

# UNIVERSIDAD TÉCNICA DE AMBATO

#### FACULTAD DE CIENCIAS HUMANAS Y DE LA EDUCACION

#### **CARRERA DE IDIOMAS**

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TOPIC:

"TED TALKS AND THINKING SKILLS"

Author: Gissela Alejandra Sarsoza Tapia

Tutor: Lcda. Mg. Ruth Elizabeth Infante Paredes.

Ambato – Ecuador 2019

#### **TUTOR APPROVAL**

#### CERTYFY:

I, Lcda. Mg. Ruth Elizabeth Infante Paredes, holder of the I. D No. 060301610-6 in my capacity as supervisor of the research study on the topic "TED TALKS AND THINKING SKILLS" investigated by Miss Gissela Alejandra Sarsoza Tapia with I.D 185025241-0, confirm that this research report meets the technical, scientific and regulatory requirements, so the presentation of it is authorized to the corresponding organism in order to be submitted for evaluation by the Qualifying Commission appointed by the Directors Board.

The both de

Lcda. Mg. Ruth Elizabeth Infante Paredes

060301610-6

**SUPERVISOR** 

#### **DECLARATION PAGE**

I declare this undergraduate dissertation entitled "TED TALKS AND THINKING SKILLS" is the result of the author's investigation and has reached the conclusions and recommendations described in the current study.

Comments expressed in this report are the author's responsibility.

Gissela Alejandra Sarsoza Tapia

I.D 185025240 AUTHOR

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Therefore, the presentation before the pertinent organisms is authorized.

Ambato, December, 2020

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#### **Dedication**

I would like to dedicate this dissertation to God, family, and friends. First, Jehovah God has in the Bible wise advice such as doing all the things as for God or that better the end of a matter than its beginning, so it gives me the motivation to work hard and to complete the research until the end. Also, my family was fundamental. My parents, Raúl and Mónica, who always support me in my life goals, and my siblings Cristian and Paulina, who are always with me through thin and thick. Finally, my friends were also encouraging. Especially, who I consider my best friend Fernando.

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Gissela

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#### ABSTRACT UNIVERSIDAD TÉCNICA DE AMBATO

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**CARRERA DE IDIOMAS** 

Topic: "TED TALKS AND THINKING SKILLS"

Author: Gissela Alejandra Sarsoza Tapia

**Tutor:** Lcda. Mg. Ruth Elizabeth Infante Paredes

**Date:** August 20<sup>th</sup>, 2020

"Ted Talks and Thinking Skills"

Gissela Alejandra Sarsoza Tapia Universidad Técnica de Ambato gisarsozat@gmail.com Mg. Ruth Elizabeth Infante Paredes Universidad Técnica de Ambato ruthinfantep@gmail.com

The present study intends to cover research with the topic "Ted talks and Thinking Skills", which aims to determine a relationship between the use of Ted Talks and the influence on Thinking Skills in students of 9th semester of the Languages Career at Universidad Técnica de Ambato. The information needed in this project was gathered by qualiquantitative approach as well as experimental research. Pre and post-tests were applied based on the international exam "Thinking Skills Assessment" (TSA) developed by Cambridge and as its name refers to this type of test measures thinking skills. The same test was applied at the beginning and in the end of the study. The original test of Thinking Skills is composed of 50 questions divided into two categories that evaluate Problem-Solving and Critical-Thinking abilities. In the experiment, it was adapted to 20 questions of the two categories. The population did not present a control group but an experimental group of 22 participants formed of 14 women and 8 men who were exposed to four sessions planned around the use of Ted talks. Furthermore, the statistical test T-student was applied in order to establish the hypothesis. Regarding the results of the investigation, it has been concluded that the use of Ted talks has no significant relationship with Thinking Skills. However, the students had a better performance in the Problem-Solving section.

Keywords: Critical Thinking, Problem Solving, Ted Talks, Thinking Skills.

#### INTRODUCTION

The use of Ted talks has allowed research on how these tools influence Thinking Skills. Indeed, teachers everywhere are encouraged to implement Thinking Skills in teaching. Nevertheless, there are few studies about integrating Thinking Skills in language teaching. The current project describes the methodology used when applying Ted talks in students from ninth semester of Sociolinguistics class from Languages Career at Universidad Técnica de Ambato. In regards to our context, universities in Ecuador have done lots of studies on how to use Ted talks in EFL classrooms. However, these projects had been focused on the development of other skills such as the four main language skills which are speaking, writing, reading and listening. On the other hand, this research contains four chapters that explain the most remarkable information in each section as it is described in the explanation below.

