

IMPROVING STUDENTS' ENGLISH SKILLS BY WATCHING MINING VIDEOS

Indri Lesta Siwidiani¹

¹UPN "Veteran" Yogyakarta

Afiliasi/Institusi Jurusan Teknik Pertambangan, Fakultas Teknologi Mineral, UPN "Veteran" Yogyakarta,
Jl. SWK 104 (Lingkar Utara), Yogyakarta 55283 Indonesia
email: aldinardian@upnyk.ac.id

ABSTRACT

Nothing is impossible in this world, this expression shows that when people want to achieve their dreams, they must try hard to make them come true, there's a saying: no pain no gain. Anyone needs effort to push themselves to be such persons they want. For mining engineering students who want to continue their studies abroad, to become article writers in international media, to become international speakers or presenters at international seminars or workshops or at events, but English proficiency is their barriers.

The recommended way to improve their English skills is by watching mining videos habitually, regularly and consistently at any time they have spare time. They will not only be fluent in mastering English both in written and spoken forms, but they will also gain a lot of experience, knowledge and technology applied in mining engineering and in ores or mineral processing more broadly and globally.

Keyword : english skill, improve,

I. INTRODUCTION

Many Indonesians want to contribute to the development of science, knowledge or technology in the international arena. They like to share their ideas or concepts through both in written or spoken medias enthusiastically as scientific article writers or speakers in any various international seminars, webinars or workshops, but they think it will be difficult to do because they are lacking of English proficiency, they have no confident at all even though they have been already studied English in so many years or at least more than ten years. They think that they still need more time for learning English to fulfil their dream that their English will be like native speakers sooner or later, someday.

They realize that the problems are always related to four skills of English (reading, writing, listening and speaking) which are composed by grammar. So, they think that the most difficult things to be handled when learning English is in mastering grammar, especially which deals with the form of sentences and smaller units: clauses, phrases and words of Standard English, and sometimes in aspects of English language of vocabulary or terminology as well. The important thing to do is to find some effective tips and tricks, some applicable strategies and techniques to handle them.

There are many translation tools or application in the internet that will help them in translating their ideas or concepts from Bahasa into English or into other languages, but sometimes these tools can't accommodate their needs appropriately. They assume that those trans-tools will support them temporarily and passively, their requirement in mastering English is beyond of that, their demand is being active in both written and spoken English.

To overcome those kinds of problems, as observer in English language teaching and learning should find a simple and easy way to improve English proficiency effectively and efficiently, especially for students of Mining Engineering Department. Some kind of way that makes students not realizing that they are actually learning English, they learn about English grammar: words, phrases, sentences, tenses, vocabulary and their meanings, or about other things related to the English four skills. If they do this learning process continuously themselves independently, their ability to master English will increase rapidly, and it will have an impact on their careers in their future. So, they will be able to manage their English proficiency actively. They are able to continue their study abroad, to step up their carrier in foreign companies, to share their knowledge, skills and abilities to anyone everywhere confidently.

II. METHOD

1. Reading

Reading comprehension is the ability to read text, process it and understand its meaning. This understanding of the meaning of text comes from the interaction between the words that are written in a text and how they trigger knowledge about the message outside the text. It means that reading is not only learning about grammar and translating any words for searching meaning of certain passage, but reading is thinking. Students should be able to create some visualization when reading and interpret message contained in the passages, books, articles they read. They should do a lot of reading, even though it is just to get a general idea of a text,

to find particular pieces of information, to know the results of a scientific study or a set literature text, to make notes or highlight important points of reference, or even to spend free time they do reading just for pleasure. Their reason for reading will help them decide how to read and manage the time.

Reading should be done by students as often as possible and students should make it as a habit or a daily routine. By reading a lot, it will help them very well improve their reading fluency, increase their comprehension, and expand their vocabulary, especially when they are able to create reading group or community to discuss certain books in certain time and place that they can enjoy together continually.

Those things are in lined with statements that revealed by Beatrice S. Mikulecky and Linda Jeffry in their book with title "*More Reading Power*". It stated that "Reading is one important way to help students improving their English skills because it can help students to think in English, to enlarge their English vocabulary, to improve their writing skill, to prepare their study in understanding their original textbooks written in English, to find out new ideas, facts, and experiences as well.

