|  |  |
| --- | --- |
| **Unit 1 Lesson 1** | **PSYCHOLOGY** |

**Differences that Don’t Divide**

Tristan and Hannah are as different as two people could be. Tristan loves football, but Hannah hates sports. Hannah loves technology. On the other hand, Tristan doesn’t know the first thing about computers. He’s from a large family with four brothers and sisters. She’s an only child. Prior to meeting Tristan, Hannah was soft-spoken in groups. However, she’s now far more outspoken than Tristan. The list of differences between them goes on and on. Yet, somehow, they’ve been married for fifteen years. With so little in common, how did they manage to make a connection and retain it for so long?

Unlikely relationships like theirs are kind of curious. Most people assume that successful couples have more similarities than differences. That is the conventional wisdom: having a lot in common with a partner should make life easier. After all, interactions will produce less conflict and unhappiness if the partners share a similar point of view.

However, research shows that this might not be the case. A Columbia University study found that some couples are just too much alike for their own good. Over three years, researchers studied 732 men and women and found that couples with the most similar personalities had some of the weakest relationships. In surveys about levels of closeness, commitment, and overall happiness, those couples scored low. Clearly, having a lot in common is no guarantee of a successful marriage. Relationships between very different people have other advantages as well. In his study of couples, Robert Levenson of the University of California showed that different personalities could balance against each other and give couples different ways to see issues and cope with life’s difficulties. For instance, someone with an outgoing nature can make up for a partner’s shyness. In turn, the outgoing partner can learn to enjoy more time alone.

The causes of attraction between very different people may go even deeper. A study at Rutgers University revealed a physiological reason for attraction between some opposites. In the study, Dr. Helen Fisher reviewed research on the subject of attraction and learned that levels of certain hormones are linked with specific personality characteristics. Individuals with high levels of testosterone tend to be competitive and analytical. They often are attracted to—and attract—their opposites, who are introspective and nurturing individuals with high levels of the hormone estrogen. On the other hand, people with more curious or flexible personality types tend to be attracted to people like themselves. In addition, people who are less anxious and more social are attracted to others of the same personality type. These two groups tend to have average levels of testosterone and estrogen. Ultimately, it seems that opposites do attract among certain personality types, but not all.

Genetics may also explain why opposites sometimes attract. A University of New Mexico study suggests that our genes strongly influence our choice of partners. The study found that a woman’s unhappiness in a relationship is linked to her partner’s genes being too closely matched to her own. This preference may have developed to avoid the dangers that come with inbreeding, which can cause harmful mutations and decreased overall health. In addition, researchers at the Universite Paris Diderot compiled evidence that people use smell to sense whether a partner is a match. The study suggests that people can sense differences in MHC (a part of our DNA that plays an essential role in protecting the body from disease) and are more attracted to those whose MHC composition differs from their own. Differing MHC compositions give partners a genetic advantage when having children since their offspring will benefit from a diversified gene pool that can protect them from various diseases.

As with everything in life, there’s no one approach to finding love. Like Tristan and Hannah, people with very different upbringings, personalities, and interests can have long-lasting relationships. Their characters, not to mention their hormones and diversified gene pool, may even benefit them in the long run. But in the end, all of this research doesn’t really offer much advice for people looking for a perfect match. So don’t search exclusively for partners whom you perceive as similar to or different from yourself. Leave your options open and allow yourself to be surprised by what you find.

|  |  |
| --- | --- |
| **Unit 1 Lesson 2** | **PSYCHOLOGY** |

**Should You Swipe?**

Meeting your significant other can be a long journey. But for some, this journey seems to have a shortcut. Dating sites and apps give singles a platform to easily connect with other singles. In the past decade, these platforms have become an important part of modern romance. In fact, a 2020 Pew Research Center study found that forty-eight percent of young American adults aged eighteen to twenty-nine have used online dating sites and apps. In addition, seventeen percent of those have entered committed relationships. With nearly a fifth of all young couples first meeting online, these services’ popularity is obvious. But not all popular things are good. For many users, these dating services have made modern romance more difficult and complex.

Psychologists have found many advantages and disadvantages to online dating. Among the many criticisms aimed at online dating, the most severe concern is its effects on people’s self-esteem and mental health.

Swipe left or swipe right: this is essentially the system for most popular dating apps. You’re given a picture and a profile, and you swipe to match or not. For most dating app users, it only takes a few seconds to decide. In fact, a study of over 100,000 dating app users done by researchers at Northwestern University and the MIT Media Lab found that women spend on average only 3.19 to 8.7 seconds looking at a profile. As for men, they spend 5.7 to 6.26 seconds. While efficient at making connections, this system is criticized for being superficial. A 2017 study in the journal *Body Image* found that users of the dating app Tinder reported less satisfaction with their bodies and looks than non-users. According to research co-author Jessica Strubel, the reason lies in how the apps work. Strubel found that after a while, users begin to feel less like unique, special individuals and more like they’re disposable. This feeling leads to users becoming increasingly sensitive about their looks and bodies. Dating apps also added to the idea that there’s always something better around the corner, which further pressures users into trying to appear more attractive.

In addition to dating apps negatively affecting self-esteem, they also change how people perceive dating and relationships. By speeding up the dating process, these apps accidentally encourage poor social behavior. For instance, it’s not unusual for people to ignore “likes” and messages or to lose interest and cut off communication. This behavior would have been considered extremely rude in the past. But with online dating, it is a common reality. When this happens, the feeling of rejection can be worse than a face-to-face rejection. And over time, these rejections can damage a person’s mental health. The 2020 Pew study found that forty-five percent of online daters felt more frustrated about their romantic life after using online dating apps. Furthermore, thirty-five percent of users actually reported feeling pessimistic about dating. Only twenty-eight percent of surveyed users reported feeling hopeful after using a dating site or app.

So, why do people even bother to use these apps in the first place? Perhaps one reason has to do with their addictive qualities. In a volunteer study by the online dating site Match.com, it was found that one in six singles reported feeling addicted to the online process of looking for a date. Researchers have compared online dating apps to gambling. Every time a person makes a match, they’re promised a chance at romance. Every match gives the user a little ego boost. This feeling is made by design. Dating app systems often work like a simple and fun game. They are designed to deliver excitement quickly and cheaply. But when people use online dating just for these reasons, others get hurt along the way.

Dating and relationships are incredibly complex, and how we feel about them is influenced by many factors. Different cultures have different views about how to build relationships, and there is no definitive data that shows that one approach is better than others. Even though online dating apps have been effective for many people, they’re not for everyone. So swipe at your own risk, and know that there are no shortcuts to happiness.

|  |  |
| --- | --- |
| **Unit 2 Lesson 1** | **BUSINESS** |

**The Business of Sharing**

The “sharing economy” is a relatively new term. It describes a business model in which an IT-based, peer-to-peer platform—usually a mobile app—facilitates the commercial sharing of goods and services. “Peer-to-peer” means that two individuals deal with each other without any direct participation by a business. Moreover, the sharing happens without any transfer of ownership. This approach contrasts with traditional business models, in which companies hire employees to produce products and services. They then sell those products or services to customers. When you buy a car, for instance, you legally become the owner of that car. This change is clear and final. Traditional businesses are usually distinguished by these rigid arrangements and agreements between participants. In the sharing economy, the arrangements between participants tend to be much more fluid. Also, the transactions are less focused on a transfer of ownership.

As it is still in its early stages of existence as a mainstream business model, the term “sharing economy” is still evolving to find a strong identity. Thus, it is often used as an ambiguous umbrella term to describe businesses that share similar characteristics. It may also be called the access economy, the gig economy, the platform economy, or the subscription economy. Some companies that have been identified with these labels are Airbnb, Fiverr, and Lyft. These and many others like them have all used a similar model to become profitable in ways that set them apart from traditional businesses.

One defining characteristic of the sharing economy is the use of an IT platform. The platform provides all participants with information that enables them to access, distribute, share, and use extra resources, goods, and services. These resources would otherwise be wasted. Take the ride-sharing service Lyft, for example. In the past, time was wasted waiting for a coincidence in which a taxi driver and a passenger happened to be in the same place so they could meet, arrange transport, and complete a transaction physically. But with the Lyft application, drivers and passengers can instantly connect, arrange transportation, pay, and more, all in just a few seconds. There is no wasted time, fuel, or any other resources. The platform leverages information and uses it to connect all participants efficiently.

Trust is another central feature of the sharing economy. Because of the fluid nature of the arrangements, participants are frequently required to interact with strangers. Thus, most platforms provide features that allow participants to give transparent feedback about their experiences. Passengers using an app like Lyft can rate their drivers—and drivers can rate passengers as well. These ratings are visible to other users, encouraging good behavior and smooth interactions between participants. People feel safe and confident using the platform.

Another unique feature of the sharing economy is the flexibility with which its workers operate. Traditional places of employment have set working hours and limited benefits, and workers are often paid a fixed wage or salary. Compensation is usually based on the amount of time they spend at their workplace rather than on the quality of their work. Workers in the sharing economy do not typically enjoy a paid vacation, health insurance, and other benefits usually provided with full-time employment. But in exchange for giving up this stability, they have much more freedom than full-time employees. If they need more money during a particular period of time, they can choose to work more hours. They can drop their kids off at school and pick them up as needed. They can go shopping when it’s ideal for them.