The theoretical framework found in chapter one contains research about the two variables that are Ted talks and Thinking Skills. This section provides information about some terms that are related to Ted talks and Thinking Skills. When it comes to Ted talks, it is described resources such as Information Communication Technology and podcasts. In the same way, language and language skills are detailed for a better understanding of Thinking Skills.

The second chapter is about methodology which covers methods, investigation modalities, type of research and hypothesis that were applied in this study. In this part, it is explained why this project meets the regulations to have a research approach, to be a field and bibliographic investigation, and to fall into different types of investigation such as exploratory, correlational and experimental research.

Throughout chapter three, the results obtained from the pre- and post-test are arranged and interpreted by graphics followed by a written explanation. This part makes a comparison of the total score that students got in the pre and posttest. Additionally, it analyzes the scores obtained before and after the experiment in the different categories of Thinking Skills that are Problem Solving and Critical Thinking, each of them with their respective subskills. Finally, the last chapter is about conclusions and recommendations. The conclusions were established according to the objectives that were indicated previously.

#### **B. CONTENT**

#### CHAPTER I. THEORETICAL FRAMEWORK

#### 1.1 Investigative Background

An article named "TED Talks as Listening Teaching Strategy" (Abdulrahman, 2020) sets three objectives, which are to measure the impact of Ted talks as a teaching strategy, to recognize student's understanding, and to identify student's attitudes toward the use of Ted talks. The experiment was to use Ted talks accompanied by pre, while, and post-listening activities and it was applied to English learners. Additionally, the instruments were pre and post-tests of 30 adapted questions taken from the TOEFL listening section as well as a questionnaire. The results were that Ted talks have a positive impact on students' listening comprehension and that students felt interested and motivated by the use of Ted talks.

Another project that is worth analyzing is TED Talks as an ICT Tool to Promote Communicative Skills, (Martinez M. et al., 2018). The main objective of this research was to propose Ted talks when teaching a foreign language. The methodology was based on a qualitative action research and it was used in 31 English learners. There were 4 sessions constructed upon Task-based Approach and pre, while, and post watching activities. Besides, the instruments consisted of teacher's interview, students' questionnaire and, teacher's journal. The study concludes that Ted talks are useful tools for teaching English because they grab students' attention, expose them to real contexts, give them content information and let them realize the different varieties of English.

Further investigation has been displayed in the study "TED talks as a mobile-learning tool to enhance speaking skills" (Quizhpi and Henley, 2015). The research aimed to enhance written and oral English language through Ted talks. The methodology was case study research, which provides qualitative and quantitative information. The participants were divided into two groups, the experimental group, with students who were exposed to Ted talks, and the control group students, who were not exposed to them. The material employed in the investigation consisted of pre-test and post-test, and an interview with the teacher. In the end, the study indicates that Ted talks provide excellent educational content which has a beneficial impact on English usage, motivation, and confidence.

On the other hand, some studies on thinking skills have been done. Thinking critically while storytelling: Improving children's Higher Order Thinking Skills and English oral competence is one relevant study (Setyarini et al., 2018). The objective of this study was to investigate the development of High Order Thinking Skills strategies and difficulties through storytelling to improve speaking skill. The methodology used was Classroom Action Research, and the information was obtained from observation, interviews with teachers and students, and analysis of Thinking Skills in lesson plans. A finding suggested that open-ended questions contribute to the improvement of Thinking Skills, which in turn develop students' speaking abilities.

Besides, the research named Incorporating Higher Order Thinking Skill (HOTS) in ESL Classroom Contexts discussed the question types used by ESL teachers and their challenges, (Shafeei et al., 2018). In terms of methodology, the study collected information through observations, interviews, and questionnaires. The results encountered were that the use of HOTS questions in ESL classroom situations is still minimal and not preferred, even if the respondents did give positive feedback on the implementation of HOTS. Furthermore, the HOTS questions should correspond to the students' real-life situations so that they can catch students' interests and motivation.

#### 1.2 Theoretical Framework

#### 1.2.1 Independent variable theoretical support

#### 1.2.1.1 Information Communication Technology

Information Communication Technology (ICT) is defined by UNESCO (2007), as the types of technology used to distribute, process, store, create, view, or exchange information through electronic means such as radio, television, film, DVD, telephone, computer, network, and the equipment and services associated with these technologies. When it comes to education, ICT training can result in the improvement of the quality of teaching, and more opportunities for both students and teachers to adapt learning and teaching to individual needs (Ratheeswari, 2018). The latter studied mentioned explains some practical applications of ICT in teaching in fields such as e-learning, group discussion, and teleconferencing.