2. Writing

Writing is an activity to express, produce, and record thoughts, feelings, facts, ideas, concepts, messages, information through words, phrases, sentences, paragraphs, articles, books, or others, it could be via paper, computer screen, notebook and using pen, pencil or keyboard. Writing English is unlikely to be the same as writing for getting the right punctuation and grammar, but the writers should understand how to write correctly. Great writing will generate ideas and sparks that capture readers' attention impressively (Siwidiani, 2021).

More over Siwidiani stated that writing is a process done by writers to deliver their message to the reader. To make this process easy, it will be better for the writers to use every day English with communicative expressions, to apply simple sentence constructions with active voice or direct speech, to be concise and positive, to explain technical terms usage, to employ headings and list in order to direct the reader's eye and lead them through the document or text properly.

In line with Fiona Talbot's statements in her book "*How to Write Effective Business English*", she stated that 'So, if as a non-native English speaker, you are to write effectively in English, it will be helpful for you to be systematic in approach'. A sequence that should help you is as the following:

- a) Identify the thought effectively in your own language.
- b) Translate it correctly from your own language into English.
- c) You may then need to convert the thought captured in English into the correct written English word.
- d) Then make sure that the 'correct written English word' is actually the one that your readers can interpret correctly.
- e) Having done all this, your English writing should enable readers to respond the way you want.

3. Listening

Listening comprehension is listening (or hearing activity with full attention) to what someone is saying, and attempting to understand what is being said. It can be described in a lot of ways. The listeners analyse what the speaker is saying for hidden messages, and meanings contained in the verbal communication. They look for non-verbal messages from the speaker in order to indicate the full meaning of what is being said (Siwidiani, 2021).

Listening comprehension encompasses the multiple processes involved in understanding and making sense of spoken language. These include recognizing speech sounds, understanding the meaning of individual words, and/or understanding the syntax of sentences in which they are presented. Listening comprehension can also involve the prosody with which utterances are spoken (which can, e.g., change intended meaning from a statement to a question), and making relevant inferences based on context, real-world knowledge, and speaker-specific attributes (for example, to what information the speaker has access and about what he/she is likely to be talking).

Listeners should use a wide range of strategies to help them comprehend and construct spoken language effectively. They need to be explicitly taught how to select and use a wide range of strategies when listening, and to understand that their use of these strategies will be determined by context and text form. Some strategies will be more appropriate to use before listening, while or during listening; and after listening are more suited to reflection and review. Listeners need to be able to apply these strategies throughout the listening process, before listening to determine how much detail they will need to understand the message, and during listening to determine which information to closely attend to and retain, and after listening for reflecting and reviewing on the message they hear.

4. Speaking

Speaking is an activity to express or communicate needs, wants, ideas, feelings, thoughts, facts, concepts, messages, information through words, phrases, sentences orally. Speaking is also a process to respond dialogue, chat, talk or conversation. When non-native English speakers want to speak fluent English, they should retrain their tongue as it is to train their memory, and then if they like to be more effective, they must retrain their mind, tongue, and hearing at exactly the same time because they must work together when they speak English (Siwidiani, 2021).

Speaking is the most difficult English skill for some students when they want to express their ideas, feelings, needs or when to respond to other people's conversations. When they try to start speaking, it seems that most of the words are already in their tongue but they don't readily come out. When the words come out, they sound random and disconnected to the topic. That makes students find themselves speaking in a clumsy and unclear way, with long gaps and intervals of indecision between every two words and it make them speaking awkwardly. Not only this, they find it difficult to go on beyond one or two lines, without stuttering, then, they tend to fall back upon their mother-tongue – or become tongue-tied. So, it is needed to overcome all these problems faced by students, especially in developing better speaking skills.

