Appendix A

Fry Readability Graphs and Reading Passages found in *Up-Beat Intermediate*

A1.

The changing face of British teen fashion

For the average British teenager, fashion matters. However, designer clothes are usually beyond their budget. They tend to spend their money in high-street stores, markets and charity shops, where they mix and match to create their own style and image.

Clothes in the UK cost much less than they used to. Since the year 2000, the price of high-street clothes has dropped a lot. In one popular store a pair of fashionable jeans costs as little as £8. The reason is that factories, which are usually located in developing countries like India and China, are using the cheapest labour they can find, sometimes even child labour.

Average number of sentences: 6.76
Average number of syllables: 151
Grade: 8
Two case studies

Three years ago Carol Weston got her older daughter Lizzie, then fourteen, her own landline telephone. It lasted two years and then Carol stopped it. ‘Lizzie preferred her mobile or the computer and I realised we were wasting money on the second landline. It’s now nice and peaceful because the phone doesn’t ring very often. However, I never know any more which of her friends are calling!’

For fifteen-year-old Kevin McDonald, his laptop is his lifeline. In his bedroom, Kevin spends two or three hours a day online. He listens to music and keeps an eye on the sports news. He also checks Facebook and MSN messenger four or five times an evening to keep in touch with friends. He says a screen-free life would be difficult to imagine. ‘I think it would be hard for any boy of my age.’
Italian job: problem solved!

THE Royal Society of Chemistry (RSC) has announced the winner of a competition to solve the problem at the end of the 1969 classic film The Italian Job.

The problem
It is a beautiful sunny day in Italy, and Charlie Croker and his gang of professional robbers are celebrating. They have just stolen over three tons of gold and are on their way to Switzerland in a coach. Then the coach almost drives off a cliff. It ends up with the back of the coach hanging over the edge of the cliff. The gang are at the front end and their gold is in the back.

Charlie Croker, the gang leader, tries to reach the gold, but as he does so, the coach starts to rock. The situation is very dangerous. Croker turns around and says: “Hang on a minute lads, I’ve got a great idea,” but the film ends before we find out what the idea was.

The solution
The RSC decided to give a prize for the most effective solution for getting the gold off the coach before it tips over the edge of the cliff. This was the winner’s idea.

1. One man lowers another man out of a window so that he can let the air out of the front tyres. This stops the coach from rocking.
2. To reduce the weight at the back of the coach, which is hanging over the cliff, another man empties the fuel tank. To do this, he crawls along the floor to order out to ambalance the coach.
3. One man gets off the coach and collects some heavy rocks. He puts them in the front of the coach in order to counterbalance the weight of the gold. When the coach is safely balanced, another man unloads the gold and the gang can get off the coach.

Average number of sentences: 5.71
Average number of syllables: 147
Grade: 9
**The Nano Revolution**

**What is nanotechnology?**
Nanotechnology is the science of using atoms and molecules to build new machines and materials.

**What is it being used for now?**
Nanotechnology can be used to create materials like sunscreen, paint and clothes. Nanotech sunscreen stays on the skin longer and is transparent. American submarines are coated with a special nanotech paint which protect them from rust, and there are nanotech clothing materials which can’t be stained or creased. Already there are around 1,000 nanotech products.

**What are the future applications?**

**Transport**
In the future, nanotechnology might produce super-strong, super-light materials which can be used to build new aircraft and cars. These will be far more environmentally friendly because they will be light and will use less fuel.

**Energy**
A nanotech coating on the glass in our houses may be able to collect and store energy from the sun. We will then have a free supply of energy that isn’t damaging to the environment.

**Medicine**
Doctors hope that, one day soon, microscopic nanorobots will be able to diagnose illness. These tiny robots will be injected into our bodies to conduct tests, deliver drugs or do surgery when needed.

It looks as if the future is going to be interesting, exciting and very, very small.
A5.

Frozen rivers

How is a glacier formed?

On the tops of mountains it can snow at any time of the year. As more and more snow falls on the ground, it begins to get deeper and more compact until it forms a glacier. Glaciers move very slowly downhill. If they reach the ocean, huge chunks of ice tend to break off these glaciers and become icebergs, which float in the sea, and can be dangerous to ships. The ocean floor then sinks because it hit an iceberg.

Where are glaciers found?

Glaciers are found in regions with continuous rainfall and constant freezing temperatures. Most glaciers are in high mountain regions such as the Himalayas and the Alps. Glaciers are even found in California and Tanzania in central Africa.