Ride-sharing services alone were a $73 billion industry in the US in 2020. The sharing economy has grown so large so fast that societies are still adjusting to it. In 2019, the state of California passed a law forcing companies to treat sharing-economy workers as full employees. The argument was that gig workers were being exploited. That law, as written, would have effectively ended the sharing economy in that state. It angered many Californians, who successfully demanded exceptions for ride-sharing and food-delivery drivers, among others. Similar debates continue across the world, but one thing is clear: technology has changed the way we do business, and there is no going back.

|  |  |
| --- | --- |
| **Unit 2 Lesson 2** | **BUSINESS** |

**The Freedom to Work**

Companies that develop and own mobile apps in the sharing economy provide the platforms that connect people looking for a service with those who can provide that service. This has made work, leisure, transportation, eating, and many other aspects of daily life much more convenient. A well-known feature of the sharing economy is the freedom that its workers appreciate. Workers can choose their hours, set their schedules, and earn as much as they want. In practice, workers can even use several platforms at once to make more money. For example, a person could use separate platforms to deliver food, give a person a ride, and rent out a spare room in their house. In this scenario, the worker would simultaneously earn income from three sources. All of this sounds wonderful, but it also comes with downsides. People have become critical of sharing-economy companies because they often deny their workers opportunities for

career growth, legal protections, or proper safety and security measures.

The sharing economy actually has several names which are indicative of the unique downsides connected to it. Some of these names include the rental economy, “disownership” economy, and gig economy. These names indicate that, rather than workers having an ownership share in the services they provide, a lack of ownership is built into the business model. There is no stability in their work once a transaction is completed. And unlike actual employees, gig workers have no chance to advance up a corporate structure. A full-time employee and a company have a mutually beneficial relationship. The company invests in human capital, and employees likewise invest in the company by pouring their efforts into its growth and success. This is why full-time employees receive benefits such as paid vacation, healthcare, and training to improve and develop their professional skills. Gig-economy workers, by contrast, either work through the platform or receive nothing. Perhaps this is why it is common for a full-time employee to work using these platforms as a so-called “side hustle”—to add to their income without relying on it to make a living.

This brings us to the next point of conflict: workers are not employees. The distinction between the two terms is subtle but significant. In addition to the benefits that employers provide full-time employees, employees also have legal rights and representation under labor laws. They usually have the ability to form unions that represent their social and economic interests. In addition, governments have an interest in protecting employees since reducing unemployment is one of their main economic functions. However, currently, workers in the rental economy do not have the ability to form unions. They also have no workers’ rights and are not entitled to the same legal protections as full-time employees. Their labor is only temporarily recognized while they are providing the service.

Finally, providing a service in the gig economy can be hazardous to a person’s health and well-being. Often, the sharing economy has very little in the way of professional training, background checks, and safety standards. Drivers, for example, may push themselves too hard and fall asleep at the wheel—a common cause of accidents. Customers who rent a property or use a service such as an Uber driver to go across town have been known to do so for illegal reasons. And sometimes the customers even abuse and physically attack the workers and vice versa. Many sharing-economy services bring the service to the customer rather than having the customer go somewhere to use the service. This results in complete strangers having very close interactions with one another. In such situations, safety is always a concern.

As the sharing economy continues to grow, so too will the attention to its downsides. As the challenges and problems that have emerged with the sharing economy are unique, perhaps the eventual solutions will be, too.

|  |  |
| --- | --- |
| **Unit 3 Lesson 1** | **SOCIOLOGY** |

**People over Profits**

To create the conditions necessary for a productive society, the government should ensure some basic human safety and survival needs. For example, the government provides security through the military, police, and legal system. It also ensures safe housing, workplaces, and infrastructure through regulations, inspections, and other methods. However, when it comes to wealth, individuals are expected to take responsibility for themselves and their families. Unfortunately, even though many people work extremely hard to provide for their families, unexpected events can cause great financial trouble. Economic depressions, for example, leave millions struggling to support their families. Natural disasters have also destroyed many people’s ability to make a living. Additionally, innovations such as automated labor cause great shifts in the labor force and can suddenly leave many without a job.

What, then, should the government do to support people who are trying to be productive but have fallen on unfortunate times? How can governments address socioeconomic problems such as homelessness, hunger, and unemployment? If these conditions are left unchecked, they can lead to destitution for many individuals. If too many people are left destitute, the result may lead to other socioeconomic problems. These problems range from rising crime to deflation and increasing class tension.

Nowadays, a combination of social safety net programs such as welfare and unemployment insurance, along with charities and non-profit organizations, work to ease these problems. These efforts are better than nothing. However, a growing number of people feel that welfare programs and charities don’t do enough to resolve social problems. Recent census information from the US shows that one in ten Americans lives at or below the poverty line, even with existing social programs. In addition, government agencies in the US have estimated that homelessness affects anywhere between 600,000 and 1.5 million people. Clearly, something else is needed to help these people who have slipped through the cracks.

A relatively new economic policy idea called universal basic income (UBI) could address these issues. The basic idea of a UBI is that the government collects taxes and distributes enough money for each person, including children, to afford shelter and food every month. Citizens would receive this money regardless of whether or not they work.

UBI supporters say that the policy could be a massive improvement to economic efficiency. Implementing UBI could save societies money by replacing other, more complicated welfare programs. The taxes currently used to fund those programs and their administration could be lowered. Furthermore, under a UBI, people enduring dull, miserable jobs would be free to find work or start businesses they actually like. This would make them more productive. Other social problems related to poverty, such as crime, would also be reduced. A lower crime rate would lead to a safer society that doesn’t have to spend as much tax money on policing and prisons.

In addition, if regulations are placed on how and where a UBI is spent, it could protect local economies. UBI experiments in South Korea’s Gyeonggi province have found that food sellers at local markets experienced increased sales, helping them maintain their businesses during challenging times. These sales increases were mainly due to a rule that made UBI funds usable only at registered local businesses. Citizens were not allowed to spend their UBI at stores owned by large corporations. This rule was added because bigger companies can weather economic challenges more easily.

As a nation grows increasingly prosperous, it seems clear that it should also change its policies to better protect life, liberty, and the pursuit of happiness. By ensuring basic human needs with a UBI, a government can not only help millions but also create the necessary conditions for continued growth and productivity.

|  |  |
| --- | --- |
| **Unit 3 Lesson 2** | **SOCIOLOGY** |

**Hold Out on Handouts**

Homelessness, unemployment, and food insecurity impact the lives of millions of people. It is tempting to turn to quick and simple solutions to deal with these issues, but a solution can seem simple when it’s not. The idea of a universal basic income, or UBI, is a radical idea that is growing in popularity. It is based on the theory that governments can and should provide everyone with a certain amount of money regularly, no matter the circumstance. Yet, however lovely the idea of giving people money may seem, it’s a poorly thought-out one. Many economists believe that a UBI would cause more problems than it would solve.

The first obstacle a UBI presents is easy to identify: where would the money come from? If the United States gave each citizen $10,000 a year, for example, it would cost about $3.3 trillion annually. For comparison, the country’s entire 2020 budget was $4.8 trillion. And $10,000 does not even equal the average individual poverty line in most states, which is closer to $12,000 and can go as high as $16,000. According to the International Labour Office, the amount needed to fund a UBI could be “equivalent to twenty to thirty percent of the GDP in most countries.” In many cases, a UBI costs too much to fund without raising taxes or defunding other assistance programs. This is a risky trade-off since losing forms of government help like healthcare could end up ruining just as many lives as a UBI would save.

Another issue is UBI’s effects on economic behavior. Would it discourage people from working and encourage laziness? Although this is an understandable concern, studies find that it’s mostly unsubstantiated. Would people waste their UBI on unnecessary purchases? Maybe, but governments could place legal restrictions on how the money is to be spent. The bigger problem with UBI systems is not that individuals may misuse it, but rather that the funds would move from the government’s hands into the hands of companies who may be more interested in making profits than solving poverty. This is because employers can get away with paying their workers less so long as they are receiving government money every month. A UBI could make the rich richer, widen the wealth gap, and possibly cause inflation. When combined with the cost to fund a UBI, these factors make it unlikely that this system would remain economically sustainable.

Robert Greenstein is the founder of the Center on Budget and Policy Priorities, a nonpartisan research and policy institute. He finds that universal programs do not work well politically in the US. In contrast, means-tested programs (programs that require a person to meet specific requirements for eligibility) have expanded in the last decade. It isn’t difficult to see why. After all, why should people with comfortable incomes get the same benefits as those who are actually struggling? Examples of means-tested programs in the US include the earned-income tax credit, which reduces taxes on poor and middle-class families, and Medicare, which provides medical assistance to people over sixty-five and certain younger people with disabilities. Expanding these programs costs less than a UBI, is popular with voters, and provides relief to those in most desperate need. These conditions alone make the possibility for change far more likely since politicians tend to support less risky changes.

Expanding existing programs isn’t all that can be done. For example, governments can subsidize employment directly by funding large-scale projects to repair the country’s aging roads, dams, public transport systems, and more. Such civil works projects would create jobs while also improving all citizens’ quality of life. Another idea, which was proposed by Edmund Phelps from Columbia University, is to subsidize workers’ wages by matching a percentage of what they earn. To illustrate, if a person made $10, the government could contribute an additional dollar. That way, citizens have an incentive to earn as much as possible.

The twenty-first century has been praised for its many innovations. At a glance, the idea of implementing a universal basic income seems like gold. But before committing to the idea that there’s a universal fix for problems such as homelessness, unemployment, and food insecurity, take a moment to think. You might find that not all that glitters is gold.

|  |  |
| --- | --- |
| **Unit 4 Lesson 1** | **INFORMATION TECHNOLOGY** |

**How Do You Like Me Now?**

Social media cannot be avoided in this day and age, and most people use it without a problem. However, some become addicted to it. Studies have estimated that between five and ten percent of Americans meet the criteria of social-media addiction. Like other behavioral addictions, social-media addiction causes physical and psychological harm, such as withdrawal and mental disorders. These illnesses are particularly dangerous and common among children and young adults. Reports on the mental health of Generation Z, or Gen Z (people born between the late 1990s and early 2010s), have shown that teenagers are more stressed and depressed than preceding generations. Thus, researchers are working to understand social-media addiction, its causes, and its effects to find ways to address it.

