Appendix C

Research on TPR Storytelling

The great majority of this summary of published research on TPRS® as of June 30, 2012, was assembled and written by Karen Lichtman, Assistant Professor of Foreign Languages and Literature at Northern Illinois University.

Many of the ideas behind Teaching Proficiency through Reading and Storytelling (TPRS®) are supported by research. Total Physical Response (TPR), on which TPRS® was originally based, was studied by James Asher (2009), professor emeritus of psychology at San José State University. Terminology used to explain and support certain key ideas in TPRS®—including the importance of *comprehensible input*, the distinction between natural language *acquisition* and traditional, effortful language *learning*, and the importance of lowering the *affective filter*—comes from the research of Stephen Krashen (1981; 1982) while a linguistics professor at the University of Southern California.

But until the last decade, TPRS® was mainly supported by theoretical research, not direct comparisons of different teaching methods. Teachers were still waiting for hard evidence they could use to defend TPRS® to sometimes-skeptical administrators, colleagues or parents. Just as TPRS® has grown through a grassroots movement of teachers, the first research produced on TPRS® has come from teachers pursuing master's or doctoral degrees. This body of research is growing in size and sophistication.

While each study may have individual limitations (as any research study must), the pattern is clear. The majority of the research to date has found that TPRS® students outperform traditional students on some measures of language skills. Of the 12 published empirical studies reviewed here, nine show advantages for TPRS®, and three show mixed results (TPRS® students performed better in some areas and worse in others). No study has found that TPRS® students uniformly underperform traditional students.

No doubt there numerous master's studies that have not been published, both in the United States and in other countries. Only one is mentioned in this summary of research.

Published Articles on TPRS®

The first published article on TPRS®, Davidheiser's (2001) "The ABCs of TPR Storytelling," is not a controlled research study, but a report of Davidheiser's experiences using TPRS® in college German classes. He finds that particularly in the first few years of language instruction, TPRS® improves pronunciation and vocabulary memory, reduces anxiety, is a natural way to learn language, promotes active learning, and is good for different types of learners. Davidheiser also integrates grammar instruction with TPRS® in upper levels.

Braunstein (2006) did a research study on student attitudes towards TPRS® in a class of 15 adult ESL students. These students told Braunstein that what they expected from English class was traditional instruction including grammar, lecture, and written work. But after two lessons taught with TPRS®, students responded that they felt "interest," "enthusiasm," and "happiness," and did *not* feel "embarrassed," "bored," or "stupid." They reported that TPRS® helped them to remember vocabulary and understand English. This study provides evidence that students — even those who expect a different kind of language teaching — are likely to respond positively to TPRS®.

There has been one article published that is very critical of TPRS®, but this article (Alley & Overfield, 2008) is not an empirical study — in other words, it represents the opinions of the authors, but the authors do not provide any direct evidence for their opinions, such as observations of TPRS® classes or tests of TPRS® students. They consider TPRS® similar to the grammar-translation method and the audiolingual method, and criticize TPRS® stories for having minimal cultural content (which, of course, is something that would vary widely from teacher to teacher, and from story to story). David Alley is currently working on a year-long study of student discourse in TPRS® classes in which he will audiotape and transcribe three high school classes (D.

Alley, personal communication, July 24, 2011), so it will be interesting to see what he concludes from a research study.

The year 2009 saw the publication of two research studies on TPRS® in the International Journal of Foreign Language Teaching (IJFLT), a peer-reviewed journal. Watson (2009) compared two beginning high school Spanish classes taught with TPRS® to one class taught with more traditional methods. The students took a written final exam with questions on listening comprehension, vocabulary and grammar, and reading comprehension, and a district-wide oral exam. TPRS® students scored significantly better than traditional students on both tests. Also, the distribution was wider in the traditional classes. This means that, for instance, the top 95% of the TPRS® students all got As or Bs on the exam, but the top 95% of the traditional students got As, Bs, Cs, and Ds — they had a wider range of grades.