Does anything live on a glacier?

The top of a glacier is very rocky, ice, soil and snow, so no animal lives there! Surprisingly, they do. Sable and polar bears live on glaciers near the sea, insects and some waterfowl continue to live here.

What is the connection between glaciers and global warming?

If temperatures continue to rise worldwide, glaciers will begin to melt, releasing water or all of the huge amounts of water into the sea. As a result, sea levels will begin to rise. If the levels rise more than one metre, major cities such as London, New York and Tokyo might flood.

Average number of sentences: 9,14
Average number syllables: 135
Grade: 5
Heroes of the air

Amelia Mary Earhart 1897 – 1937 (USA)

Famous achievement:
In 1932, when she was 35 years old, Earhart went to the end of the earth, an attempt to walk around the globe without stopping. She became the first woman to fly solo across the Atlantic Ocean, setting a world record.

Sally Ride 1951 – (USA)

Famous achievement:
In 1983, she became the first American woman in space. She was a physicist and worked on space shuttle missions. She was also a novelist and wrote about her experiences in space.

Average number of sentences: 6.91
Average number of syllables: 138
Grade: 7
Average Sentences: 7.2
Average Syllables: 152
Grade: 8
Appendix B

Fry Readability Graphs and Reading Passages found in Issues for Today


In the United States, it is important to be on time, or punctual, for an appointment, a class, a meeting, etc. However, this may not be true in all countries. An American professor discovered this difference while teaching a class in a Brazilian university. The two-hour class was scheduled to begin at 10 A.M. and end at 12 P.M. On the first day, when the professor arrived on time, no one was in the classroom. Many students came after 10 A.M. Several arrived after 11 A.M. Two students came after 11 A.M. Although all the students greeted the professor as they arrived, few apologized for their lateness. Were these students being rude? He decided to study the students’ behavior.

The professor talked to American and Brazilian students about lateness in both an informal and a formal situation: lunch with a friend and in a university class, respectively. He gave them an example and asked them how they would react. If they had a lunch appointment with a friend, the average American student defined lateness as 19 minutes after the agreed time. On the other hand, the average Brazilian student felt the friend was late after 33 minutes.

Average number of sentences: 7.5
Average number of syllables: 160
Grade: 10
Most of us know a little about how babies learn to talk. From the time infants are born, they hear language because their parents talk to them all the time. Between the ages of seven and ten months, most infants begin to make sounds. They repeat the same sounds over and over again. For example, a baby may repeat the sound “dadada” or “bababa.” This activity is called babbling. When babies babble, they are practicing their language. Soon, the sound “dadada” may become “daddy,” and “bababa” may become “baby.”

What happens, though, to children who cannot hear? How do deaf children learn to communicate? Recently, doctors have learned that deaf babies babble with their hands. Laura Ann Petitto, a psychologist at McGill University in Montreal, Canada, has studied how children learn language. She observed three hearing infants and two deaf infants. The three hearing infants had English-speaking parents. The two deaf infants had deaf mothers and fathers who used American Sign Language (ASL) to communicate with each other and with their babies. Dr. Petitto studied the babies three times: at 10, 12, and 14 months. During this time, children really begin to develop their language skills.
Loneliness: How Can We Overcome It?

Most people feel lonely sometimes, but it usually only lasts between a few minutes and a few hours. This kind of loneliness is not serious. In fact, it is quite normal. For some people, though, loneliness can last for years. Psychologists are studying this complex phenomenon in an attempt to better understand long-term loneliness. These researchers have already identified three different types of loneliness.

The first kind of loneliness is temporary. This is the most common type. It usually disappears quickly and does not require any special attention. The second kind, situational loneliness, is a natural result of a particular situation—for example, a divorce, the death of a loved one, or moving to a new place. Although this kind of loneliness can cause physical problems, such as headaches and sleeplessness, it usually does not last for more than a year. Situational loneliness is easy to understand and to predict.

The third kind of loneliness is the most severe. Unlike the second type, chronic loneliness usually lasts more than two years and has no specific cause. People who experience habitual loneliness have problems socializing and becoming close to others. Unfortunately, many chronically lonely people think there is little or nothing they can do to improve their condition.

Average number of sentences: 9.38
Average number of syllables: 171
Grade: not valid. The meeting point meet in the black area-long words.
B4.