To identify social-media addiction, scientists have found some common symptoms that addicts share. For example, addicts often exhibit poor decision-making and self-control. They frequently ignore real-life relationships, fail to maintain work or school responsibilities, and lose interest in maintaining their health. Additionally, addicts are likely to have mood swings and difficulty concentrating.

The causes of social-media addiction are complex and differ from person to person. However, most researchers compare it to gambling because of the way it affects the reward areas of users’ brains. They found that when people receive a like, retweet, share, etc., on social media, they get a rush that is similar to the feeling that gamblers get when they win. This rush is created by a neurotransmitter called dopamine, which helps create feelings of pleasure and motivation. For most users, this rush is enjoyable but not addictive. However, addicts will pursue this rush even at the cost of their health. Social-media addicts can also become reliant on the activity not only for recreational purposes but also as a way to cope with stress, loneliness, and depression. This can lead to further problems. For example, people who look for validation or praise online might develop disorders linked to their self-image, such as body dysmorphia—a mental health condition in which the subject spends a lot of time worrying about their appearance.

The consequences of years of social-media addiction are growing increasingly apparent. A study by the JAMA Network of medical journals found that America’s youth suicide rates reached a high in 2017. Most theories that try to explain this phenomenon find that social-media use can be linked to mental health issues. As noted earlier, reports on the mental health of Gen Z show that they’re growing increasingly stressed and depressed. Many experts believe that stressors found on social media significantly contribute to youth depression. Some of these stressors include economic problems, fear of not fitting in, fear of school shootings, and worries over the high cost of college. Another common stressor is bullying, particularly cyberbullying. According to the American Psychological Association, thirty-five percent of Gen Zers list it as a stressor.

In terms of addressing social-media addiction, the most common advice is to limit screen time. However, this is easier said than done. Technology doesn’t compare with other bad habits like gambling since technology is an essential part of everyday life. We use devices at school and work for entertainment, communication, and more. Since teenagers and their parents have trouble breaking the addiction cycle and restricting screen time, perhaps social-media companies should work to reduce their psychological impact. In fact, some companies are taking this idea seriously. For example, Instagram, the popular photo and video-sharing app, made its viewable “like” count optional.

Social media is a powerful tool that’s been allowed to exist relatively untouched by outside regulation. However, growing concern over its effects on youth has led parents and health experts to the breaking point. For Generation Z, the damage might have already been done. But this problem must be solved if we hope to protect the mental health of future generations.

|  |  |
| --- | --- |
| **Unit 4 Lesson 2** | **INFORMATION TECHNOLOGY** |

**Healthy Screen Time**

Good sense tells us that children shouldn’t spend their entire day in front of a screen because devices are an escape from or replacement for more enriching real-world activities. Yet devices and screen time are unavoidable and sometimes even necessary for families. And although most adults are aware of this situation, they also hold on to the belief that leaving a kid in front of a screen somehow makes them a bad parent. However, this way of thinking was turned on its head in 2020. COVID-19 has redefined parents’ understanding of and relationship with screen time as millions of kids around the world were forced indoors and “left to their own devices.”

According to the American Academy of Child & Adolescent Psychiatry (AACAP), children ages eight to twelve in the United States spend four to six hours in front of a screen on average. This number is higher for teens, who log up to nine hours per day. Excess screen time can lead to several negative outcomes. These include, but are not limited to: sleep problems, lower grades, weight gain, and mood disorders. Thus, the AACAP recommends that families create a screen-time plan for children. Recommended screen times vary depending on the person, agency, or institution being asked. According to the American Academy of Pediatrics, no more than two hours of screen time are recommended for children and teenagers per day. In addition, they recommend absolutely no screen time for children under age two. However, these recommendations became impossible to follow in 2020. COVID-19 forced schools to shut down and moved classes online. This meant that all students were required to stay in front of their screens for a large part of their day.

As a result of this disaster, experts fear that children will have grown used to online education, communication, and play. Thus, they might find it hard to find satisfaction in an offline world. However, not all experts are so pessimistic. Some have tried to find a silver lining. Although most would still hesitate to say that increased screen time is a good thing, many are starting to believe that thinking of it as all bad is just as harmful. There are benefits to increased screen time, such as making children more digitally literate, creating ways for friends and family to play and connect, and giving children a way to express their creativity. Nowadays, experts and health officials are changing their recommendations regarding screen time. Rather than just giving a time limit, scientists now recommend applying the “Three Cs” (child, content, and context) when deciding on a child’s digital dose.

The Three Cs are key terms used to help parents ensure that their children get the most out of their screen time. “Child” is used to remind parents that they know their children best and know what amount and what kind of media they will enjoy most. For example, children easily made anxious or scared should avoid frightening media. “Content” is used to remind parents to focus on quality over quantity. Parents should make sure that the content their children consume is from well-known or educational sources. Lastly, “context” is used to remind parents to link digital learning to the real world. Parents should be active in their child’s screen time. Bonding over media can help a child build their self-esteem. Also, children should take online learning and apply it in the real world. For example, learning about cooking isn’t enough. Children should be encouraged and taught to try it for themselves.

With more of our lives being intertwined with technology and digital communication, we must come to terms with the change. Screen time isn’t always good, but it isn’t always bad either. Rather than see things as binary, we need to understand how different people feel about their relationship with technology. It’s a tool that can be used for enormous good, and it can also be abused. When it comes to children, one thing hasn’t changed: adults, particularly parents, are their role models. So parents, give your children something to look forward to rather than something to fear.

|  |  |
| --- | --- |
| **Unit 5 Lesson 1** | **SOCIOLOGY** |

**How Do We Choose Our Friends?**

A study at Cornell University found that the average adult has 2.03 close friends. Yet, researchers have also found that the same adult is likely to have about 150 social contacts, people they know and interact with regularly. This figure (now known as Dunbar’s number) was named after the scientist Robin Dunbar and has been confirmed in other studies. But how is it that people have so many social contacts but only 2.03 close friends? How do we select the people who go from an acquaintance to a friend? The common-sense answer is that we seek friendship in certain people because of their excellent personal qualities, but the answer coming from psychological research is more complex. Researchers have found that our choice of friends is largely affected by a combination of proximity, similarity, and self-interest.

To begin with the obvious, we’re inclined to become friends with people who are nearby. We tend to form friendships with people we see in our neighborhood, school, or work. One famous US study from 1950 looked at residents of a two-story apartment building and found that people who lived on the same floor developed closer friendships than those who lived on different floors. In a 2008 experiment at a German university, students were randomly given seats for a single gathering. One year later, students who had sat near each other were more likely to be friends than those who had not.

Of course, we do not develop relationships with everyone around us, so proximity isn’t enough. Similarity is important as well. Psychologists use the term *homophily* to describe our preference for those with whom we have things in common, such as age, sex, race, class, physical characteristics, and interests. Research has found that the more of these characteristics people share, the more likely they are to become friends. Brain images show that we find it easier to empathize with those we view as similar to ourselves. One theory is that homophily developed as a side effect of our natural preference for those who share our DNA—our relatives.

Self-interest is also a key factor in how we form friendships. Evolutionary psychologists reason that the behavior of our closest relatives—other primates—is much like our own. Thus, they look to non-human primates for clues to explain human friendship. Other primates also form warm, long-lasting relationships with individuals to whom they are not related. Primate friendship has perhaps been most thoroughly studied in the rhesus macaque. Rhesus macaques usually live in groups of about thirty. They do two things a lot: cultivate friendships by grooming each other and fighting over food and mates. They especially tend to groom other monkeys of a higher social status, who are more likely to be helpful in a fight. In a study titled “The Alliance Hypothesis for Human Friendship,” two psychologists present evidence that suggests human relationships are formed in a similar way to those among rhesus monkeys. The authors looked at how people ranked their friends on a social networking site. While social status didn’t matter, people tended to highly rank the friends who, in turn, ranked them highly. Researchers believe that this is because, like the macaque, we sometimes need allies. And the more a friend cares, the more likely they are to help us in a conflict.

Of course, this is a pretty cold and incomplete view of friendship. Research helps explain how and why we make friends, but not how we sustain those friendships. Meeting by accident, having a few things in common, and having someone who will back you up in a fight isn’t enough to make a friendship last for a lifetime. Also, even if the reasons appear less than noble, our feelings toward our friends can still be quite genuine. The ways they make our lives better remain real. Consider one last finding from friendship research: having even one close friend can make you much happier than having none. And if you have 2.03, that’s even better.

|  |  |
| --- | --- |
| **Unit 5 Lesson 2** | **SOCIOLOGY** |

**Cutting Your Losses**

Friendships constantly change. Sometimes a person thought to be a good individual turns out to be not so wonderful after all. Additionally, people change with time. Individuals can also grow beyond their friends or make changes in their lives that their friends cannot accept. Most of the time, friends gradually grow apart. However, there are still times when a person has to question whether a friendship is worthy of keeping. Choosing friends wisely is necessary for building solid friendships. But what if you already have a relationship with someone, and you think it’s becoming unhealthy?

We are free to choose the friends we spend our free time with. But we cannot choose our classmates or coworkers, who often become our friends by default. Thus, the first step to deciding how to handle a difficult relationship is to determine why you have the relationship in the first place. The reasons for friendships vary, so it’s important to consider the nature of a friendship when deciding whether or not to maintain it. With social friends, if the relationship takes a turn for the worse, it may be best to end it. But with work or school friends, the decision becomes rather challenging. Although you may find it difficult to get along with certain people, you still have to see them frequently. In these cases, maintaining the relationship may make your life easier.

