University of Arkansas
RICH MOUNTAIN

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UA Rich Mountain
Assessing Student Learning
Course Outcomes Report
Mysti Gates
Spring 2022

Purpose
The Course Outcomes Report supplies information each semester regarding student learning on the course level. This report must be submitted to your division chair by the last day of the semester. Data from this report will be integrated into the annual Program Review. The Strategic Goals aligned with this report are Strategic Goal Three: Provide High Quality Education and Strategic Goal Four: Continuous Quality Improvement.

Course Details
Course Name: English and Composition I Course #: ENG 113-01

Assessed Outcome
Course Outcome: Write a clearly expressed, grammatically correct five-paragraph essay, including a thesis sentence, central paragraphs, introduction, and conclusion.

Related Program Outcome: Students will increase their reading, writing, speaking, and listening skills.

Related GELO category (choose one):
- ☐ Thinking critically
- ☒ Communicating effectively
- ☐ Using technology
- ☐ Conducting relevant research

Evidence of Student Learning
Describe the classroom activity/tools related to the **course** objective (project, discussion, essay, quiz, etc.): Students were expected to write 2 essays for Comp I – one on a topic related to technology and one on a controversial issue. Essays were to include a minimum of 3 credible sources to be cited in the MLA documentation style.

5. Course Data
Number of students in your course(s) who met the course objective: 7

Total number of students in your course section(s): 7

Percent (%) of students achieving this course objective: 100

6. Response to Data
Will you change how you teach as a result of this assessment?

☐Change(s) needed. *Type explanation here.*

☒No change(s) needed.

Seven out of 7 students scored a C or higher on the first essay. Score breakdowns include one A, five B's, and one C. Six out of 7 students scored a C or higher on the second essay. Score breakdowns include one A, four B's, and one C. The 7th student simply did not submit an essay but still has a few days left to do so. The student did score

***Attach <u>anonymous</u> student samples of each activity along with the grading rubric/scale.**
****Attach any meeting minutes associated with this assessment.**

Attached: 2 essays from the same student

- one on technology
- one on a controversial topic

Grading rubric

Mrs. Gates' Essay Checklist

- ❑ Strong thesis
  - ❑ Highlighted in YELLOW
- ❑ Relevant topic sentences
  - ❑ Highlighted in GREEN
- ❑ Correctly embedded evidence
  - ❑ Including correct use of quotations/italics in leads
  - ❑ Highlighted in PINK or BLUE
  - ❑ Quotes of 4 lines or more adhere to special formatting rules
- ❑ Student adequately discusses/analyzes the evidence (quotes)
- ❑ Student transitions well from one topic to the next
- ❑ Correct formatting of borrowed material
- ❑ Correct parenthetical citations (MLA)
  - ❑ Author's last name and page number
  - ❑ Page number only if author is mentioned within the sentence/lead
  - ❑ Last name only if there are no page numbers
  - ❑ Period goes AFTER the parenthetical
  - ❑ If no author, include the title (keep the quotations or italics)
- ❑ Matching Work Cited entries
- ❑ Minimum 3 sources
- ❑ Works Cited Page (MLA)
  - ❑ Hanging indent
  - ❑ Organized alphabetically
  - ❑ Citations are complete
  - ❑ Quotations and/or italics used as applicable
  - ❑ Proper punctuation
- ❑ Paper is double-spaced
- ❑ Heading on page 1
- ❑ Times New Roman, 12 pt font
- ❑ Header with last name and page number
- ❑ Paper is not too dependent on sources
- ❑ Essay is well-written
- ❑ Student avoids the use of contractions and slang
- ❑ Paper is free from first and second person pronouns
  - ❑ First person pronouns *may* be suitable in the introduction
  - ❑ Second person pronouns are *only* acceptable inside quoted material

NOTES:

B+

[redacted]

ENG 113 01

Mrs.Gates

11 Apr. 2022

Biometric Technology within Business Security

Biometric technology has been seen in movies for years - think *Mission: Impossible*, but it is not just limited to spies and secret agents. Biometric technology plays a very important role in businesses and companies daily and is becoming more prevalent every day. Making the security process more convenient and reliable, saving the employer thousands of dollars a year, and the increasing usage among major companies are just three reasons why biometric technology is the future of business security.