#### **1.2.1.2 Podcasts**

A report on an American journal describes Podcasts as a manner to disperse audio and video through the web, (State of the News Media, 2006). Podcasts have had a positive influence on developing listening comprehension (Al Qasim et al., 2013). The latter study affirms that there is no doubt that podcasts are a valuable tool not only because they contribute to the listening skill but also they increase motivation and engagement due to their authenticity and autonomy. As well as that, it was found that the environment created through podcasts enforced team-building skills and a sense of community that let the learner enjoyed the tasks.

On the other hand, podcasts are now being used as a fundamental feature of a fully integrated multimedia learning system proving different benefits. A study that analyzes the use of broadcast news in teaching (Yamane, 2014) explain that the use of podcasts in English classes is a powerful tool. It helps students gain insight into world issues, as well as to improve critical thinking and debate skills that are required in today's interconnected world.

#### **1.2.1.3 Ted talks**

Regarding the definition made by Romanelli, Cain, and McNamara (2014), Ted talks are described as short, no-cost, unlimited and educational videos. Such videos are created in an unusual and non-normal style of an academic lecture to spread ideas. This video style has an appeal to the modern generation, as they are viewed digitally, but they are still of interest to older generations. In other words, Ted talks have a large range of topics that can fit the interests of a different audience.

More information about Ted talks can be given by Taibi (2015), who says that Ted talks are a collection of about 1800 talks, with 35 000 transcripts in over 30 languages, related to a wide variety of topics. These multilingual videos are valuable resources for professors because they help to explore controversial topics to encourage world awareness and critical thinking, or as a way of learning languages. In this aspect, Ted talks are not just a tool for learning but also to develop thinking skills due to the topics that invite to reflect.

Another point of view is presented by Masson (2014), who clarifies that Ted talks stand for Technology, Entertainment and Design talks (Technologías de entretenimiento y diseño). The website contains high-quality presentations or lectures that are freely available and accessible. In addition, Ted talks are a technological innovation that facilitates connection and communication because they encourage society members to gain an understanding of social factors.

As a matter of fact, the website itself TEDtalks (2020), describes Ted talks as a nonprofit website that contains short talks (18 minutes or less). TED started as a conference in 1984, and today it addresses almost all subjects— from science to business to global issues—in over 100 languages. In addition, Ted talks have the goal of spreading ideas, welcoming people from every discipline and community who are searching for a deeper understanding of the world.

Ted talks are available into a wide range of languages including English, but a remarkable feature that needs to be emphasized is the transcript of the videos that the website provides. Zealand (2012), explains that clicking on a TED Talk transcript will allow listeners to replay phrases or entire parts of the talk. They can add their feedback about the talks they're listening to, and read other listeners 'comments. They can even compare transcriptions in English to their first language. Some of the talks are also subtitled.

#### 1.2.2 Dependent variable theoretical support

#### **1.2.2.1** Language

There had been many definitions of language, but one that it is worth to consider is the one provided by the well-known American linguistic (Chomsky, 1957), who defines language as "set of finite or infinite sentences, each finite in length and constructed out of a finite set of elements". It means that all languages have a specific number of phonemes or letters in the alphabet, therefore, language can be created from the finite or infinite combination of those limited elements.

More current studies provide supplementary information about the language. It is mentioned that language constitutes the effective combination of grammar and the knowledge of how to use grammar so that the set of sentences is suitable for the intended purpose and context, (Fasold, 2006). This way of seeing language focus on communicative competence which involves grammar and its use to fulfill a communicative purpose.

#### 1.2.2.2 Language Skills

Language is thought to be a system of systems (Hervey, 1975). For that reason, language has four principal skills, which are divided into two categories. Productive or active skills and receptive or passive skills. The productive skills are speaking and writing and the receptive skills are listening and reading. Additionally, the class should integrate these skills because working on language skills becomes pioneer in language construction (Harmer, 2018).

When it comes to teaching the four skills, it is expressed that that productive skills cannot exist independently from receptive skills, (Golkova et al., 2014). These two are integrated to constitute the complex system that is language. Moreover, listening and reading can activate passive knowledge, that is the reason why the receptive skills generally come first, and then the useful practice of productive skills should follow. In doing so, learners can acquire information through receptive skills and express their thoughts or feelings through productive skills.