Another important step to take is to establish fundamental principles about what a healthy relationship is. Drawing boundaries for your physical, mental, and emotional space will help you identify when they are crossed and is essential to maintaining healthy and constructive relationships. This may be more of an art than a science, but some well-known formulas can help you judge your relationships. One is the 60/40 rule. Celia Schweyer is a dating and relationship expert at a matchmaking firm. She explains, “The 60/40 rule says that you should put sixty percent of the effort into a relationship and expect to receive forty percent in return from your friend, partner, or whoever is on the other end of the relationship.” The 60/40 rule essentially gives a value to the age-old idea that relationships are all about “give and take.” However, this rule doesn’t have to be strictly kept. If someone you care about is trying to overcome a difficult situation, most people should be willing to give more and accept less.

While it’s good to have guidelines, general rules, or principles, sometimes you need clear and inflexible rules about relationships. This can remove some of the difficulties attached to ending toxic relationships—relationships that are emotionally and sometimes physically damaging. One hard and fast rule is the “three-strikes” rule. As the name implies, three strikes will result in permanent consequences. This rule is even applied in some legal systems around the world. For some, allowing just two strikes is an even better way to protect themselves from a bad relationship. Sir Anthony Weldon wrote in a book called *The Court and Character of King James*, published in 1651, “The Italians have a proverb: ‘He that deceives me once, it’s his fault; but if twice, it’s my fault.’” Preventing yourself from being taken advantage of is done most effectively by ending a relationship with a person who has shown a pattern of bad behavior. Common sense and reason establish certain boundaries that you don’t need to state explicitly; for example, good friends don’t cruelly criticize or ridicule each other. However, individuals may have additional boundaries they don’t want to be crossed. To avoid accidentally upsetting one another, people need to determine and communicate what is acceptable for them and what is not.

Only you can determine if someone should be removed from your social circle. We all try and make the best friends we can. However, when people you know change or when the realities of a relationship don't match your expectations, you may need to consider cutting them off. Applying some guidelines and rules can be an effective way to deal with such issues with the least harm to yourself.

|  |  |
| --- | --- |
| **Unit 6 Lesson 1** | **MARKETING** |

**Profits or the Planet**

Corporate Social Responsibility (CSR) is a management concept that means companies include social and environmental concerns in their operations and hold themselves responsible for their actions. For example, the Starbucks Coffee Company has set and met many CSR milestones. They’ve reached ninety-nine percent ethically-sourced coffee and contributed millions of hours of community service. CSR has become an increasingly important part of corporate strategies since much of the public demands social and environmental protection. Yet, some people still argue that CSR is a misleading, wasteful, and unproductive practice.

The benefit for companies that take part in CSR initiatives is that it boosts brand value. Companies with CSR initiatives get more sympathetic treatment in the media. This is because people believe that CSR-committed companies care more for their customers. But there is good reason to believe that some companies don’t take CSR seriously and only do the minimum needed to benefit without taking on extra expenses. Take, for example, the Volkswagen emissions scandal in 2015. The United States Environmental Protection Agency found that Volkswagen had knowingly broken the rules in the Clean Air Act by programming its cars to turn on emissions controls only during laboratory testing. This happened after the company had gained lots of positive publicity for its “clean” engines. By the time Volkswagen was caught, this software had been installed in over eleven million cars worldwide.

Another criticism of CSR initiatives is they’re expensive. Maintaining safety, eco-friendliness, and responsibility costs money. Almost all companies judge their production process by doing a cost-benefit analysis (CBA). A CBA is an organized way of estimating the strengths and weaknesses of a product, service, or strategy. Unfortunately, many companies find that the increase in production cost isn’t recovered by sales when adopting CSR policies. A poll in New Zealand found that four out of five people believed climate change to be an important issue. Yet, an international study of 20,000 customers by consumer-goods supplier Unilever found that only one in three people actually chose to buy eco-friendly brands. Thus, people’s words aren’t very reliable for predicting their buying habits.

CSR initiatives can also be demotivating. Certainly, there are companies whose practices give employees a sense of pride by being environmentally and socially responsible. However, this is not true for all. Typically, employees that reduce profits are punished for it. For example, a factory manager is more likely to be punished for slowing down production to follow safety rules than to be rewarded. Much of this is because avoiding disaster isn’t as easily noticed as solving problems. To illustrate, imagine an employee working in the oil industry. This person is less likely to be rewarded for having no oil spills than an employee who fixes an oil spill incident quickly.

Perhaps the biggest conflict at the heart of CSR is whether or not companies should even be held responsible for regulating themselves. Nobel prize-winning economist Milton Friedman argued in a 1970 essay titled “A Friedman Doctrine: The Social Responsibility of Business is to Increase Its Profits” that a company has no social responsibility to the public or society. His theory states that a corporation’s only responsibility is to meet the desires of its employers (shareholders). And since many investors want to maximize profits, people who run corporations have to avoid policies that reduce profits. Friedman believed that the only appropriate agents of social causes are individuals. To illustrate, consider fast-food chains. Are those chains responsible for obesity? Are they accountable for customers littering? For those who support Friedman’s theory, the answer would be no.

Although there are many criticisms of CSR policies, public demand is starting to change many corporations’ attitudes about the part they have to play. In fact, many companies have adopted a quantifiable set of standards known as environmental, social, and corporate governance criteria, or ESG, to communicate to investors their companies’ commitment to social responsibility. This set of standards forces companies to regulate their commitments in measurable ways while giving them a financial incentive to do so. But is this meaningful change or just more corporate jargon? Time will tell.

|  |  |
| --- | --- |
| **Unit 6 Lesson 2** | **MARKETING** |

**Invest in Ethics**

In 1987, director Oliver Stone released the film *Wall Street*, in which the character Gordon Gekko became famous by delivering a passionate speech to investors that claimed: “Greed is good.” This speech influenced countless investors and businesses at the time, who went on to use its message to justify a variety of corporate practices that put profits over employees’ welfare and well-being, the environment, and consumers. But does this belief still hold?

The mentality of Gordon Gekko can trace its roots to a theory created by Nobel Prize-winning economist Milton Friedman. Friedman argued that a corporate executive’s only responsibility was to meet the desires of their employers. For a long time, executives interpreted their employer’s desires as profits: which, of course, isn’t far from the truth. Investors do want to profit from their investments. However, this interpretation is also an oversimplification. Recently, a growing number of investors want both profits and a positive societal impact. This expectation has led to a trend in the investment world known as sustainable or impact investing: a view of investment that considers environmental, social, and corporate governance (ESG) criteria to create long-term financial returns and a positive societal impact.

For a time, Corporate Social Responsibility or CSR initiatives were considered the best way to meet investor expectations. They not only improved corporate practices but also helped build a company’s reputation. However, not everyone was convinced by corporations promising to improve. That’s because some companies did sincerely work to improve their practices, while others didn’t or faked it. The lack of transparency in CSR systems opened the doors to ESG. Now, it’s important to note that ESG wouldn’t exist without CSR. However, there are differences between the two. CSR aims to make businesses accountable for their actions; ESG criteria try to make those actions measurable. By calculating a company’s ESG ratings, financial institutions can give companies a score that investors can use to judge their potential investments. There are many reasons for an investor to be interested in a company’s ESG score. Besides wanting to support companies that create a positive societal impact, many impact investors think companies with a high ESG rating are safe investments. A popular belief among investors is that these companies tend to be more resilient, forward-thinking, and innovative. This belief is supported by academic studies. For instance, Oxford University reviewed over 200 sources on ESG performance and found that the majority (eighty-eight percent) of companies that focused on sustainability had better organization and performance that translated to higher cash flows.

ESG ratings start at zero and go to one hundred. They are meant to present an objective and transparent evaluation of a corporation’s practices. Ratings are provided by third-party financial agencies such as Bloomberg, Thomson Reuters, and Sustainalytics. Since there is no singular gold standard for ESG ratings, most agencies rely on various data sets to calculate their ratings. Bloomberg, for example, considers 120 environmental, social, and governance indicators to make their score. These indicators include things such as carbon emissions, waste disposal, executive compensation, etc. Individual calculations are added to make three separate scores, one for each of the three focuses in ESG. They are then weighed and added together to create a final score. How each calculation is made can vary between industries. For example, IT companies, entertainment companies, and energy companies might be scored differently in comparison to one another since the nature of their work is different. It’s also important to note that ratings differ between reviewing agencies.

In the past, companies could keep investors happy by producing profits by any means necessary. However, people’s changing attitudes about how companies should function within society have started to impact many companies’ bottom lines. Customers aren’t just looking for the best deals anymore. They want to know their money is being given to companies that have their best interests at heart. Investors also don’t want profits by any means necessary. They want to create social good and want the companies they invest in to plan for the future. Because of these demands, companies must adapt their business models to include sustainability as part of their profit strategy.

|  |  |
| --- | --- |
| **Unit 7 Lesson 1** | **EDUCATION** |

**E-Learning: A Window of Opportunity**

In 2020, a global pandemic caused by the COVID-19 virus forced many governments to implement restrictions that prevented students from attending physical classes. Under these conditions, school systems around the world decided to proceed with classes, albeit online. The sudden change to e-learning was not without its difficulties. However, many educators and students felt that it was a positive experience overall. In fact, despite the challenges caused by the hurried, emergency rollout, e-learning has shown that it has several benefits that ensure its place in modern education. In particular, e-learning is more efficient, student-centered, flexible, and accessible than traditional classroom education.

