V. Tests Given and Summary of Results

After meeting with Jimmy's parents and him to discuss the purpose of these lessons, we began with a simple pre-test to assess his current fluency level and comprehension. Since there was no specific prior reading level type information, only qualitative remarks from the parents or the student, there was a need to find a baseline (initial reading score or IRI). This aims to give the me somewhere to plan for the future. For this assessment the student read and the number of correctly written words were scored. Additionally, the main ideas and a few specific words were addressed verbally to the student allowing him to answer (Rasinski, web). The post assessment given was more focused on the reading comprehension. The purpose was to see if the student had retained the material. The reading was administered from a text, but same information as used in the pre-test.

V.I. Pre-Assessment

The topic being covered throughout this study was cellular structure and function. All students in the class were asked to learn about the different types of cells, how they are identified. The internal components (organelles) were expected to be identified and their functions outlined. The reading selected for Jimmy was from the textbook used in all of our MYP Honors Biology 9 classes, *Biology* by Glencoe Sciences. He read selections and I scored his word recognition using the method cited by Tim Rasinski's *Best Practices in Fluency Instruction* (Rasinski, 287-289) and an online PDF he created (Rasinski, web). As the student reads, words that he misses or struggles reading are marked. When finished, the number of correct words are scored over the total number of words to give a percent.

I started this lesson/assessment off with modeling what I wanted Jimmy to do for me. "For students to become fluent readers, they need to have an idea of what is meant by fluency." (Rasinski, 100). After I read a small beginning piece, he began to read for me. I was amazed when Jimmy read almost every word from the text. Since he attended a Bilingual school while living in Shanghai, he had learned to read and write English. Using the Assessing Accuracy and Automaticity scale (Smith, slide 19) see Appendix A, Jimmy scored a 99% correct or achieving the Independent Reading Level. Even the more difficult scientific terms were pronounced as best as he could. Using the rubric for Assessing Interpretive & Meaningful Reading (Smith, slide 21) see Appendix B, my student scored a 2 in Expression and Volume, 2 in Phrasing, 3 in Smoothness and 3 in Pace. According to the scoring system, my student's score (10) is making good progress towards fluency.

As the reading was taking place, I periodically stopped Jimmy and asked him some questions to check for understanding. These ranged from direct definitions from the reading, what did certain words mean (not always science words) and then more conceptual questions. I helped him in a few spots where the words were difficult. This is where I was able to see some of the gaps in his vocabulary recognition. His responses would allow for me to see his reading comprehension.

Rasinski's PDF - page 7, found on the web outlining how to score comprehension was used (Rasinski, Web). From a person that cares about my students standpoint, this was hard for me...not only is Jimmy learning biology, which has all its own "language," but he is working to understand english and its nuances. He didn't know what mechanical meant, he didn't know what distinguish meant, he didn't know what solar meant. I was able to explain what they were and he seemed to understand, but I cannot be with him all the time. Jimmy scored 2/6 on this scale, stating that he had inadequate recall and comprehension.

Both of these tests gave me some guidance in what Jimmy needed from me. Jimmy was weak in his vocabulary and the comprehension of these words. He can read them, so there is just a learning and association piece that needs to be fostered. These pieces gave me something to focus on, if I can build the vocabulary of words, I can hopefully bring the comprehension with it. Jimmy is a very smart student, the language is the only thing that is standing in his way of being a successful student.

V.II. Post-Assessment

The post-assessment given to Jimmy was similar to that of the pre-test. I felt it was important to use the same method to keep the study controlled. Testing with different methods might have produced slight inconsistencies in the data and the conclusions drawn. A different text was used in this assessment, but the same material was covered. This was done just using another biology textbook I had, *Biology: A Search For Order in Complexity*, 2nd Edition. It is not of the same publisher, so there are enough differences to see if the reading and comprehension has been successful.

Again, Jimmy was scored on the word recognition, scoring a 98% this time (comparable to last time). The Assessing Interpretive & Meaningful Reading rubric was used, producing 2 in expression and volume, 2 in phrasing, 3 in smoothness and 3 in pace. Again, giving the Jimmy a 10, which means he is making good progress toward fluency. It doesn't surprise me that these scores have not really changed. He was already a proficient reader of the words. It was the comprehension I was most concerned about. I tried to use the same questions as before to the best of my ability, as some were text specific, but things were controlled as much as possible. My evaluation of his final level did improve, but only slightly. I believe I could move him to 3/6 on the comprehension scale, but not really any higher. The score of a 3 still is indicative of an inadequacy to recall and comprehend the material. It did seem that with this continued work, Jimmy might be able to get to the 4/6 mark by

the end of the year. This seems a reasonable goal as his barrier is so difficult to overcome, usually only taking place with time and practice.