III. RESULT

Watching mining video is an active process in which students digest spoken information into relatable chunks that contain meaning from such mining video. It is not only just hearing what is said on video through words, phrases, sentences; rather, but also identifying and understanding the implicit and explicit meanings or messages of the words or expressions, phrases and sentences the students hear and relate them in some way to know the purpose of the mining video. In here, students are capable to simultaneously understanding a speaker's accent, pronunciation, grammar, vocabulary, meaning, topic and concept, context and purpose of the mining video.

There are so many mining videos that can be accessed via internet with variety of topics discussed, for examples about introduction to mining, prospecting and exploration, techniques of drilling and blasting, mineral processing, mining waste management, reclamation, and many other interesting topics, which can be explored and studied carefully. From these videos, students can

manage themselves to improve and master their English skills undoubtedly, also they are able to increase their knowledge of the mining engineering definitely.

The following mining videos will be observed carefully according to the point of views of both the language used and their contents.

a. What is Mining?

<https://www.youtube.com/watch?v=IL0KfvfSvsg>

This video is very suitable as an introduction to mining engineering, especially for first grade students of mining engineering who don't understand yet what mining is with all kinds of theory, science, knowledge, technology which should be applied. To find out more deeply about this video, let's start observing it from the language used point of view:

- 1) The narrator uses a communicative English or an everyday English with familiar expressions that easily comprehend by students of non-native speakers.
- 2) The sentence structure is not complicated, by using correct choice of words and phrases, the sentence becoming simply understand.
- 3) The narrator sometimes utilizes compound or compound-complex sentences, but they are not composed in more than two lines of simple sentences, this is meant to the audience being able to recognize the content of the video, and to the message being able to be conveyed very well.
- 4) The narrator applies active voice to most of the sentences, it means that he is more focusing to the doers rather than the target of any actions happened in video, even though in several sentences, he applies passive voice too. This is meant to show to the audience that he is also concerning to the target too, sometimes.
- 5) The narrator employs simple present tense and simple future tense in his narration. This is meant that when he employs simple present tense, he intends to inform the audience that the actions showed in the video are happening right now, and when he employs simple future tense with modal verbs in his narration, it means that he desires to show about possibility, ability, intent, obligation or necessity that can be happened in video.
- 6) The tone of the narration is informative, it means that the narrator wants to inform the audience about educational material related to what mining is and its intricacies.
- 7) The organizational text structure of the narration is description, it means that the

narrator plan to describe about the mining with detail information for getting the clarity and ease of understanding.

- 8) The technical terms that the audience needs to pay attention more to, especially for those who may have just heard about them in video, are the expressions like ore, mineral, open cut mining, strip mining, alluvial mining, crude, mine waste, tailings, and some names of certain things or places like River Rhine Disposal, Gold Ridge, Guadalcanal, Solomon Island, and so on. Then, the students as the audience should learned those technical terms by searching them through Dictionary of Mining, Mineral, and Related Terms or any other valid sources

That's all of the observation according to the language used point of view. Now, let's continue this video observation from the content point of view which will be discussed in sequence:

- 1) The narrator opens the video by presenting a general understanding about what mining is. He states that mining is extracting ore or minerals from the ground, and ore is natural material with high concentration of economically valuable minerals which can be used for the manufacture of thousands of goods people use every day.
- 2) Before the mining process can be carried out, firstly, the prospectors will search the minerals, take samples and do tests to find out how much and what minerals are presented in the ground.
- 3) In the next session, the narrator explains there are many different types of mining, such as:
 - Surface Mining is a method removing ore or minerals at or near the surface.
 - Open Cut Mining is a method digging deep into the earth creating a huge hole, and from there the minerals are removed.
 - Strip Mining is a method to strip or remove the Earth's top layers to gather the minerals close to the surface.
 - Alluvial Mining is method extracting metals or open gold from sediments, sands or gravels that are in rivers.
 - Underground Mining is a method extracting ore or mineral at the deep down underground.
 - Development Mining – Deep-sea Mining is a method extracting ore/mineral beneath the ocean surface on the seafloor.
- 4) The narrator, then, describes about the mining process, after removing or digging up the raw materials, the rock and the earth, the next process is transporting them to the processing

plant. A processing plant removes the unwanted rock and earth and separates the valuable ore and minerals from the waste.