#### 1.2.2.3 Thinking Skills

Thinking Skills are mental processes that allow to ingrate new experiences in the schemata or the knowledge of how things are. (Pyune, 2015). Also, it provides a collection of skills that students can implement across a wide variety of subjects including Critical Thinking and Problem Solving. In fact, Cambridge includes these two abilities when assessing thinking Skills. For instance, the international exam TSA (Thinking Skills Assessment) in the Question Guide outlines the abilities that are involved in Problem Solving and Critical Thinking. Additionally, this guide details information about each subskill.

#### 1.2.2.3.1 Problem Solving

According to Reisberg (2013), problem solving refers to the cognitive processing aimed at achieving a goal when a solution strategy is initially not understood by the problem solver. This kind of skill involves thinking about numbers, graphics and mathematical problems such as understanding information with quantitative content and creating solutions. Additionally, some of the abilities that lie in this category are relevant selection, finding procedures and identifying similarities.

Cambridge (2020), in the Question Guide for Thinking Skills Assessment provides information about the skills mentioned above. Relevant Selection is the problem-solving ability to define the pieces of relevant information. The function in this skill is to pick and apply knowledge for seeking a solution. Next, finding procedures refers to look for a process or technique that can be used to produce the solution. Lastly, identifying similarities is to understand the relationships among two or more sources of information and the similarity between them.

#### 1.2.2.3.2 Critical Thinking

A definition by Scriven and Richard (1987), reports that Critical Thinking is an intellectual process of conceptualizing, applying, analyzing, synthesizing, and evaluating information from observation, experience, reflection, reasoning, or communication. As an academic discipline, this process is related to analyze, judge or create arguments. Furthermore, the subskills that require critical thinking are identifying main conclusion, drawing a conclusion, identifying an assumption, assessing the impact of new evidence, detecting reasoning errors, matching arguments and applying principles.

These skills are mentioned in the Question Guide of the TSA exam by Cambridge (2020). First, there are the skills of identifying and drawing a conclusion, which require the ability to identify or state the conclusion supported in the text. Next, there is the skill of identifying an assumption. The assumption is not indicated in the argument, but it is accepted as true. To identify the assumption, it is necessary to understand the conclusion and to analyze the arguments. In addition, there is the skill of assessing the impact of additional evidence. This sub skill consists on judging which information would weaken the argument given. To develop this ability, it is required to comprehend what the argument is about and then consider the possible effect that it can cause.

Besides, other skill is detecting reasoning errors. This ability asks to recognize the flaw in the argument. It demands explaining why the conclusion cannot be followed from the reasons provided. Additionally, the skill of matching arguments. This type of sub skill demands finding similarities between different arguments. Both arguments can be similar in structure or pattern but they are not about the same topic. Finally, the skill of applying principles. A principle is a recommendation of one case that can be applied to other situations. In this ability, it is needful to find the principle and transfer that into another context.

#### 1.3 Objectives

#### 1.3.1 General Objective

• To determine the relationship between the Ted talks and the Thinking Skills at Universidad Técnica de Ambato in the Languages Career with students from 9<sup>th</sup> semester in Sociolinguistics class in the period from April to August 2020.

#### 1.3.2 Specific Objectives

- To select the appropriated Ted talks that fit the needs of the students considering the topics of Sociolinguistics class.
- To establish the elements of the Thinking Skills proposed by the Thinking Skills Assessment test developed by Cambridge in the theoretical framework.
- To evaluate the level of thinking skills before and after the experiment in the students from 9<sup>th</sup> semester in Sociolinguistics class through the TSA test.

#### **CHAPTER II. METHODOLOGY**

#### 2.1 Resources

#### **2.1.1** Humans

The people involved in this study were the research tutor Mg. Lcda. Ruth Elizabeth Infante Paredes, who guided the experiment as well as the dissertation, the investigator, Gissela Alejandra Sarsoza Tapia, and the twenty-two students of Sociolinguistics class in the Languages Career at Universidad Técnica de Ambato who were the population of this project.

#### 2.1.2 Institutional

In the first instance, all the people involved in the investigation are part of the Universidad Técnica de Ambato. Additionally, the theme is related to teaching, and it is because the people in this experiment belong to Facultad de Ciencias Humanas y de la Educación, specifically at Languages Career.