VI. Lesson Plan Matrix

#1 Lesson Foci/Date	Objectives (include	Instructional materials	On-going assessment (to
	including performance,	(what will use to deliver	measure attainment of
	conditions, and criterion.	the main objectives of the	objectives)
	State the Common Core	lesson)	
	State Standard at the end of		
	each objective.		
Skill/Strategy Focus:	Student will work on	Glencoe: Biology	While other
Exposure to and	cellular vocabulary	textbook	students will be
Beginning to Learn	by reading the	Vocabulary sheet	working with
Vocabulary	textbook with the	(Appendix C)	their classmates
	teacher.	Pen or pencil	to review at the
Date:	Student will be	Online website,	beginning of
October 1st, 2014	assessed on the	http://www.biolog	class. Teacher
	word recognition	y-questions-and-a	will spend
	and comprehension	nswers.com/	specific time with
	by the teacher.		the target
	Student will work to		student.
	complete		Student will be
	Vocabulary sheet.		taking a short
	Student will find and		quiz with the
	translate english		vocabulary
	vocab words into		words.
	chinese words.		Student will
	B2.L2.p1 Cells		present a poster
	B2.L2.p2 Cell Function		with a classmate
			about an
			assigned
			organelle.
			Student can show
			his language and
			knowledge

#2 Lesson Foci/Date	Objectives (include	Instructional materials	On-going assessment (to
	including performance,	(what will use to deliver	measure attainment of
	conditions, and criterion.	the main objectives of the	objectives)
	State the Common Core	lesson)	
	State Standard at the end		
	of each objective.		
Skill/Strategy Focus:	Student will	School owned	Teacher and student
Continued	watch 2 Youtube	Chromebook	will meet post videos
Vocabulary work and	clips. Teacher will	computer.	to discuss what was
application.	assist the student	View:	observed, looking for
	in listening to the	Eukaryopolis - The	comprehension.
Date:	videos in English,	City of Animal	Student will turn in
October 21st, 2014	with Chinese	Cells: Crash	cell drawing, where
	subtitles. Once	Course Biology #4	feedback can be
	perform, the	https://www.yout	given. Teacher will
	student can view	ube.com/watch?v	be looking for
	again with english	=cj8dDTHGJBY	appropriate shape,
	subtitles. This	View: Plant Cells-	size, location of
	technique can be	Crash Course	organelles, proper
	done for many	Biology #6	labels and functions.
	videos.	https://www.yout	
	Student will draw	ube.com/watch?v	
	the basic cell	=9UvlqAVCoqY	
	structure of both	 Plain white paper 	
	plant and animal	 Colored pencils 	
	cells.	and markers.	
	Student will		
	annotate the		
	functions of each		
	organelle again.		
	B2.L2.p1 Cells		
	B2.L2.p2 Cell Function		

Appendices

Appendix A:

Assessing Accuracy & Automaticity

Calculation: Total number of words read correct <u>divided by</u> Total words read (correct or corrected + uncorrected errors). Example: 137 words read correct / 145 total words read (137 correct + 8 uncorrected errors) = 94.5% correct.

Interpretation: 99% C

99% Correct: Independent Level Reading 95% Correct: Instructional Level Reading 90% Correct: Frustration Level Reading

Fall	Winter	Spring	
		60 wcpm	
53	78	94	
79	93	114	
99	112	118	
105	118	128	
115	132	145	
147	158	167	
156	167	171	
	53 79 99 105 115 147	53 78 79 93 99 112 105 118 115 132 147 158	60 wcpm 53 78 94 79 93 114 99 112 118 105 118 128 115 132 145 147 158 167

Rasinski, T. & Padak, N. (2000). Effective Teaching of Reading: From Phonics to Fluency. Boston, MA: Allyn & Bacon.

Appendix B:

Assessing Interpretive & Meaningful Reading

	1	2	3	4
Expression and Volume	Reads in a quiet voice as if to get words out. The reading does not sound natural like talking to a friend.	Reads in a quiet voice. The reading sounds natural in part of the text, but the reader does not always sound like they are talking to a friend.	Reads with volume and expression. However, sometimes the reader slips into expressionless reading and does not sound like they are talking to a friend.	Reads with varied volume and expression The reader sounds like they are talking to a friend with their voice matching the interpretation of the passage.
Phrasing	Reads word-by-word in a monotone voice.	Reads in two or three word phrases, not adhering to punctuation, stress and intonation.	Reads with a mixture of run-ons, mid sentence pauses for breath, and some choppiness. There is reasonable stress and intonation.	Reads with good phrasing; adhering to punctuation, stress and intonation.
Smoothness	Frequently hesitates while reading, sounds out words, and repeats words or phrases. The reader makes multiple attempts to read the same passage.	Reads with extended pauses or hesitations. The reader has many "rough spots."	Reads with occasional breaks in rhythm. The reader has difficulty with specific words and/or sentence structures.	Reads smoothly with some breaks, but self- corrects with difficult words and/ or sentence structures,
Pace	Reads slowly and laboriously.	Reads moderately slowly.	Reads fast and slow throughout reading.	Reads at a conversational pace throughout the reading.

Scores of 10 or more indicate that the student is making good progress in fluency.

Score _____

Scores below 10 indicate that the student needs additional instruction in fluency.

Rubric modified from Tim Resintki - Creating Fluent Readers

Appendix C:

Cell Structure Vocabulary

Directions: Please define the following words. You may use any resource to complete. Once written in English, please find the Chinese symbol(s) or word(s) for each organelle/structure. I hope that you can make some associations between the 2 languages for better understanding and familiarity.

Organelle/Structure	Plant / Animal or Both	Function
Cytoplasm		
Cytoskeleton		
Nucleus		
Ribosomes		
Nucleolus		
Endoplasmic Reticulum		-smooth:
		-rough:
Golgi Apparatus		
Vacuoles		
Lysosomes		
Centrioles		
Mitochondria		
Chloroplasts		

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