George Klare's Readability Test

In his classes, George Klare¹ demonstrated four ways of judging the readability level of texts:

- 1. Individual judgment
- 2. Group judgment
- 3. Using a test
- 4. Readability formula

Method 1. To demonstrate this method, Klare would pass out a set of sheets with five passages on them (See pages 3-4). He asked the class to read the passages and rank them from the least readable to the most readable, that is: most readable, next to most readable, middle level, next to least readable, and least readable.

The passages were from a McCall-Crabbs reading test. They had been given to over a thousand readers and followed by questions to measure comprehension. On that basis they were graded for readability. Klare chose these passages because they were test data and about equal distance apart in readability.

On receiving the passages and ratings back from his students, he would plot their answers out on a five-by-five grid. The following answers were from a class of fifty-six professional writers, all members of a federation of agricultural writers.

Judgments	Passage Numbers						
	1	2	3	4	5		
Most Readable	3	0	40	1	8		
Next to Most Readable	11	2	5	14	18		
Middle Level	9	4	5	22	16		
Next to Least Readable	21	17	1	8	9		
Least Readable	11	26	1	10	4		

Summary of Judgments of Readability of Five Passages by 56 Professional Writers²

Klare noted that these highly variable results were typical. It was not unusual in his classes to have a number in every cell. Almost all passages were judged to be at all possible levels. He found also that only five-to-ten percent of the students would have ranked all five passages in the correct order: 3,5,4,1,2.

¹ G. R. Klare. 1981. *Practical Aspects of Readability*. Milton Keynes, England: Institute of Educational Technology, The Open University.

² G. R. Klare. 1976. "Judging Readability." *Instructional Science*, vol. 5, pp. 55-61.

Klare said that if he had asked the students to give the grade levels of the passages, there would have been even more variation. A study by Jongsma had 44 school and public librarians rate 12 award-winning books in the United States. He found one book rated all the way from the third to the twelfth grade. Klare concluded. "We should certainly say that where you use individual judgments of readability they are likely to vary rather widely." He noted that with practice and the use of a readability formula, individual judgment tends to improve.

Method 2. Looking, however, at the group, judgments, he found that the majority selections (shown in bold in the above case) matched the test data in all classes. Although this method is very accurate, it is not very practical. "You can't usually get a group of 30 editors or writers together to make a judgement."

Method 3. The third method of assessing readability, testing it on an audience, is likewise not a practical solution. Klare said, "To develop a test, to refine it, to modify it, and to put it into effect takes a good deal of time. In one readability study we did ended up with a form G, meaning that we had to work through A, B, C, D, E, and F before we got a test that was sensitive." Cloze tests are easier to create and apply, but still not very practical.

Method 4. The fourth method is using a readability formula.

Klare explained to his classes: "A readability formula gives a quick index of readability. Formulas use simple counts of language or style variables, usually word length and sentence length, and arrive at an index. Now at first glance it would seem surprising that a readability formula using such simple variables could give you a reliable estimate for something as complex as human reading material. Statistical studies do show, however, that simple indices of the kind that we'll be using are highly related to more complex indices and therefore give you, for the purpose of getting a prediction of readability, much the same kind of information you would get from a more complex kind of measure. So I'm not arguing that the variables in a readability formula do anything more than give you a quick predictive index of readability."

After applying the Flesch Reading Ease formula to the five passages, Klare posted this comparison of the results:

Passage Numbers	Flesch Scores	Reading Ease Grade Levels	Reading Test Grade Levels	Summary of Group Judgments	Individual Judgments
3	90	4-5 grade	4.2	most readable	
5	79	6 grade	6.0	next to most readable	
4	65	7-8 grade	7.8	middle level	?
1	58	some high school	9.3	next to most difficult	
2	49+	high school	12	most difficult	

Comparison of Methods

Test Passages

1

Uncle Sam is the most extensive land owner in the country. He has under his control about two hundred million acres of vacant land. These vast tracts are largely desert land, it is true, but some sections are mountainous, some are forested, and other portions are suitable for pasture lands. All of this government land lies outside the original thirteen colonies and outside the states of Ohio, Indiana, Illinois, Tennessee, and Kentucky.

Uncle Sam is desirous of having this land, known as the Public Domain, made productive. The task of preparing it for agriculture is given to the United States Reclamation Service. As soon as huge reservoirs and irrigation canals are built in the arid regions, the land is opened to settlers at a very low price per acre. The cost is largely determined by the expense or the water supply. The money received is in turn used to further the work o£ reclaiming more land. A recent law gives to the soldiers of the World War the first opportunities to purchase homes and live upon this land.

2

The buildings and architecture of the Temple of Confucius are of much the same type as any other similar Chinese edifice, full of a certain air of respectability, an atmosphere inherited from the long, long past that has never failed to impress itself on visitors. Within the gates, one's attention is first drawn to the small forest of tablets, from five to ten feet high and three to four feet wide, lining the way, and commemorative of "filial piety." Some o£ these, covered by pillared pavilions, are well preserved.

The Chinese Emperor K'ang Hsi visited the temple during his reign, 1662-1722. He leaned against a post while gazing at the exterior of the building, and, as he turned to go, seized by some sudden impulse, he struck its cap with his hand, commanding it to give forth a ringing sound. Tradition has it that, the word spoken, the miracle was performed. It is now polished smooth by the innumerable hands o£ those pilgrims from every corner of the earth who always strike the ringing post of K'ang Hsi upon leaving the holy temple.

3

The children were telling about their Christmas vacations.

"We vent to Kansas," said Jack. "One day when we were skating on the lake some of the boys cut a hole in the ice, struck a match and a fire blazed right up out of the hole for two or three minutes,"

"Oh, oh!" said all the others, "that-couldn't be true. Water doesn't burn."

"But it is true." said Jack. "I saw it."

They turned to the teacher to see what she would say and she explained this very strange happening. It seems there are natural gas wells under the lake which send the gas bubbling up through the water where it is caught in large pockets under the ice.

"So you see," said the teacher, "when a hole is cut the escaping gas will burn if lighted."

4

Once upon a time, there was a man named Chou who, after competing for several official appointments without success, noticed one day that as the years advanced, his hair was turning gray. While weeping over his misfortune in the street, he was asked by a passerby to tell the cause of his sorrow.

"I have never once succeeded in my official career," replied he, "and now 1 am grieved to think of my old age and the lost opportunities. That is why I am crying."

"Never once succeeded?" returned the stranger. "Well, when a youth, I devoted myself to literary studies. On completing my education, I began to seek for an official position. But it so happened that the sovereign of that time preferred the old men to me. After his death, his successor rather favored the military. Accordingly I turned to military pursuits. As soon as I became an accomplished soldier, however, he passed away and was succeeded by a young man, who in turn showed a partiality for youths. But, alas! I had already grown older. This explains how I have never once met with success."

5

Omar's army had been victorious over the Persian forces. The conquered chieftain was taken prisoner and was condemned to death. As a last boon he asked for a cup of wine. It was brought him. Seeing that he hesitated to raise it to his lips, Omar assured him that neither was the wine poisoned, nor was there any one there who would kill him while he drank. Omar added that he gave his word as a prince and soldier that his captive's life was safe until he had drunk the last drop of wine. At these words, the Persian poured the wine upon the ground and demanded that Omar keep his promise. In spite of the angry protests of his followers, Omar kept his word and allowed his prisoner to go free.