#### 2.1.3 Materials

The materials used were cellphones, computers, Internet connection, the Thinking Skills Assessment exams, some apps such as Zoom (a videocall conference), and Google forms in order to give students the tests. Also, the bibliography as source of information for the study. Moreover, the fundamental part of the project that were the Ted talks.

#### 2.1.4 Economics

Table 1: Economics

Design	\$20
Development	\$20
Delivery of the research project	\$20
Total	\$60

#### 2.2 Methods

#### 2.2.1 Research approach

For the way the data is collected and analyzed, the research is qualitative and quantitative. Streefkerk (2019), suggests that quantitative research is measured in numbers and graphs while qualitative research is expressed in words. The research provides statistical information found in the scores of pre and post-test based on the TSA exam, that gives information about Thinking Skills of the students before and after the experiment was applied. This information was organized in charts as well as descriptions of the results of the study expressed in words.

#### 2.3 Mode of investigation

#### 2.3.1 Field research

The investigation is under the requirements to be a field research. According to Little (2012), field research deals with gathering primary data from subject's natural environment. The current study of Ted talks and Thinking Skills was carried out at Universidad Técnica de Ambato with students from Languages Career in 9<sup>th</sup> semester of Sociolinguisites class. Even tough, the experiment was carried out virtually, that is the educational environment students are facing these days.

#### 2.3.2 Bibliographic research

Boon (2017), claims that a bibliographic research can be defined as the study which requires to gather information from published material. It might be from books, journals, newspapers, and so on, to electronic information, which includes audios, videos, websites, blogs, and bibliographic databases. In order to write the theoretical framework, the data about Ted Talks and Thinking Skills was collected through some of the sources mentioned above especially from educational books, journals and websites that are described in the bibliography.

#### 2.4 Level or type of investigation

#### 2.4.1 Exploratory Investigation

The purpose of this type of research is to investigate a problem to understand it better. In this study, the problem was found when the pre-test was taken because it could be observed that the scores obtained on the Thinking Skills were low comparing to the expected results of the overall score. Additionally, the different questions showed the weaknesses that students had in specific areas such as Critical Thinking and Problem Solving.

#### 2.4.2 Correlational Research

The correlation consists on establishing a relationship between two variables through statistics and predicting a result in the participants of the study. The degree of the relationship expressed in the result determines to which extent are the variables related to one another. This project proposed to establish a relationship between Ted talks and Thinking Skills and the results in the conclusion determined the incidence of that relationship.

#### 2.4.3 Experimental Research

The project meets the characteristics of experimental research. Based on the definition given by Harland (2011), experimental research aims to establish a relationship between two variables that can be manipulated and measured. At the end of an experimental study, a correlation of the dependent and independent variables will be either supported or rejected. Therefore, after completing the experimental research, which means manipulating the variables, it was observed the differentiation to the exposure to the independent variable, which is the use of Ted talks and its influence in the Thinking Skills.

# 2.4.4 Hypothesis

# **Alternative Hypothesis**

Ted Talks have a relationship with Thinking Skills at the Universidad Técnica de Ambato in the Languages Career with students from 9<sup>th</sup> semester in Sociolinguistics class in the period from April to August 2020.

# **Null Hypothesis**

Ted Talks do not have a relationship with Thinking Skills at the Universidad Técnica de Ambato in the Languages Career with students from 9<sup>th</sup> semester in Sociolinguistics class in the period from April to August 2020.

#### CHAPTER III. RESULTS AND DISCUSSION

#### 3.1 Analysis and discussion of the results

This section shows the analysis of the experiment that was the use of Ted talks to develop Thinking Skills. It was applied at Universidad Técnica de Ambato in the Languages Career with students from ninth semester in Sociolinguistics class. The 22 students that were the subjects of this experiment took a pre and post-test based on the Thinking Skills Assessment (TSA) test developed by Cambridge and which is divided in Problem Solving and Critical Thinking. Additionally, the test was modified to contain 10 problem-solving and 10 critical-thinking questions with a total score of 20 points, 1 point per question. The questions on Problem Solving contain 4 questions on Relevant Selection, 2 questions on Finding Procedures, and 4 questions on Identifying similarities. Besides, the Critical-Thinking part includes 2 questions of each of the following skills: identifying main conclusion, identifying an assumption, assessing the impact of new evidence, detecting reasoning errors, and applying principles.