Biometric security is very reliable and convenient for the employee and the employer. Reliability and convenience are two really important factors when looking at security measures in a business setting. If not convenient, that which is being asked may be avoided by employees completely. Maria Pilhström, a senior global marketing manager for Fingerprints Biometrics commented, "As our daily lives become more connected and digital, 60 percent of consumers feel they have too many passwords to remember, with the average person having as many as 85 passwords across all professional and personal accounts" (Pilhström). Switching over to a fingerprint or retina scan could relieve employees of the pressure of trying to remember so many extra passwords, and employers of the common practice of password sharing - which leads to

information leaks. Because "unique biometric traits are highly specific and difficult to steal and spoof, integrating biometric technology into the workplace for physical and logical access could be the solution businesses need to realize, a new era of workplace security" (Pihlström). Without these advancements, companies would continue to put themselves at risk of leaking information, which can also lead to losing profits.

Biometric Security also helps cut costs and saves employers thousands of dollars. As stated above, information leaks can cause profit loss but there are some other factors to consider when it comes to businesses and budgeting security measures. The first thing to consider is how much the upkeep of a dated password login or manual time punch system costs. An article by the SHRM Association reports, "They're also expensive for companies to manage, according to Alex Simons, director of program management in Microsoft's identity division, in an interview with CNN. Simons said he spends over $2 million in help desk calls a month helping people change their passwords" (Maurer). These are costs that could easily be avoided with an updated system. Another pricey factor is user error, intentional or unintentional. Danny Thakkar has been working in the biometric technology production field for more than 20 years now, and he stated in an article that "[b]uddy punching costs employees millions of dollars every year and a study found out that payroll gets inflated by almost 2.2 percent on an average due to it…If a manufacturer employs 1000 workers at an average salary of $35,000 then buddy punching would inflate the payroll to $770,000 annually" (Thakkar). With the use of a biometric security system, such as a fingerprint ID scanner, those funds could be saved and used productively.

Finally, the business world is constantly advancing and growing, and so is the presence of these security systems within these companies. Companies need to be willing to change and grow with the market. Krasnokutsky argues in a *Mobidev* article, "AI based security is

increasing in usage and will be necessary to remain competitive in any industry. IBM reports that as of 2021, 25% of businesses have completed deployment of AI based security, while 40% are partially deployed" (Krasnokutsky). He goes on further to say "The remaining 35% have not begun this process, and if your business falls into this category you may be placing your clients at great risk for dangerous data breaches" (Krasnokutsky). Protecting the customer and their information should always be a top priority, and biometrics are proving to be top-of-the-line protection and security.

Biometric security is advancing and becoming more efficient every day. While these systems do have their shortcomings, they are a very essential next step towards security. Disney, American Airlines, and Barclay Banking are just a few examples of well-known companies that have taken that step. Protecting customers, employees, and employers alike - saving the company from big profit losses, and the flexibility to change and grow with a company's needs are just a few reasons why biometrics should be a growing business's next investment for security needs.

Works Cited

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B

Disadvantages of green energy

In the US, 80 percent of the energy consumed comes from fossil fuels. There is no doubt about it that these sources of energy are bad for the environment, a large contributor to climate change, and not sustainable for long term use. Change is necessary, but often the solutions are misrepresented. America is at an energy crossroads, and green energy is one of the most popular competitors against fossil fuels - but green energy is not as green as people think. Biomass, solar, and hydropower are three of the most preferred - but not so clean - energy sources.

