

Integrated Writing Task**Skill 1 pg. 196****Narrator: Writing, Skill 1. Example lecture.**

Female professor:

So, we've been looking at alternative sources of energy. Today, we'll talk about solar energy, an alternative energy source that more and more people have been taking advantage of by installing solar panels on the roofs of new or existing homes. Solar energy's convenient because the system isn't difficult to install, and once the system's installed the homeowner has a virtually cost-free source of energy.

Many people tout the advantages of solar energy, but it isn't the great solution that some would have us believe. It does have its advantages, but there are drawbacks, as well. The first one is cost. Even though an installed, working solar energy system does provide free energy, the installation costs are prohibitive to many homeowners. Many homeowners simply don't have the financial ability to install solar panels. While it's true that a homeowner who uses solar energy to generate electricity doesn't have to make monthly payments to the electric company, it takes many years for this to outweigh the initial costs of installing the system in the first place.

Another problem is location. In some parts of the country there's abundant sunlight all or most of the year. In other areas, however, there aren't enough sunny days. Northern parts of the country and areas where there are a lot of rainy or overcast days are places where less energy can be generated from solar power. So, solar energy works better as an alternative energy source in some areas of the country, and less well in others.

There's also an aesthetic problem involved. Solar panels are designed to lie flat on a roof. This is certainly better than having large panels erected in the yard. However, many people still find the sight of solar panels on a rooftop unappealing. This isn't a huge issue, but it is one that many potential users take into consideration. So, solar energy is a viable solution in some situations, but not in all.

Narrator: Writing, Skill 1. Lecture 1.

Male professor:

Everyone agrees that parental involvement in education is important. Numerous studies have shown a clear correlation between parental involvement and improved student performance. Facilitating the involvement of parents, however, isn't always an easy task.

One factor that can encourage, or discourage, parental involvement is teacher attitude. Some teachers may not be convinced of the importance of parental involvement. Others doubt that parents are interested enough to participate in school activities. A teacher such as this may do little or nothing to encourage parents to become involved in educational activities. On the other hand, a teacher who sees the value in parental involvement will make an effort to create opportunities for parents to become involved in school activities and events.

Other factors that affect parental involvement have to do with different families' specific situations. Families where both parents work full time tend to be less involved in school activities. Parents who don't have a high level of English language proficiency or literacy also tend to be less involved.

Schools, from teachers all the way up to administrators, can do a great deal to overcome barriers to parental involvement. Teachers need to be trained about the importance of parental involvement and given concrete suggestions about things to do to encourage it. School administrators need to find ways to make it easier for busy parents to participate in school activities, and everyone needs to communicate in ways that all parents can understand. Schools can make real efforts to involve parents at all levels. For example, homework assignments can be designed to encourage parent participation, parents can be invited to volunteer in the classroom, workshops and meetings can be scheduled at different times so that everyone who wants to attend can, etc. There's no question that parental involvement in education has a very positive effect on student achievement, so it's certainly worth however much time and energy schools can devote to it.

Narrator: Writing, Skill 1. Lecture 2.

Female professor:

Many claims have been made about the effectiveness of aromatherapy in the treatment of a variety of ailments, both emotional and physical, but none of these claims have been backed up with sound scientific evidence. Recently, a group of researchers set out to test the effectiveness of aromatherapy in treating pain and the ability to heal.

Lemon and lavender were the essential oils used in the study as these are two of the most commonly-used scents in aromatherapy. Study participants were exposed to the scents by a cotton ball taped directly below the nose. Each cotton ball had been dipped in either lavender or lemon oil or plain water.

While the participants were exposed to the scents, researchers tested their response to pain by putting their feet in icy cold water. Researchers also tested wound healing using a common method that involves applying tape to the skin. Blood samples were taken and analyzed for changes that would indicate effects on the immune system. Participants also filled out questionnaires intended to gauge their mood and stress levels.

The results of the study showed that the essential oils had no effect whatsoever on pain, stress, the immune system, or the ability to heal. The only effect shown was that lemon oil appears to have a positive effect on mood. Lavender had no effect at all. So, although it's nice to think that pleasing scents such as lavender can help us feel better, the scientific evidence shows that this is nothing more than a nice idea.

Narrator: Writing, Skill 1. Lecture 3.

Male professor:

Forest fires, though destructive, are part of the balance of nature. Smaller fires help clear out the underbrush, leaving room for larger trees to grow and creating conditions that make it less likely for larger, more destructive fires to occur. In addition, some plants have adaptations that depend on the occurrence of fires. For example, the lodge pole pine, has cones that open and scatter their seeds

only after they've been exposed to the heat of a fire. For these reasons, a modern approach to forest fire management has developed, that recommends fighting only those fires caused by human activity or that threaten places where people live.

Approaches to fighting forest fires depend on the type of fire. Ground fires—fires that burn at or even below ground level—are most often controlled with trenches. Fire fighters dig these trenches down to the layer of soil that's made up of minerals and therefore doesn't burn. The trenches create a line that the fire can't burn past.