- 5) Concerning to the mine waste, the narrator enlightens that some of the methods used to manage mine waste are River Rhine Disposal. It is a crude method where the tailings or waste are pushed or dumped into the nearby river systems. To help control the discharge of sediments into river systems, some miners used tailings dam, with a purpose to slow the flow of water so that the heavy rock and earth fall to the bottom and the water is held or reused in the processing plant.
- 6) The narrator carries on his enlightenment after the mining activity was done. It is the time to repair the environmental damage created by the mine. Responsible and quality mining companies follow up with a rehabilitation program to help speed up the recovery of the environment.
- 7) Before closing his description, the narrator conveys about mining issues, influences and benefits, such as:
 - Mining can also bring change to the lifestyle of the people living in and around the mine sites.
 - Mining has a great impact on the surrounding environment, and perhaps the greatest environmental challenge is the disposal of the mines waste.
 - Mining is a huge business, if well planned and managed mining can bring large-scale development opportunities and benefits to a region.
 - Mining presents business opportunities and employment opportunities.
 - Mining is already a part of our lives and many of the goods and tools that we use every day are made from materials produced from mines.
 - Mining is one of the largest contributors to the world's economy, but then because mining is such a huge endeavour its impact whether good or bad are also huge.

That's all the observation according to the content point of view in general. By watching this video, audience will understand the content properly because the visuals of mining and its intricacies in video will explain more clearly and understandably.

b. All You Need to Know about Metallurgy

<https://www.youtube.com/watch?v=8YqBzwMQeZs>

The video with topic or title “*All You Need to Know about Metallurgy*” is also very suitable as an introduction to mining engineering students both for those who study about mining or metallurgical engineering. The observation to this video will be done the same as the previous video discussed above. This video will be observed according to the language used point of view and content point of view. Let's start observing it from the language used point of view:

- 1) The narrator uses formal English, it means that he applies professional or academic contact expressions in his narration.
- 2) The sentence structures are not complicated, most of them in simple sentence structures.
- 3) The narrator uses intermediate to advance choice of words and phrases.
- 4) The narrator sometimes narrates with compound or compound-complex sentences with two lines of simple sentences.
- 5) The narrator applies both of active voice and passive voice in his narration.
- 6) The narrator employs simple present tense almost in all of his narration and several simple future tense.
- 7) The tone is informative, the narrator wants to inform about educational material related to metallurgy.
- 8) The organizational text structure is description with properly detail information about metallurgy.
- 9) The technical terms should be learned more are: pulverization, centrifugation, jaw crusher, ball mill, calcination, gangue, conveyor belt, froth, mud.

The observation will be continued according to the content point of view, it will be as the following:

- 1) The narrator begins to explain about the meaning of metallurgy. Metallurgy is the process of obtaining pure metal from ore.
- 2) To obtain pure metals, it should be carried out through five steps which are:
 - crushing and grinding of ores
 - concentration of ores
 - roasting, calcination and smelting
 - reduction of metals
 - refining of metals
- 3) Crushing and grinding ores done in big jaw crushers and ball mills is a process to get fine powder. This process is called pulverization.
- 4) Concentration of ores is a process removing impurities which can be done by three methods, as follows

- Centrifugation is done when there is difference between the densities of the ore and the impurities.
 - Froth flotation is used to concentrate ores that are in sulphide forms.
 - Magnetic separation is done when the pulverized ore is placed on a conveyor belt that has two magnetic wheels which will attract magnetic particles, then they will fall separately apart from the non-magnetic particles.
- 5) Roasting is the process of heating concentrated ore to high temperature in presence of excess air.
 - 6) Calcination is the process of heating the concentrated ore in absence of air at a temperature not sufficient to melt the ore.
 - 7) Smelting is a melting operation in which the constituents of the ore are in melted form.
 - 8) Reduction of metals can be done using reducing agents as well as by the process of electrolysis and thermal decomposition.
 - 9) Refining of metal is purification of crude metallic products electrolytically or chemically.

The explanation above is the observation based on the content point of view in general. Visualization always says better, clearer and more understandable, so there will be no doubt for audience to comprehend the content of this video about metallurgy well.