Solving crimes is one of the most important tasks of law enforcement. Improvements in crime technology help detectives solve crimes faster and more efficiently today. For example, crime laboratories now use DNA testing, which can identify body fluids such as semen, sweat, and saliva. These are also now assisting in fingerprinting. In the past, fingerprinting was only helpful if the fingerprints found at the crime scene could be matched with prints that were already on file. If fingerprints of convicted criminals were kept in police records permanently, people whose fingerprints are not on file cannot be identified in this way, and as a result, many crimes have not been solved.

However, the newest kind of fingerprint testing can do much more than supply viewed fingerprint patterns. It can provide vital additional information about a fingerprint, such as the age and sex of its owner. The fingerprints can reveal if the person was a juvenile too. The latest technology goes even more. It can even get fingerprints from fabric, for example, from blankets or curtains.

In a recent case, the police in Tacoma, Washington, found the body of a 20-year-old woman who had been murdered in her bedroom. There were no witnesses, and her apartment had few clues. The only real evidence did not seem very helpful. The victim's hair had several hairpins in it and bobby pins as someone had wiped his or her hands. At the time of the murder, it was impossible to identify a fingerprint on even a small piece of fabric. This is because all the unique characteristics of fingerprints and patterns can get lost in this fabric. The detectives were unable to use the evidence, but they moved it anyway. They sent it to a forensic expert with the Tacoma police for help. A forensic expert then reported that the DNA was...
How Lunar Eclipses Have Changed History

Lunar eclipses have always fascinated people. Some study eclipses as an astronomical phenomenon, others just enjoy observing their beauty. However, in ancient and even in more recent times, lunar eclipses were mysterious, unpredictable, and frightening. In the past, people believed that eclipses were bad omens or signs and that superstitions were often selected historical events. For instance, a lunar eclipse was partly responsible for the fall of Constantinople in 1204.

Constantinople was named for the Roman emperor Constantine, who moved his capital to Byzantium (present-day Istanbul in Turkey) in 330 A.D. The Byzantine government ruled the area for over a thousand years.

In the 14th century, the Ottoman (Turkish) Empire was planning to take over Constantinople. The Turkish troops attacked Constantinople in 1441, and again in 1442, but did not succeed. Then, in 1451, Sultan Mohammed II attacked the city again. Mohammed II had several advantages over the defenders of the city. For instance, he had 250,000 men in the army. Constantinople was fortified by only 12,000 troops. The sultan also had a new style of cannon that shot stones that weighed 1,100 pounds. This weapon was capable of breaking through Constantinople’s thick walls. In April 1453, the Turkish army attacked the city’s thick walls with its new cannons. The defenders, however, repaired the walls every night. Furthermore, they attacked back several times. Still, after some time, the 7,200 defenders became exhausted. They never thought of giving up, however, because they had faith in an old prophecy. The prophecy stated that Constantinople could never fall while the moon was becoming full.
Archeologists made an exciting discovery in Egypt in 1954. During an excavation near the base of the Great Pyramid, they uncovered an ancient crypt. Although they believed that this discovery would help us understand Egypt's past, they also hoped that it would give us important information about the future.

This crypt was a tomb, or burial place, for a dead Egyptian pharaoh, or king. Historians believed that the Egyptians buried their pharaohs with two boats, one to carry the body and the other to carry the soul. This was one of their religious customs about death. The archeologists expected to find two boats inside the crypt. As they broke the crypt open, they smelled the scent of wood. The ancient Egyptians had sealed the room so effectively that the aroma of the cedar wood was still preserved. Inside the crypt, archeologists found a 4,600-year-old boat that was in almost perfect condition. In addition, they found another closed room next to the crypt. Archeologists and historians believed that this chamber contained the second boat. If so, archeologists would have better information about the past. They would be sure about the religious custom of burying pharaohs with two boats.

However, this was not the only information they hoped to find. They wondered if the air in the two rooms contained something special that helped to preserve the wood. This information could help in the preservation of ancient artifacts in museums throughout the world. Researchers also hoped to find some answers about the future by carefully examining the air in the second chamber. When the archeologists opened the first chamber, all the old air escaped. Scientists wanted to recover the air in the second chamber, compare it with the air of the present, and then examine the differences, especially differences in the level of carbon dioxide (CO₂). This information might help them predict changes in the air in the future. They also did not want outside air to get inside the chamber. Careful planning would be necessary in order to open the second room and save the air. In fact, it took years to plan the excavation and to design and make the equipment necessary to open the chamber and collect the air inside.
Average Sentences: 7,5
Average Syllables: 168
Grade: 11