Online learning is more efficient than traditional classes because of the many tools it offers. For example, it allows educators to easily integrate videos, PDFs, podcasts, and other outside materials into a lesson. Educators can also use learning management systems (LMS) to obtain detailed and accurate information about student performance. Moreover, teachers can study LMS metrics and adjust their teaching styles to better suit individual students’ needs. With these tools and resources, teachers can create engaging lessons and keep track of student progress.

Traditional classroom education might feel more personalized since it’s done face-to-face, but e-learning has the potential to be far more student-centered. Every student has his or her own way of learning. No two students are the same. One student might respond better to reading the information, while another might respond better to a lecture. Personalities can also affect a student’s learning experience. For example, introverted students might feel uncomfortable raising their hands to ask a question or request that a teacher repeat information. With e-learning, students can either watch a lecture again or message their teacher instead of disrupting a lesson. Extroverted learners can also benefit from the e-learning format by having access to online debates and discussion boards.

Many students appreciate the flexibility of e-learning. Unlike traditional classroom courses, e-learning can occur anywhere there’s a computer connected to the internet. In addition, it can be done at the student’s own pace. E-learning allows students to view and review information as often as needed, whereas teachers in a traditional classroom setting have limited time to cover the material. According to the Research Institute of America, having more control over the learning process and the ability to review lectures has resulted in a twenty-five to sixty percent increase in information retention rates. This flexibility is even more beneficial to young adult learners who may hold jobs while studying. E-learning provides these people with a quality education while removing the stress of balancing a work schedule with school.

Another advantage of e-learning is accessibility. Accessibility means more than just having access to lectures at any time or place. It also means having access to courses from around the world. For example, during the pandemic, many universities allowed international students to sign up for classes despite being unable to travel. This change allowed students to continue their studies without interruption and prevented a generation of graduates from falling behind. In addition, e-learning is an inexpensive alternative to college for those who only want to learn about specific topics. For example, Coursera, a massive open online course provider, offers certificates from well-known educational institutions and corporations. One such corporation is Google. Google offers several courses on Coursera which teach project management and other valuable skills. While these certificates do not guarantee a career, eighty-two percent of course takers have reported a positive career result—a new job, promotion, or raise—within six months of completing one of these courses.

E-learning has proven itself to be more efficient, equal, and flexible than traditional classrooms. It’s also shown that its unique advantages allow it to create a rich learning environment. Although there are still some problems with e-learning, there can be little doubt that it is here to stay. Rather than resist change, students, educators, and parents should take advantage of it. Only then can we figure out how to perfect e-learning for future generations.

|  |  |
| --- | --- |
| **Unit 7 Lesson 2** | **EDUCATION** |

**No Replacement for the Classroom**

E-learning has become the subject of much discussion since the COVID-19 virus swept the world in 2020. Many were quick to praise its usefulness, with some people even arguing to keep all education online. However, recent research has shown that online education isn’t all that it’s cracked up to be. The assessment groups Illuminate Education and Northwest Evaluation Association found that students in all grades and subjects had experienced learning loss during the pandemic, particularly in math and reading. Although some of this loss can be attributed to technical issues like faulty internet connections, many researchers believe that the real problem is its format. E-learning suffers from many disadvantages, such as lacking focus and structure for students, creating social isolation, and having limited efficacy.

Although many people praise e-learning for its flexibility, this flexibility is also a disadvantage. Learning requires focus, which is why schools create structure and supervise students. For e-learners to succeed, they need to be independent and responsible for their own learning. While this sounds good on paper, it doesn’t match with reality. Even the best students can fall behind when not properly guided.

During the pandemic, parents were expected to help monitor their children’s education. However, it was difficult for parents to concentrate on both work and their children’s education. This situation left many students unsupervised and open to distractions. Many distractions are easily overlooked in the home, such as text messages, family conversations, or a hungry family pet. After all, dealing with two things at once is just multitasking. People are capable of that much, aren’t they? Perhaps—but according to studies, not well.

A recent Stanford University analysis that reviewed years of data found that “multitasking is associated with poor performance on cognitive memory tasks.” Moreover, psychologist David Meyer reports that productivity could drop as much as forty percent when a person is forced to analyze several different sources of information at the same time. He suggests that people need time to adjust and focus on single tasks in order to learn properly.

A second problem with e-learning is that it can cause social isolation. Despite some students reporting that they feel more comfortable learning from home, most educators and children agree that long periods of isolation can be demotivating. This can lead to failing grades and a low-quality learning experience. In fact, according to a study conducted by exam preparation company OneClass, more than seventy-five percent of students reported that they didn’t think they received a quality learning experience online. And a poll of 14,000 college students by a college review website found that sixty-seven percent of students said they didn’t find online classes as useful as in-person classes. In both studies, students pointed to the lack of face-to-face interaction as a cause of their dissatisfaction. And while social isolation can be demotivating to young adults, it can be even more harmful to children. Despite the many ways in which students can communicate on e-learning platforms, these interactions are limited. Traditional classroom education, however, doesn’t have this problem. Students in the classroom are free to create personal, real-life experiences with physical contact and body language, which are essential to developing social skills in children.

Another problem with e-learning is its limited efficacy. E-learning supporters often praise the various digital tools available online. However, many of these tools don’t compare with real-life experience. For example, no video or podcast will ever replace real-world experience for medical students. Sure, video lectures can help students gain knowledge. Still, medical students need experience to learn how a hospital operates and to gain the skills required to work in high-stress situations.

Despite all the supposed benefits of e-learning, researchers are still divided on its effectiveness. Columbia University ran a study of 51,000 community colleges and found that students taking online courses were more likely to fail or drop out than those who took the same classes in a traditional setting. This research suggests that, despite how convenient e-learning is, it still has a long way to go before it beats learning in the classroom.

|  |  |
| --- | --- |
| **Unit 8 Lesson 1** | **CRIMINAL JUSTICE** |

**Crime and Punishment**

It isn’t very fashionable nowadays to express enthusiasm for the police and the way laws are enforced. In the US and elsewhere, anger over abuses by the criminal justice system has grown. There are movements to reduce police forces or even abolish them, along with prisons. Some of the complaints by activists are valid; no criminal justice system is perfect. But the more extreme demands to remove punishment from the legal system are wrong and almost certain to fail. Punishment helps to keep social order and provides justice for victims in a way that satisfies a deep human instinct for fairness.

Another word for “punishment” is “retribution,” and the punishment model for dealing with crime is sometimes called “retributive justice.” One obvious argument for this model is that punishment deters crime. If societies don’t impose punishment on criminals, then respect for the law declines, and chaos results. The Harvard psychologist Steven Pinker describes this phenomenon in his book *The Blank Slate*. In 1969, teenage Steven didn’t believe in police or prisons, or even government. Then one morning, the police in his hometown of Montreal announced they were going on strike: “By the end of the day, six banks had been robbed, a hundred shops had been looted, twelve fires had been set, … and $3 million in property damage had been inflicted.” The city authorities had to bring in the army to restore order. Pinker was thus forced to rethink some of his assumptions. It was clear, he realized, why people committed those crimes. With no police to put them in jail, they expected no consequences.

One other reason for punishment concerns fairness. Retributive justice is based on the idea that if you have made an innocent person suffer by breaking the law, you *deserve* to suffer a similar amount. This is true regardless of any practical effects like deterring crime. In this way, it is a moral principle. For example, the US system has a custom called the “victim impact statement.” Before a person is sentenced for a serious crime, the victim (or in cases of murder, the victim’s loved ones) speaks in court. They describe the often terrible effects that the crime has had on their life. Judges and juries consider these statements when deciding a criminal’s sentence. The goal is for the punishment to be appropriate for the amount of harm done.

Crimes are committed against the community as well as against individuals. The eighteenth-century German philosopher Immanuel Kant compared crime to debt. In this view, when everyone behaves themselves, everyone enjoys the benefits of peace and order. But if you break the law, you have enjoyed those benefits without restraining yourself as your neighbors have. This is clearly unfair, so you owe them a debt that must be paid. Punishment is payment. Today, we often describe serving a prison sentence as “paying one’s debt to society.”

This idea of punishment as a mechanism for correcting wrongs isn’t just a philosophy but is built into our psychology. Across cultures, research consistently shows that people are eager to punish others for doing something wrong—even at a cost to themselves. A 2020 study published in the journal *Evolution and Human Behavior* paired up strangers in an online game using real money. In the game, players had opportunities to steal from one another and refuse to share freely earned resources. In both cases, victims were willing to pay their own money to impose fines on unfair and selfish players.

Why is the instinct to punish so strong? Humans are a highly social species. We’ve evolved a psychological need to punish harm and unfairness because of our need to live in groups peacefully. It would be quite hard to maintain a community if our neighbors could inflict suffering on others without negative consequences (as Pinker’s story shows).

Civilization is delicate, and humans aren’t perfect. The threat of punishment is an effective way to prevent people from acting on their worst instincts. Supporters of abolishing police, prisons, or punishment, in general, are not being realistic. Not only would such measures increase crime, but they would also violate our fundamental sense of justice for victims and the community as a whole.

|  |  |
| --- | --- |
| **Unit 8 Lesson 2** | **BUSINESS** |

**Second Chances**

The criminal justice system is composed of a series of agencies and institutions that work to prevent crimes, manage criminals, and support victims. When dealing with criminals, many countries exercise a form of retributive justice that focuses on punishing offenders. In fact, one of the earliest and most complete written legal codes, the Code of Hammurabi (written around 1750 BCE), declared that “if a man put out the eye of another man, his eye shall be put out.” This is perhaps the earliest form of written retributive justice. However, because something has existed for a long time or is in common practice, it doesn’t mean it’s the best way to do things. Although retributive justice succeeds at punishing criminals, does it actually prevent crime and support victims?