This observation is to prove that students are able to improve their English skills by watching mining videos. There are four category data obtained, as follows:

1. When doing presentation and discussion, the students are able:
 - to prepare the ppt appropriately, they are proficient writers. It means that the students organize the spoken information they'd caught from watching mining video to be written information which they have to expose it professionally in front of the audience.
 - to deliver the content of their ppt orally, they are competent performers. It means that the students arrange skilfully the written information of their ppt to be the spoken information in front of the audience.
 - to respond to audience questions, they are capable answerers. It means that the students manage themselves to convey reasonable answers logically based on

their knowledge they gained from watching mining video to the audience.

2. When doing written quiz, the students are able:
 - to answer all questions reasonably in written forms by using proper English with less grammatical error.
 - to explain their answers for several certain questions logically with their own words in written forms.
 - to describe their answers for several specific questions appropriately in written forms.
3. When doing spoken quiz, the students are able:
 - to answer all questions reasonably by using proper English with less grammatical error in spoken forms or orally.
 - to explain their answers for several certain questions logically with their own words in spoken forms or orally.
 - to describe their answers for several specific questions appropriately in spoken forms or orally.
4. When learning mining videos, the students are able:
 - to read the title and subtitle or any information written on the video visualization they watch and read other articles related to the topic of mining video they watch.
 - to write any certain information or event they need to create ppt, report or record any data in written forms.
 - to listen any information read, explained or described by the narrator of English native speaker.
 - to speak or to tell any information gained from the mining video they watch.
 - to imitate the intonation, accent or pronunciation of any expressions, words, phrases delivered by the narrator English native speaker.
 - to translate meaning of any information, expressions, words, phrases delivered by the narrator English native speaker.

IV. CONCLUSION

Based on the discussion and result of the observation above, it can be inferred that by watching mining videos, students are able to improve their English writing skill, reading skill, listening skill and speaking skill. Moreover, when

they watch mining videos continuously and regularly at any time when they have spare time, they will get a lot of benefits. They will not only be fluent in English both in written and spoken forms, but they will also gain a lot of knowledge and technology applied in mining engineering and in ores or mineral processing more broadly and globally.

Because of those, automatically, students will be confident to continue their studies to post graduate level abroad, to participate in the international events, to become article writers in various international media, to be speakers in various international workshops, seminars, or webinars.

V. REFERENCES

- Lundquist, Lynn. 2008. *Learning Spoken English*. Publisher Information.
- Mikulecky, Beatrice S. and Linda Jeffries. 2007. *Advanced Reading Power*. USA: Longman.
- Siwidiani, Indri Lesta. 2021. *English Subjects and Exercises for Mining Engineering: A Handout*. UPN "Veteran" Yogyakarta.
- Staff of the U.S. Bureau of Mines. 1996. *Dictionary of Mining, Mineral, & Related Terms, Second Edition*. U.S. Department of The Interior.
- Talbot, Fiona. 2009. *How to Write Effective Business English*. Great Britain: Kogan Page Limited.
- <https://www.youtube.com/watch?v=IL0KfvfSvsg> (What is Mining?)
- <https://www.youtube.com/watch?v=8YqBzwMQeZs> (All You Need to Know about Metallurgy)
- <https://www.youtube.com/watch?v=oUmcTVBE-vA> (How do They Do It – Coal Mining)
- <https://www.youtube.com/watch?v=feJwOwsCzc> (How Gold Is Produced)
- <https://www.youtube.com/watch?v=62-yS0uXBb0> (Modern Mining - How Eagle Mine Produces Nickel and Copper)
- <https://www.youtube.com/watch?v=oT2LHGG-9Ko> (Powering America: Uranium Mining and Milling)
- <https://www.youtube.com/watch?v=VAiCiFD-Rjg> (The Mining Process at Copper Mountain Mine)
- <https://www.youtube.com/watch?v=2ERb87Zphhc> (Newmont Mining Corporation: How Gold is Made)
- <https://www.youtube.com/watch?v=Z3IDnEOUIWM> (Diamond Mining - Inside the Largest Mine in the World)