then make changes based on those assumptions and anecdotes. There simply isn't time in my day to design activities that produce measurable data that can be

used to see what is actually happening in my class. I look at student work and foster change from there. This aspect of teaching has always been challenging to me. The concept of improvement science has simplified this process for me. Small measurable changes made over cycles of activities seem more manageable. I hope to be able to look at what I learned and tweak it for the benefit of myself and my students.

Consequently, the experience of crafting a study based on research and gathering and evaluating findings has been transformative. Not simply because I learned about my students' perceptions and digital reading trends in my classroom, but also because I learned about myself. I found that I like research. I enjoyed creating a task for the specific purpose of gathering information about my practice. It was something just for me as a teacher to answer a question that I had, and I liked it. As I began the process, I had great difficulty finding a problem of practice that seemed large enough in scope to affect change in my organization. Once I realized that I could localize the problem to my German classroom, everything changed. I was doing something to not only improve my students' language abilities, but also my ability to help them. This was a key transformation. Normally I try simply to help my students, not help myself. Not only was I able to improve my students' learning experience, I also intentionally improved my practice.

Even though my study was based in my German classroom, my role beyond the classroom has changed as well. While earning a degree does not necessarily make me a leader, people do notice, and I have already seen the effects of completing a doctoral degree in education. Within my own department I have been sought out and looked to as someone who speaks with authority about a given subject, especially technology integration. While I may doubt my own abilities and not feel qualified, others appear to feel differently. I can be an agent of change in my organization. I hope to become such as I help my colleagues and students in the future. With the knowledge and

experience of completing this dissertation, I feel confident that I actually can do more outside my own classroom, which I had not considered before.

Because of these changes I also look forward to sharing my experiences with others. This would likely begin by sharing my work with other foreign language teachers at my school district. My department could benefit from a discussion about this topic. I also plan to speak with my supervisor about leading a district professional development session about digital reading in the classroom. Additionally, the Pennsylvania State Modern Language Association conference this year is to be held in my home town. If I were to present at this conference it would give me an opportunity to engage with the local community of teachers and those from across the state. If the presentations go well at a local level, I may inquire about presenting at larger conferences such as the Northeast Conference on the Teaching of Foreign Languages or even the American Council on the Teaching of Foreign Language conference. Regardless, I plan to share my experiences and findings to promote further discussion about digital reading in the foreign language classroom.

Lastly, and as stated at the beginning of this section, I will again rely on my own observations. Because of this study I now have different tools to move past anecdote. Applying these tools will help me to realize the validity of my own experiences and those of my students. These experiences are real and relevant. Completing this program taught me this point. Students cannot and should not separate learning from their experience, and neither should educators and researchers. This program has strengthened my resolve to believe that everyone should be met where they are at and move forward from there. I am grateful to have had the opportunity to engage with the professional learning community and remember the value of research and acquired knowledge in education. Without it our practice suffers and with it, our practice as educators flourishes.

Appendix A Initial Reading task from the Goethe Institute

Can be found <https://www.goethe.de/lrn/prj/mlg/mad/gri/de9051035.htm>

Appendix B Self-Reflection

Digital Reading Self-assessment

Thanks for taking my survey. I'm interested in learning about your ideas and perceptions regarding digital reading. When I say digital reading, I mean anytime you read on a screen. It could be Schoology, a book, a website, Instagram, a news article, Snapchat, or a twitter feed. Your answers will not be part of your grade and are anonymous. Please be honest and answer as best you can. Vielen Dank!

1. How confident of a reader are you in general? Circle

- Very Confident
- Confident
- Not very confident
- No confidence

2. What do you read for fun? For example: Snapchat, a book, Kindle, news articles, text messages, Twitter, etc.

3. How often do you read on an electronic device out of school? Circle

- Never
- Sometimes
- Often
- Always

4. What do you prefer about reading digitally? – Circle as many as apply

- I can read multiple things at once (read a book, an article, twitter, social media posts)
- I can do my work digitally
- Portability
- Functionality
- Ability to look up words
- Other: _____

5. Describe how you react while reading digitally in German: (for example, overwhelmed, disgusted, excited, challenged, etc.)

6. How do you go about starting a digital German reading assignment? What steps do you take? (for example, open a dictionary, prepare yourself mentally, look for title words, cognates, open google translate, etc.)

7. Imagine that I just assigned you to read an article about travel on your iPad completely in German. We have been talking about travel for a week and this article is all about what actual Germans think about traveling.

-How do you feel about being given a reading in German on an iPad? Please explain your reaction:

-What would you say to a friend who was absent about this task?

On a scale from 1-4, Rank how much you agree or disagree with the following statements:

1. strongly agree, 2. slightly agree, 3. slightly disagree, 4. strongly disagree

****Remember digital reading is anything you read on a screen****

8. _____ I am easily distracted when I read digitally.

9. _____ I am comfortable reading digitally.

10. _____ Reading on an electronic device enhances my overall reading experience.

11. _____ While reading in German digitally, I feel like I get a lot out of the reading

12. _____ I prefer reading digitally to reading a paper text.

Optional: If you would agree to talk with me more about your responses, please write your Name below:

Appendix C Vocabulary Lists

Vokabeln für Rotkäppchen

1. Das Käppchen: der Hut des kleinen Mädchens
2. verlaufen: wenn du läufst aber falsch, du gehst in die falsche Richtung
3. das Bissen: Was du mit dem Mund machst, wenn du isst. Du nimmst ein Bissen von einem Apfel
4. Schnappen: Mund offen und sehr schnell zu, wie Schnappi das kleine Krokodil
5. umfallen: du stehst aber dann fällst du um und du liegst auf dem Boden
6. verschlingen: to scarf or devour
7. die Vorhänge: curtains on a window
8. Zunähen: to sew shut
9. Nachsehen: to check on, to go and see
10. Schnarchen: to snore

Vokabeln für die Prinzessin auf der Erbse

1. herausfinden: neue Informationen lernen
2. Das Gewitter: sehr schlechtes Wetter, ein großer Sturm
3. Klatschnass: sehr sehr nass, Wasser überall
4. Schlafkammer: das Zimmer, wo eine Prinzessin schläft
5. Jammern: viel über die schlechten Dinge in deinem Leben sprechen
6. Dünnhäutig/empfindlich: sensitive
7. bestaunen: gaze in amazement
8. spüren: to feel feelings
9. die Fersen: heel, feet
10. trocken: adjective- dry

Appendix D Graphic Organizer

Story Diagram

Name: _____
Cohort, #: _____
Date: _____

Conflict: (Why?)

BEGINNING: (What?)

Setting (Where? When?):

Character (Who?):

MIDDLE: (How?)

Theme and Author's Message: (Why?)

Motivation: (Why?)

END: (What?)

😊 ☹️

Figure 2 Graphic Organizer

Appendix E Field Guide Notes

Table 2 Field Guide Notes

Guiding Questions:	Group _____
What resources do students use as they work?	Notes:
Search Google	
Open online Dictionary	
Open translator	
Consult the vocab sheet	
Turn on captions	
Ask another student or group	
Ask the teacher for help	
Use their phone	
What language do students use when and for what purpose?	Notes:
Affirming work (self/ other)	
Contradicting work (self/other)	
React to video in German	
React to video in English	
Ask questions in German	
Ask question in English	
Discuss the plot in German	
Discuss the plot in English	
Discuss organizer in German	
Discuss organizer in English	
How are students making meaning of the video?	Notes:
Ask each other questions	
Pause the video	
Rewatch segments of video	
Fill out the organizer during task	
Discuss language use/structure	
Review vocabulary together	

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