If we look at the US prison population, we’ll find that it has increased by 500 percent in the last forty years. This has led to crowded prisons, financial troubles, and growing criminal recidivism. In 2005, a study of thirty states found that nearly forty-four percent of released prisoners were arrested again within a year of their release. In addition, statistics show that one in nine US men born in 2001 will be going to prison at some point in their life. For women, the rate is one in fifty-six. These rates are even higher among minorities. For example, one in every three black men will one day be in the criminal justice system. These statistics show that the American retributive justice system isn’t effective at deterring crime.

There is an alternative perspective on justice that is growing in popularity: restorative justice. This is a view of justice that focuses on rehabilitation, healing harm, and repairing damages. It requires all stakeholders (victims and offenders) to meet in a safe environment to work toward healing and repair. This form of criminal justice has already been implemented in many systems around the world as either a test or primary way of rehabilitating offenders, and its results have shown promise. In many instances, restorative justice has reduced recidivism rates in both juvenile and adult criminals. In the US, fifteen out of twenty studies found that Victim-Offender Mediation (VOM) and Family Group Conferencing (FGC) have helped reduce recidivism by twenty-six percent.

There are many forms of restorative justice. For instance, VOM involves victims meeting with offenders under the care of a trained mediator. Both parties are allowed to express their feelings and views on the crime committed. This program aims to have offenders agree on steps they must take to repair the harm they’ve caused. FGC is similar to VOM in many ways and is most effective with juvenile offenders. FGC differs from VOM by including public officials such as police officers and school officials in the process. This is done to repair the broken relationship criminals have with the community and expand their understanding of how their actions affect others.

One country that is extremely successful at rehabilitating criminals is Norway. Their incarceration rate is just 75 out of 100,000 people; the US rate is 707 out of 100,000. Norway also has one of the lowest recidivism rates in the world: twenty percent. Many people attribute this success to Norway’s unique justice system. In Norway, criminals maintain a fairly “normal” life while in prison. They live in small communities to limit the spread of criminal subcultures. They’re given rooms with televisions, computers, and private shower facilities. At Norway’s Halden prison, prisoners live in a 303,000-square-meter facility where there are no bars. There, prisoners are allowed to play sports and music and to interact with prison staff. They’re also educated or given job training so that they can continue life outside of prison without turning back to crime.

For many people, retributive justice feels right. It punishes those who’ve committed wrongdoing and locks them away. People who’ve gone to prison also carry a stigma with them throughout their lives. But this solution has only led to having more people being put in prison. Perhaps the better option is to stop punishing people and put our efforts into healing what’s been broken.

|  |  |
| --- | --- |
| **Unit 9 Lesson 1** | **ENGINEERING** |

**Automation: Here to Help**

In many fields, humans are increasingly able to take a back seat to machines. This is a trend from which we all stand to benefit. Rapid developments in artificial intelligence (AI), machine learning, and automation improve customer service, increase productivity, and even save lives.

Often taking the form of highly sophisticated software, AI is now ideally placed to help businesses look after customers. For example, call centers have long been making use of automation. While this practice once left customers frustrated, interactive voice response (IVR) systems can now answer inquiries faster—and at a lower cost to businesses—than humans. IVR systems can take calls twenty-four hours a day, 365 days a year, and never get ill or tired. In fact, according to *Forbes* magazine, in 2022, twenty percent of all customer inquiries will be dealt with exclusively by AI. With IVR systems more efficient than ever, customer waiting times are significantly reduced, and human agents are freed up to deal with the most complex inquiries.

This is thanks to improvements that give machines the ability to know what we’re talking about. Natural language processing (NLP) is the branch of AI that involves teaching computers to understand written and spoken human language. Using NLP principles to record and analyze large amounts of customer data, IBM developed its Watson Natural Language Understanding (NLU) service. This software understands seven languages and ninety to ninety-five percent of the sentences it hears. It can even differentiate between satisfied and dissatisfied customers. Altogether, by 2024, *Forbes* estimates that the market for AI technology in call centers alone will be worth $2.8 billion.

AI can also work with staff by providing guidance and support. Ross Daniels, chief marketing officer at Calabrio—a company that offers solutions to improve customer experience—is an advocate of this “employee-facing” AI. Daniels says it can help staff “simplify their day, provide information during interactions, or assist with training and development while improving work-life balance.” Far from being a threat to employees’ jobs, AI could be a trusted colleague.

Unlike invisible software, some AI takes physical form; these objects and machines are known as embodied AI. For example, when we get home from work, many of our appliances—washing machines, dishwashers, and heating systems—are now, to some extent, intelligent. They are part of the internet-of-things (IoT). By ensuring efficient energy use, the IoT saves us money and can help the environment.

Embodied AI and automation are also proving priceless to industry. Today, fifty percent of the world’s robots work in car manufacturing, filling roles that once put human workers at risk. Before long, self-driving trucks will probably deliver self-driving cars directly to our homes. In fact, automated machines are becoming capable of quickly and cheaply building those very homes, too. Meanwhile, should a natural disaster strike, robots can help locate victims in areas too dangerous for humans while drones deliver food and medicine. Looking into the future, we can predict that machines will likely continue to grow smarter and do most tasks independently.

Modern intensive agriculture has already been transformed by automation. Programs monitor weather, rainfall, and insect attacks; they then communicate with robots that deliver precise amounts of water and chemicals to ensure crop health and increase harvest quantities. Robots are also able to pick crops around the clock, bringing down production costs. In developed nations, agriculture faces a severe shortage of workers. While many often arrive from abroad, this may be unsustainable. For example, in times of crisis, such as the COVID-19 pandemic, the mass movement of people is impossible. Thus, in the future, it may be robots that will keep food on our plates.

AI and automation are here to make human lives easier, safer, and more comfortable. Nevertheless, for some people, “the rise of the machines” is a worrying development; people fear losing jobs to them and even consider them a threat to human life. But AI expert Kate Darling wishes to put minds at rest. She believes we need to stop seeing AI as a competitor. Instead, she suggests that we think of AI and robots as similar to animals, which we have worked with for thousands of years. “Robots,” Darling argues, “can be our partners.”

|  |  |
| --- | --- |
| **Unit 9 Lesson 2** | **ENGINEERING** |

**The Real Cost of AI**

There are clear advantages to shifting away from human labor and using technological solutions. The automation of jobs through artificial intelligence (AI) and robots has improved many industries’ profitability, safety, and efficiency. However, there are also some clear problems. These technologies have social and economic impacts, and they also raise serious ethical questions. To maximize the benefits of these technologies, we must be able to recognize and minimize their drawbacks.

One well-known disadvantage associated with AI and automation is worker displacement. Often, a single robot or AI is capable of destroying dozens of human jobs. This can result in a sudden and dramatic increase in unemployment. Also, this does not just affect low-skilled jobs. AI is also being used in fields that require advanced problem-solving skills and the ability to analyze complex situations. Robots equipped with state-of-the-art software and large data capabilities can perform delicate surgery, identify ideal chemical compounds to maximize crop harvests, and even help set public policy. These jobs used to require highly educated and trained professionals. This threat to skilled jobs is why the late physicist Stephen Hawking warned that “artificial intelligence and increasing automation is going to decimate middle-class jobs, worsen inequality, and risk significant political upheaval.” Also, job loss affects more than just people’s financial stability. According to World Health Organization studies, in almost all cases, workers displaced by AI and automation experience a period of emotional stress and other mental health problems. To make matters worse, many of these workers are forced to relocate as well.

Another downside to automation is that it is extremely complicated and expensive. It requires a large initial capital investment. There are high operating costs related to maintenance, repair, management, training, and more. These costs can make machines more expensive than human workers. Depending on the industry, the organization’s size, growth forecasts, job-market conditions, and other factors, choosing automation is not necessarily beneficial to companies.

Currently, AI-assisted and automated work involve machines capable of performing limited tasks that are either repetitive or highly specified. Machines, however, are limited to what they have been programmed to do. They have much less flexibility than humans. Even the most advanced and precise robots cannot adapt to as wide a range of functions as quickly as a human can. For example, a human mechanic can drive a car, change the oil, and replace old parts. However, a self-driving AI program can only drive a vehicle. Similarly, a human doctor could probably perform surgery, deliver a baby, and set a broken bone, whereas a surgical robot can only perform surgery. Unexpected challenges and situations happen all the time. Thus, we cannot rely solely on machines to do all our work for us.

Finally, there are the less immediate but perhaps most important ethical and moral questions about automation. For example, should AI and automation be used by the military? An increasing number of studies demonstrate that humans tend to become too dependent on technology and automation. One such study, “Understanding Human Over-Reliance on Technology,” was published by the National Institutes of Health in 2019. The author found that people think less critically and behave less carefully when machines take over decision-making processes. This mental state could lead to serious consequences when combined with powerful machines capable of starting and fighting wars with minimal self-risk. There is also the possibility that AI technology could eventually control, rather than serve, humans. Some people may laugh at this idea now, but human error in the management of technology or decisions about how it should be used is a real concern. Elon Musk is a business leader in the field of AI. He has warned that it could become “an immortal dictator from which humans would never escape.”

Our use of AI-assisted automation and robots is already yielding substantial rewards in certain areas, with the promise of many more to come. But these technologies come with real dangers as well. To ensure a future in which AI is a friend to humans rather than an enemy, we must think carefully about how best to use it.

|  |  |
| --- | --- |
| **Unit 10 Lesson 1** | **HEALTH** |

**The Real Cost of Lost Sleep**

Sleep is an essential biological process. It helps people maintain their health by facilitating the recovery of the body and mind. Health experts at the Centers for Disease Control and Prevention (CDC) recommend that adults up to age sixty get at least seven hours of sleep per night. For teenagers, they recommend eight to ten. They also emphasize that failing to maintain a healthy sleep schedule will result in poor health. Yet, despite knowing the importance of sleep, most people don’t prioritize it.