Biomass energy is having more negative impacts on human health and the environment than coal. Alternative energy apart from fossil fuels is a necessity, but biomass energy is a dangerous delusion. According to research done by Harvard's School of Public Health:

> As coal use has decreased, the share of health impacts from stationary sources has risen from gas, wood, and biomass. Together these fuels accounted for an estimated 70-77% of total early deaths from fuel consuming stationary source PM2.5 in 2017. (Negative impacts of burning natural gas and biomass have surpassed coal generation in many states")

Biomass energy often comes from the burning of wood and wood pulp, which is leading to air pollution. The release of carbon monoxide, nitrogen oxide, and soot into the air is causing an array of health problems. Headaches, dizziness, and nausea are just a few of the symptoms that have been reported. Another factor to consider with biomass energy and wood burning is the environmental impact. An author at EnergySage commented, "burning wood to produce electricity emits carbon dioxide into the atmosphere, but trees will re-grow and capture the emitted carbon

dioxide. However, forests can take decades to regrow and sequester carbon, so the carbon neutrality of that source of bioenergy depends on the time frame you're looking at"(" Environmental impacts of biomass"). The harvesting, transportation, and conversion processes have to be considered, as they are not always carbon neutral. During harvest these factors need to be considered - soil erosion, habitat loss, and even the carbon release from the soil. Transportation of the product is expensive because of the high moisture content, and ultimately a big player in the consumption of fossil fuels - gasoline and diesel. Finally, the conversion process. This can be a clean process if the plant is willing to spend more, as it can be a very expensive investment.

Following biomass is solar power. While the energy production process does not produce emissions, there are other areas of this fossil fuel alternative that need to be checked out. The first thing to look at is production. Cabe Atwell, an author for the *EE Times* commented, "the manufacturing of solar cells is nearly identical to any other semiconductor, and the process of producing them uses a number of different hazardous chemicals, most of which are used to clean the PV surface" (Atwell). He goes on further to say "These include hydrochloric acid, sulfuric acid, nitric acid, acetone, 1,1,1-trichloroethane, and hydrogen fluoride — all of which are detrimental to humans and the environment if handled or discarded improperly" (Atwell). Solar power currently makes up 3 percent of energy in the US, but is predicted to make up 20 percent by 2050. That means this manufacturing process will continue on, and not far behind production is disposal. A solar panel's lifespan is typically 15-30 years, and after that power generation slows down quite a bit per panel. That is a pretty good amount of time, but where the problems come in is early replacement. Ryan Kennedy with *PV Magazine* reports some statistics from IRENA, "Without changes to the current structure of solar panel retirements, the world could witness some 78 million tons of solar trash disposed in landfills and other waste facilities by 2050, according to

the International Renewable Energy Agency (IRENA). They predict the U.S. will contribute 10 million metric tons of trash to that 2050 total" (Kennedy). That is a lot of trash, and on top of that - the solar panels contain the toxic chemicals mentioned above, and those can leak out as they break down, which causes another big set of problems with pollution.

And finally, hydropower. In some people's opinions, this can be the most dangerous of these three green energy solutions . These energy plants cannot be built just anywhere, they need consistent water flow and large amounts of land, and a lot of times this land is not unoccupied. Lindsay Fendt, a journalist for MIT Climate shared these statistics in an article, "The World Bank estimated in 2000 that between 40 and 80 million people had been directly displaced by dams and reservoirs.Another study from 2010 estimated that 472 million people downstream from large dams suffer from reduced food security, regular flooding or impacts on their livelihood" (Fendt). When large dams like these are built, it can make it more difficult for fish to make it up and downstream. Sometimes fish ladders are built, but there are mixed opinions on whether they are effective enough to make a difference or not. Hydropower is a good option when it comes to low carbon electricity, but the benefits need to be weighed, as these can lead to environmental and social issues.

Just as fossil fuels have issues, so do green energy sources. All of this needs to be considered as the journey continues to find the cleanest way to power our everyday lives. Often green energy is claimed to be the final answer everyone is looking for - and while it is definitely a step in the right direction, these negative factors need to be brought to light. Misrepresentation leads to mistrust, so why misrepresent? With the necessary information, more time, and a well balanced mix of these different types of energy, fossil fuels can become part of the solution and green energy can continue to develop into something amazing.

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