Varguez (2009) compared four beginning high school Spanish classes: two receiving traditional instruction and two receiving TPRS® instruction. One of the TPRS® classrooms also happened to be socioeconomically disadvantaged and have a less experienced teacher. Students in the study took a standardized test: the University of the State of New York's standardized Second Language Proficiency Examination (SLPE) from June of 2006, which measured listening comprehension and reading comprehension. Varguez also included a longer reading passage adapted from the New York State Regents exam, since the SLPE tested only comprehension of words, phrases, and sentences. The poorer TPRS® class performed statistically the same as the richer traditional districts on all three tests, which is surprising since socioeconomic status is a strong predictor of academic success. But the TPRS® class that matched the traditional classes on demographic variables significantly outperformed the traditional classes on all three tests. This indicates that TPRS® can be effective in both rich and poor schools, and can be used to help close achievement gaps caused by socioeconomic status.

Oliver (2012) compared final exam scores of beginning college Spanish students in four traditional classes and two TPRS® classes. The TPRS® students significantly outperformed the traditional stu-

dents on a traditional final exam testing reading, writing, and grammar. Additionally, Oliver describes positive effects on speaking, listening, and motivation that were not tested by the exam.

Dziedzic (2012) compared four sections of Spanish 1: two that he taught traditionally and two that he taught using TPRS®. Both groups also participated in sustained silent reading. At the end of the year, 65 students who had never learned Spanish previously took the Denver Public Schools Proficiency Assessment. The groups did equally well on listening and reading, but the TPRS® students significantly outperformed the traditional students on writing and speaking, with large effect sizes on these two production measures.

Master's Theses on TPRS®

In addition to these published articles, six master's theses on TPRS® have been published through ProQuest Dissertations and Theses. Rapstine (2003) does not include a research study in his analysis of high school and college TPRS®, but cites inclusion of all types of learners, use of the target language, and a learner-centered classroom as advantages of TPRS®, and lack of authentic cultural instruction, (oddly) lack of reading material, and possible teacher exhaustion as disadvantages of TPRS®.

Taulbee (2008) also analyzes high school TPRS® without a research study. She cites active learning, use of the right brain, inclusion of all types of learners, higher retention, increased speaking and writing fluency, and lower failure rates on national tests as positive aspects of TPRS®, and difficulty extending TPRS® to upper levels, lack of cultural material, and lack of grammar practice as negative aspects. Taulbee notes that TPRS instructors respond to these criticisms by saying that TPRS® delays but does not eliminate grammar, and that while TPRS®'s main focus is on communication rather than culture, teachers may embed culture in stories and readings.

Garczynski (2003) taught two middle school groups the same material using either TPRS® or the Audiolingual Method during a short 6-week intervention. The two groups performed the same on tests of listening comprehension and reading comprehension, but the students

significantly preferred TPRS®. Beyer (2008) taught high school Spanish students the story of The Three Little Pigs in the past tense, and students reported that the storytelling was enjoyable, preferable to the textbook, and helped them learn to conjugate verbs in the preterit tense. Bustamante (2009) taught a college TPRS® class for an entire semester, finding that TPRS® significantly increased student skills in all the measures used in the study: reading comprehension and fluency, writing fluency, vocabulary, and grammar. Students who had previously taken a non-TPRS® Spanish class unanimously preferred TPRS® to their previous class.

Foster (2011) compared not just TPRS® and traditional high school classes, but also processing instruction (VanPatten, 1996), a more explicit input-based teaching method. This study only looked at performance on one grammatical structure, Spanish constructions using gustar. TPRS® students outperformed traditional classes on a grammaticality judgment task and on writing fluency, and equaled traditional classes on three other measures (speaking accuracy, writing accuracy, and reading). However, processing instruction students outperformed the other groups on speaking accuracy and writing accuracy of these constructions. Processing instruction students equaled TPRS® students on a grammaticality judgment task and on reading, but underperformed TPRS® students on writing fluency. When the goal is accurate manipulation of a single grammatical structure rather than fluency, explicit teaching can be beneficial.

One additional, unpublished, master's thesis, Webster (2003) is worth mentioning here because it includes a small survey on enrollment in TPRS® language programs. Programs using TPRS® have increased enrollment, and decreased attrition between levels. Webster also reports that TPRS® classes yield success on the AP exam, and prepare students well for college. (See excerpts from this thesis on pp. 381-383 in Appendix J.)