In the majority of developed nations, sleeplessness is on the rise. A recent Gallup poll found that forty percent of Americans report getting less than seven hours of sleep per night, bringing the current average down to 6.8 hours. In other parts of the world, this number is even lower. For example, South Koreans only sleep six hours per night. In addition, the country has an incredibly stressful work culture with long hours—an average of 2,069 hours per year. A word has even been invented to describe people who have died due to overwork: *gwarosa*.

Although many people choose to sleep less to be more productive, lacking sleep is proven to impact performance negatively. Studies have found that insufficient sleep harms one’s cognitive abilities, creativity, and concentration. It also affects language skills, decision-making, and memory. In severe cases, it can lead to serious consequences. For example, each year, about 100,000 deaths occur in US hospitals due to medical errors. In many of these cases, tired doctors and nurses state that lack of sleep was a significant contributor to the error. US traffic accident statistics also demonstrate the deadly effects of this problem: “Drowsy driving” causes about 100,000 motor vehicle crashes and over 1,500 deaths each year.

Chronic sleep deprivation also leads to increased risks of developing serious diseases. Insufficient sleep can diminish one’s immune system, raise blood pressure, and lower the release of growth hormones. It’s also associated with obesity since lack of sleep often leads to increased hunger and late-night meals. According to Carl Hunt, the director of the National Center on Sleep Disorders Research in Bethesda, Maryland, the risk of developing obesity rises twenty-three percent if a person gets just six hours of sleep per night compared to an average total sleep time of seven to eight hours per night. These risks increase with fewer hours of sleep: fifty percent with only five hours per night and seventy-three percent with four hours per night.

Sleep-deprived people are also more likely to develop sleep disorders that make getting back on a healthy sleep schedule more difficult. Insomnia, a condition that makes it difficult to fall asleep, is the most common sleep disorder. However, other disorders such as restless legs syndrome, which affects leg nerves, are also common. Perhaps one of the more dangerous sleep disorders, which affects some thirty million people in the US, is sleep apnea syndrome. This causes the passage in the back of the throat to collapse, creating shallow breathing. In severe cases, a person will partly wake up because no air enters the lungs at all.

Over time, sleep deprivation can create many long-term consequences. It builds what experts call a “sleep debt.” Like other kinds of debt, people tell themselves that they’ll pay it back when it’s convenient. However, sleep doesn’t work like a bank account where you can freely deposit at your convenience. Sleep expert Elina Winnel has found that catching up on lost sleep has limits. She states, “statistics indicate that we can catch up on about twenty hours of missed sleep. We can also only catch up on this debt in one- or two-hour [periods] at a time—not in one block.” Unfortunately, this debt is already burdening many people. Estimates put the yearly price at $15 billion in healthcare expenses and $50 billion in lost productivity for the US alone. Changing habits can be tough, and the stresses of everyday living can make sleep seem like a luxury. But, depriving yourself of sleep does nobody any favors.

|  |  |
| --- | --- |
| **Unit 10 Lesson 2** | **HEALTH** |

**Burnout Syndrome**

We have all experienced stress, whether caused by long hours, tight deadlines, or just the demands of contemporary life. The worlds of education and work can, at times, be incredibly demanding. While the human mind and body are incredibly resilient, prolonged periods of stress can cause serious damage to our mental and physical well-being. We call this phenomenon “burnout.”

Quickly identifying the signs of burnout could help people avoid its worst effects. So what should we be looking out for? The most common symptoms of burnout can be divided into two main types: emotional and behavioral. Emotional symptoms include a lack of interest in work, a sense of failure or defeat, feeling cynical or negative, and being detached from the world. Behavioral signs to look out for include withdrawal from responsibility, skipping work or school, seeking isolation from others, substance abuse or overeating, becoming annoyed easily, and procrastination.

Besides knowing which signs to look out for, it’s also good to know which situations are likely to lead to burnout. Education, while of huge benefit to us all, also accounts for much modern stress. As qualifications have become more important, competition has increased. Today, it can seem more important than ever to achieve the highest standards. However, it may be that this obsession with education, far from being of benefit, actually reduces the quality of students’ education. The periods around exams hold the highest risk of academic burnout. Medical researcher Jacob Shreffler suggests that students should limit study hours per day, take breaks and days off, exercise, and make time for fun. He also advises eating and sleeping well, studying with friends, finding relaxing study spaces, and keeping watch for feelings of burnout.

Graduates could be forgiven for thinking that the most stressful period of their lives is over. Unfortunately, this may not be the case; competition and workload in the professional world can also be overwhelming. In fact, researchers at Stanford University have found that workplace stress leads to 120,000 deaths in the US each year.

Dr. Yulia Okhotina is an expert on stress at work and supports many of Shreffler’s strategies. However, she also suggests that people who start to feel burned out should be prepared to say no or ask for help when workloads become unbearable. Employees can often worry about appearing unhelpful or even lazy and agree to work unhealthy hours or on several projects at once. However, this eagerness to please could be the perfect recipe for burnout. Wanting to appear “invincible” may harm your health and your career prospects. The employee who suffers in silence may be less productive and, therefore, less successful in the long run. As Dr. Okhotina puts it, “the areas you decide are important to you will benefit from your improved attention.”

As the effects of burnout become clearer, businesses realize that the phenomenon is not simply harmful to employees but bad for business. Research by *Harvard Business Review* notes that employees take a combined total of 550 million days off each year because of stress. For the US economy, the cost of these lost days is around $500 million a year. On top of this lost revenue, a study by the American Psychological Association found that burned-out employees are 2.6 times likelier to be looking for a different job.

Consequently, some employers are beginning to reduce working hours. Along with those in other Scandinavian countries, employers in Sweden have found that staff who work six hours a day are healthier and less stressed than those who work eight. They tend to get more exercise and can spend relaxing, rewarding time with their families. Also, companies such as Apple, Google, and Nike now organize meditation sessions for staff, something of which Dr. Okhotina would approve. She recommends meditation as a

means of temporarily shutting off the “constant flow of information” we are exposed to during the average day.

Burnout is a threat to individuals, businesses, and even national economies. However, parents, schools, universities, and employers are now beginning to realize the benefits of providing environments that are calm and healthy and therefore more productive.

|  |  |
| --- | --- |
| **Unit 11 Lesson 1** | **CHILD PSYCHOLOGY** |

**Food for Thought**

There is no manual that teaches you how to be a good parent. That’s because parenting is an art, not a science. Despite there being thousands of books promoting different parenting styles, there is still no guaranteed method that will lead to happy and successful children. Every family is unique, so each requires different considerations. However, it doesn’t hurt parents to learn more about the kinds of activities and behaviors that could possibly benefit a child. By doing so, parents can make educated decisions about their children’s needs and give them proper guidance. After all, every parent should aim to provide their children with the best social skills, emotional intelligence, and health benefits they can. One simple and proven way to do this is to eat meals together regularly.

A study conducted in Canada at the University of Montreal and published in the *Journal of Developmental & Behavioral Pediatrics* shows the benefits of eating meals together. The researchers looked at several families, beginning when the children were five months old and continuing for over a decade. The study looked at the long-term effects that different shared-meal patterns have on child development. Families participated separately, and they ate meals with their kids at different frequencies. Researchers, parents, teachers, and the children provided information throughout the study. This included information about the children’s lifestyle, habits, and mental, physical, and social well-being. The researchers found that families that frequently shared quality mealtimes with their kids had children with better developed social skills and greater emotional intelligence by age six and higher psychological and physical fitness levels by age ten.

One of the researchers said, “From a population-health perspective, our findings suggest that family meals have long-term influences on children’s physical and mental wellbeing.” Another researcher added: “Family mealtimes provide young children with social interaction and discussions of social issues and day-to-day concerns in a familiar and emotionally secure setting. This communication likely helps the child engage in better communication skills with people outside of the family.” The findings suggest that family meals, while not the only thing required of a good parent, are a natural and effective activity that improves a child’s well-being.

Emotions serve as signals that we can interpret and use to make decisions. A noisy stomach signals the need for food; similarly, a child’s facial expressions and body language can broadcast information about the child’s emotional state. Getting children to talk with their parents about their emotions can be difficult. Therefore, parents must create a two-way street of communication. Parents have more life experience than children and naturally want to give them advice. But to give proper advice, parents have to first look and listen to how their child is feeling. This was exemplified in the study by the finding that children who regularly had meals with their parents communicated their feelings better and exhibited less physical aggression by age ten. This is because they had learned to talk about their feelings and had constructive outlets for their emotions.

Another benefit of having routine quality mealtimes is the improvement it makes to a child’s physical health. Experiences and diet during childhood and adolescence play a key role in determining a person’s physical well-being as an adult. Kids who grow up in families that have routinely shared mealtimes are more likely to have healthier eating habits later. For example, children who ate more regularly with their families exhibited lower levels of soft drink consumption during the study. Not surprisingly, the researchers also found that shared quality mealtimes at age six led to better fitness levels by age ten.

Sharing mealtimes might seem like an insignificant thing to some people when they consider the big picture of raising a child. But it is one of the easiest and most effective ways for parents to devote quality time to their children. It’s a small gesture that leads to better relationships and increases the odds of a child growing up well-adjusted and healthy.

|  |  |
| --- | --- |
| **Unit 11 Lesson 2** | **CHILD PSYCHOLOGY** |

**Participation Trophies**

Parents can be sensitive when it comes to their kids. As a high-school teacher, I probably know this better than most people do. Just last week, I had a two-hour meeting with a mother who, upset about her son’s failing grades, decided that I was the problem. (I’ll call this student Justin—not his real name.) “If you gave Justin passing grades,” she insisted, “his self-esteem would improve, and then he might actually start doing better.”