Surface fires move quickly and are more difficult to contain. Fire fighters extinguish the flames with water, using portable water backpacks and, if there's a water source nearby, pumps. Firebreaks are also used. These are areas that have been cleared of brush, deadwood, and any other burnable material.

Crown fires are the fastest-spreading and most difficult to control. These usually have to be approached from the air. Water and fire retardant chemicals are sprayed on them from helicopters or low-flying airplanes.

Narrator: Writing, Skill 1. Lecture 4.

Female professor:

Organic farming is a sustainable approach to farming that aims to work with and to conserve natural resources. Rather than using the chemical fertilizers, pesticides, and fungicides that are of fundamental importance to industrial farming, organic farming relies on natural methods and materials to control pests and diseases and also to develop soil quality.

Healthy soil is a fundamental part of organic farming. Healthy soil leads to healthy crops, which are less susceptible to pests and disease. Organic farmers use only natural fertilizers such as manure and compost. Compost is really just decayed organic wastes such as food scraps and yard trimmings. What might be considered garbage in other situations is valuable fertilizer to an organic farmer. Organic farmers also rotate their crops regularly to help maintain the quality of the soil.

Organic farmers take a number of different approaches to pest control. Crop rotation, in addition to maintaining soil health, also helps control pests by interrupting their breeding cycle. Insects will not breed repeatedly in the same place if their food source is no longer there. Organic farmers also encourage the presence of beneficial insects— insects that prey on the harmful insects that damage crops. One way to encourage beneficial insects is with companion planting, a method which involves planting food crops alongside other crops that either attract the beneficial insects or repel the harmful ones. There are many other methods, too, such as using insect traps, and planting pest-resistant varieties, among others. By using a combination of methods, organic farmers are able to control pests without chemicals.

There are also several approaches to disease control. For example, allowing for better air circulation by row spacing and regular weeding or pruning are all important in preventing diseases. Planting disease-resistant varieties is also important. In some cases, farmers may apply organically based fungicides.

Skills Practice: Integrated Writing Task pg. 246

Narrator: Writing Skills Practice. Integrated Writing Task.

Male professor:

Scientists have been looking into the role antioxidants may play in preventing age-related memory loss and Alzheimer's disease. Antioxidants are nutrients found in brightly colored fruits and vegetables. A study at the University of California looked at the effect of antioxidants on older dogs. The study involved 70 beagles, some of which were fed a diet rich in antioxidants and some of which were fed a normal diet. The dogs on the antioxidant diet were better able to perform tasks and learn new tricks than the other dogs. In addition, MRI scans showed that there was less plaque build-up in their brains.

A study on mice also showed positive effects of antioxidants on brain processes. Aging mice were fed blueberries, a fruit that's high in antioxidants. The mice demonstrated improved memory and motor skills and also had less damage from oxidation and inflammation in their brains, as compared to mice fed a normal diet.

The substance curcumin has also been shown to have positive effects on memory loss. Curcumin, an anti-inflammatory agent, is a component of turmeric, a bright yellow spice commonly used in curries. A study showed that curcumin reduced damage to the brain tissue of mice from oxidation and inflammation and decreased plaque. The country of India, where turmeric-based curries are commonly consumed, has the lowest incidence of Alzheimer's disease in the world.

There's also research showing that B vitamins can help prevent memory loss. B vitamins may prevent inflammation in the brain and help in the formation of new brain cells. B vitamins are found in a range of foods, including meats, dairy products, whole grains, and green, leafy vegetables.

Writing Practice Test: Integrated Writing Task pg. 248

Narrator: Writing Practice Test. Integrated Writing Task. Listen to a lecture about violence on television.

Female professor:

It's fairly widely accepted that violence on television has an effect on behavior. Since children in the United States watch an average of 25 hours a week of television, it doesn't seem far-fetched to consider that television programs would have a significant effect on them. As far as violence goes, a child growing up in this country will have seen, on average, 40,000 murders and a total of 200,000 acts of violence on television by the time he or she reaches 18 years of age.

Now that television has been around for a good long time, researchers have had the opportunity to observe its effects on behavior over time. Several studies in this area are notable. In 1960, a University of Michigan professor studied a group of third grade boys in rural New York state and found a correlation between viewing violence on TV and aggressive behavior. Eleven years later, he followed up with the same boys, who were then young men of nineteen. He found that the same study participants who had watched violence on TV when they were younger had a higher incidence of trouble with the law in their teens. Eleven years after that, researchers again followed up with the study participants, then 30 years old. It was found that the ones who had

watched violence on TV regularly as children were more likely as adults to be involved in crimes and to behave aggressively at home with their children and wives.

A Columbia University professor found that television-watching in general correlated with aggressive behavior. He followed a group of families for 17 years. He found that children who watched an average of one to three hours of TV while they were teenagers were significantly more likely to engage in violent behavior as adults, than were children who watched less TV.