Doctoral Dissertations on TPRS®

Three dissertations on TPRS® have also been published through ProQuest Dissertations and Theses. Perna (2007) compared three

methods: TPRS®, traditional, and "instruction through primary- reinforced by secondary- perceptual strengths," a teaching method where students can choose to go to auditory, kinesthetic, tactual, or visual learning stations based on their individual learning styles. Perna taught five high school classes for a total of 24 days, using all three teaching methods. She found that all three methods worked equally well for grammar lessons, but that perceptual strengths was the most effective for vocabulary lessons, followed by TPRS®, with traditional instruction being the least effective. Since TPRS® does not typically break lessons into grammar lessons vs. vocabulary lessons, Perna's instruction may not have been typical of TPRS® classrooms.

Spangler's (2009) dissertation study tested a total of 162 participants from five high school Spanish classes in California and two middle school Spanish classes in Rhode Island. Students took the standardized STAMP test (STAndards-based Measure of Proficiency; Avant Assessment, 2002), a computer-based test measuring reading, writing, and speaking. TPRS® students equaled traditional students on the reading and writing sections and on a separate measure of anxiety. But on the speaking test, TPRS® students significantly outperformed traditional students. This was a large effect size, which means that there was a strong relationship between having received TPRS® instruction and scoring well on the speaking test.

Finally, Beal's (2011) dissertation surveyed a very large sample of 821 middle and high school students within one school district whose teachers used TPRS® regularly, occasionally, or not at all. He found that use of TPRS® had no effect on anxiety or plans to continue with Spanish. Overall, the traditional group scored the highest on the district final exam, followed by the regular TPRS® group, and the occasional TPRS® group scored the lowest. This was mediated by grade level: in middle school, TPRS® students did better on the final exam than traditional students, but in high school, TPRS® students did worse than traditional students. Unfortunately, the study doesn't include any measures to establish whether the TPRS® and non-TPRS® groups were similar at the beginning of the school year. The study is only quasi-experimental because students were not randomly assigned to

classes. This means that, for instance, we don't know about the socioeconomic status of the schools, or other variables that might have been important.

Each of these studies is limited by itself — some have small sample sizes; some had the same teachers teach both TPRS® and traditional classes (which may be unfair if the teacher is biased toward a particular method), while others had different teachers teach the classes (which may be unfair if one teacher is better than another). It is important to take into account too that TPRS® is implemented in different ways by different teachers, in part because it keeps evolving and in part because every individual is different and every teaching situation is different. But together, the pattern of results is quite clear. In the majority of studies, TPRS® students outperform traditional students; in a minority of the studies, the results are mixed. The twelve empirical studies reviewed here include a total of over 1672 students enrolled in 107 different classes, taught by 47 different teachers in 21 different schools, so the results cannot be attributed to a particular class or teacher. Table 1 below summarizes the results. Each measure in each study is reflected in this table: for instance, in Varguez (2009) TPRS® outperformed traditional instruction when socioeconomic status was held constant, but a poorer TPRS® class equaled a richer traditional class, so both "TPRS® equals another teaching method" and "TPRS® outperforms another teaching method" are checked. Such a study nonetheless favors TPRS®.

Of course, there is much research still to be done: research on elementary school and college language learners; research on which elements of TPRS® contribute the most to learner success; and research on retention of language knowledge over time, an area in which the large amount of comprehensible input in TPRS® should be advantageous. The results above should also be replicated and extended in order to give us a fuller picture of the differences between TPRS® and other teaching methods. But for teachers, parents, students, and administrators who are interested in comparisons of TPRS® versus traditional teaching, this body of research provides evidence that TPRS®

students often outperform and rarely underperform traditional students. A significant amount and variety of research is in: TPRS® is effective.

Table 1: Summary of Research Results on TPRS®

	TPRS ®	Positive re-	TPRS®	Another
	outperforms	sults for	equals	teaching
	another	TPRS® (no	another	method out-
	teaching	comparison	teaching	performs
	method	group)	method	TPRS ®
Braunstein				
(2006)		√		
Watson	*			
(2009)				
Varguez	>			
(2009)			•	
Garczynski	1			
(2003)			•	
Beyer				
(2008)		•		
Bustamante	✓	1		
(2009)				
Foster	1		✓	•
(2011)				
Webster				
(2003)		•		
Perna (2007)	✓		✓	✓
Spangler	•			
(2009)			•	
Beal (2011)	✓		✓	✓
Oliver				
(2012)	•			
Dziedzic	•		✓	
(2012)				