Give Justin good grades that he doesn’t deserve, and then true success will follow. His mother honestly believed this. “I’ve read studies,” she said. “I know what I’m talking about.” Clearly, this woman cares a lot about her son. After all, she has done some research and read parenting books. So, what will I do? For one, I won’t give in to her demands. Justin will fail my course if he doesn’t change his habits. As cruel as this might sound, he could become a better student for it.

Unfortunately for today’s children, many parents won’t agree. Overprotective parents are afraid their children will suffer from low self-esteem if they fail, insisting that their children will perform better in sports and school if they start the learning process with inflated confidence. So they hover around teachers and coaches, making sure that their children encounter as few hurdles along the way as possible. But in my opinion, overprotecting children does more harm than good. When kids aren’t allowed to fail or make mistakes, they don’t learn what not to do. Thus, they cannot build the skills they need to make choices that will help them succeed.

The original intention of awards was that they were to be earned by overcoming difficulty. The process of struggling through a hard time and achieving the goal is what an award is meant to recognize. If you attend any children’s awards ceremony today, you’ll have trouble figuring out who actually achieved anything. The worst-performing students receive the same praise as the winning teams and the most hard-working students. Trophies are no longer reserved for the best but are handed out like cake at a party—to anyone who shows up. I happen to think that trophies gained through no particular effort could actually lower the performance of winners and losers alike. Rewards only motivate when they have value, and the basic law of economics states that the value of anything is proportional to its supply. When rewards are passed out to everyone, their supply increases to such an extent that they are made worthless. Thus, such rewards lose the very effect that they were designed to produce—they no longer motivate anyone. This results in mediocre performance across the board. Winning teams and top students simply stop working hard because everyone gets a prize, no matter what.

Sadly, it gets worse because an extensive sense of entitlement makes failure more difficult to accept in the real world—specifically, in the workplace. Here, bosses don’t give away prizes freely, choosing instead to reward performance. Coddled kids—now young adults—have a very difficult time adjusting when they haven’t experienced the benefits of meaningful failure in the past. As a teacher, I can tell you that undertaking a challenge and seeing it through until you triumph is how you grow as a person. Psychology professor Jean M. Twenge of San Diego State University sums up the problem nicely in her book *The Narcissism Epidemic: Living in the Age of Entitlement.* She writes: “The ‘everybody-gets-atrophy’ mentality basically says that you’re going to get rewarded just for showing up, but that won’t build true self-esteem.” To prevent this, parents must teach children how to deal with their failures rather than protect them from anything unpleasant.

Failure hurts, but it must be experienced so that it can be overcome. When parents are overprotective of their children’s self-esteem, they actually damage their kids’ potential for success. Achieving something feeds self-esteem, not the other way around, and children can only achieve success if they’re allowed to make mistakes—and learn in the process. I don’t enjoy failing students. However, it really is for their own good. The students I fail will learn a hard lesson, but it’s better than learning nothing at all.

|  |  |
| --- | --- |
| **Unit 12 Lesson 1** | **ETHICS** |

**Plant-Powered Living**

The basic principle of vegetarianism is simple: eat plant-based food products and not food products derived from animals. Although this idea is pretty straightforward, the wonderful world of vegetarianism doesn’t end there. To some people, this lifestyle seems strange. There are those who see vegetarians as having radical views or being malnourished. But in reality, what it means to be a vegetarian is poorly understood. The actual reasons for becoming vegetarian are diverse, as are the kinds of plant-based diets. By learning a little more about vegetarianism, you can see why people choose this lifestyle and how it can help you live a longer, healthier, and more environmentally friendly life.

According to the Mayo Clinic’s *In-Depth Nutrition and Healthy Eating* guide, there are six basic types of vegetarians. A lacto-vegetarian follows a diet that excludes food products containing meat, fish, poultry, and eggs but includes dairy products like milk, cheese, and yogurt. Next, ovo-vegetarians exclude meat, poultry, seafood, and dairy products but allow eggs. The third kind of vegetarian is a sort of mixture of the first two types. Lacto-ovo vegetarian diets exclude meat, fish, and poultry but allow both dairy products and eggs. Fourth are pescatarians, who exclude all animal-based foods except fish. Fifth is a vegan diet, which is the most limited. It excludes all foods that contain meat, poultry, fish, eggs, or dairy products. Sixth is the least limited—sometimes called a semi-vegetarian or a “flexitarian” diet. People who follow this diet mostly eat plants but include animal products in small amounts.

Now that we understand the various types of vegetarian diets, let’s look at why people choose to become vegetarians. According to a study conducted by Ipsos Retail Performance, a market research firm, there has been a 300-percent increase in the number of vegetarians from 2004 to 2019 in the US. Nearly ten million Americans now consider themselves vegetarians. There are various reasons for making this choice, including religion, environmental impact, morals, and health. Perhaps the least clear and easily understood among these reasons is the environmental impact. Farm animals that provide food products require a lot of land to raise. And massive amounts of energy are required to provide them with shelter, food, and transportation. Also, farm animals, particularly cows, create methane—a greenhouse gas. In the US, it’s estimated that agriculture is responsible for ten percent of all emissions.

After becoming vegetarian, many people notice both immediate and long-lasting improvements to their health. Most plant-based diets contain foods that are less processed and have fewer chemicals. Eating more natural and less processed food means you are more likely to have lower blood sugar, which reduces your risk of diabetes. Furthermore, one Harvard Medical School study shows that plant-based diets can lower your cholesterol, reduce the risk of many serious illnesses, and extend your life. Many fruits, vegetables, and seeds are loaded with antioxidants that help the body fight diseases and repair damaged tissue.

While removing certain things from your diet has obvious benefits, people sometimes worry that a vegetarian diet can lead to poor nutrition. One common misunderstanding about vegetarianism is the idea that a plant-based diet cannot provide sufficient nutrition. It’s true that some things humans need are only or mostly found in animal products. No plant-based food by itself contains complete proteins, and only animal products can provide vitamin B12 and the kind of iron that our bodies absorb most easily. But research shows that with enough diversity, along with supplements, your body can have the full complement of nutrients that it requires.

Becoming a vegetarian comes with a lot of choices. You can choose your reasons for doing so and choose the vegetarian diet that is best for you. As a bonus, the benefits extend beyond just you. Not only might you live a longer, healthier life, you will also help protect the environment.

|  |  |
| --- | --- |
| **Unit 12 Lesson 2** | **ETHICS** |

**Nature’s Food Chain**

The critically acclaimed 2017 South Korean movie *Okja* is a story about humans and farm animals. The film explores the relationship between a simple farm girl and a genetically modified “super-pig” that is created by a large corporation. The corporation calls the livestock experiment a success and says it is environmentally safe and ethically sound. Throughout the movie, a different and darker reality is revealed about the company. The film explores the troubling realities of animal labs and factory farming of livestock. *Okja* is sometimes compared to the 1995 film *Babe*. *Babe* and *Okja* show animals as having feelings, passion, drive, and even goals, just like humans do. The main human character in *Okja* is best friends with the pig. Here’s the problem, though: these are movies, not real life. Pigs cannot talk, and the overwhelming majority of humans do not have meaningful friendships with farm animals. *Babe* has been called a 92-minute argument for vegetarianism. The arguments in both movies have an emotional appeal. However, they cannot stand up to arguments based on objective facts and logic. In fact, including meat in your diet is both morally acceptable and necessary for your health.

The most powerful weapon vegetarians have is the undeniable cruelty of the meat industry. There is no excuse for making a living organism suffer without a clear and just reason, and there is no doubt that pigs, cows, chickens, and other animals that we eat do suffer. In factory farms, millions of animals receive abuse. These animals live short, miserable lives in tiny cages without ever seeing daylight, just because it is cost-effective. This is absolutely terrible, and concern about animal cruelty is an excellent reason not to buy meat that comes from factory farms. Yet it is not a logical reason to abandon meat products altogether since meat can be, and is, produced ethically. Those who object to the methods of industrial agriculture can try a farmers’ market or look for labels that read “organic,” “free-range,” or “cruelty-free.” Of course, these labels are not always accurate; making sure they are requires some research on the shopper’s part, just like it does for “non-genetically modified” and “pesticide-free” fruit and vegetable products.

What about the idea that it is wrong to take a life, any life, in order to eat? Plants are also living organisms that must be raised for humans and animals to eat. In nature, there is no clear line between living things that have emotions and ones that do not. Scientists have found that plants can distinguish relatives from strangers; they “cry out” in response to stress by releasing a particular gas, and they grow faster when music is played to them. Apparently, there is no way for humans—or other animals—to avoid eating living things with feelings of some sort. Plus, plants help keep our air

and water clean, control the climate, and make life on Earth possible. So one could argue that they are just as important as, if not more important than, animals.

It is a scientific fact that many consumers in the food chain have evolved to eat both plants and animals. Humans belong to this category of consumers, called omnivores. Omnivores can be identified by the different types of teeth they have—some of which are for slicing meat, others for smashing plant matter. Besides a few species of tiny organisms that eat minerals, all animals’ diets depend on the deaths of other living things. There are even some carnivorous plants that eat insects and other small animals like mice.

It is moral to care about the lives and the suffering of animals. However, to abandon meat-eating out of guilt is to take emotion too far, at the expense of our health. If the title character of *Babe* was a normal pig, he was an omnivore, as we humans are. He ate leaves, insects, and worms. He could experience pain, much like we do, and that’s reason enough to treat him in a kinder way than the typical factory farm would. But he also killed to live, just like we do. We must eat meat ethically, but we must eat meat.