#### **Pre-Test and Post- Test Results from the Experimental Group**

In order to analyze each of the skills mentioned above, they have been assigned a value of 4 points each. It means that for the skills that contain just two questions in the exam, the mark will be multiplied by two. Doing so, the results of the questions can be analyzed in equal conditions over 4 points. Furthermore, the pre and post-test questions were obtained of the Specimen Test and the Question Guide 2020 found in the TSA official website.

#### **Pre-Post Test Problem Solving and Critical Thinking**

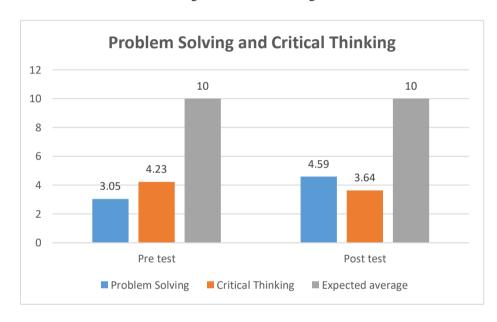
Table 1: Pre-Post Test Problem Solving and Critical Thinking

PROBLEM SOLVING AND CRITICAL THINKING			
Thinking skills	Pre test	Post test	Expected average
Problem Solving	3.05	4.59	10
Critical Thinking	4.23	3.64	10

Source: Pre-test and Post-test scores -Problem Solving and Critical Thinking

Author: Sarsoza, G. (2020)

Figure 1: Pre and Post Test – Problem Solving and Critical Thinking



Source: Pre-test and Post-test scores -Problem Solving and Critical Thinking

Author: Sarsoza, G. (2020)

Figure 1 displays the results of pre and post-tests divided into the two main categories Problem Solving and Critical Thinking. It can be observed that Ted talks proved to be beneficial to Problem Solving skills. The average in the score that belongs to Problem Solving in the pre-test was 3.05 but it increased to 4.59 in the post-test. On the other hand, Ted talks did not make a difference in Critical Thinking. In fact, the students got lower grades than those obtained in the pre-test. In the pre-test students got 4.23 but, in the post-test, they got 3.64.

#### **Pre-Post Test Problem Solving/ Relevant Selection**

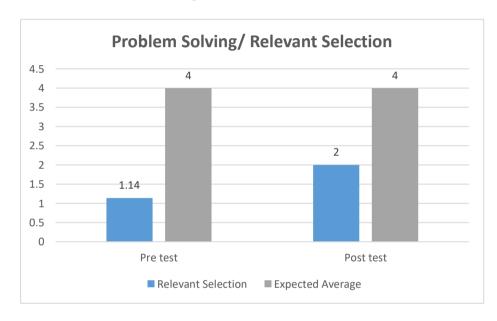
Table 2: Pre-Post Test Problem Solving - Relevant Selection

PROBLEM SOLVING- RELEVANT SELECTION			
Thinking skills	Pre test	Post test	Expected average
Problem Solving / Relevant Selection	1.14	2	4

Source: Pre-test and Post-test scores - Problem Solving / Relevant Selection

Author: Sarsoza, G. (2020)

Figure 2: Pre and Post Test – Problem Solving/ Relevant Selection



Source: Pre-test and Post-test scores - Problem Solving / Relevant Selection

Author: Sarsoza, G. (2020)

The figure above shows the results of the pre and post-tests of the skill Problem- Solving Relevant Selection. The students had a score of 1.14 in the pre-test, but they got 2 in the post-test. It indicates that the use of Ted talks with the activities applied in class as the lesson plan explains were beneficial to students to improve Relevant Selection skills.

#### **Pre-Post Test Problem Solving/ Finding procedures**

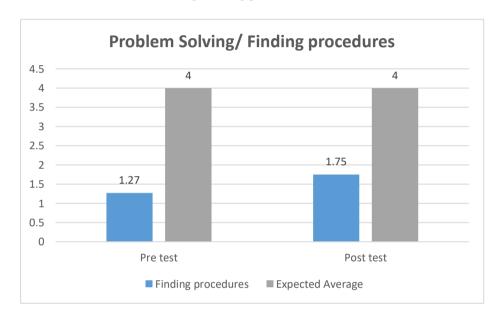
Table 3: Pre-Post Test Problem Solving - Finding procedures

PROBLEM SOLVING- FINDING PROCEDURE			
Thinking skills	Pre test	Post test	Expected average
Problem Solving / Finding procedures	1.27	1.75	4

Source: Pre-test and Post-test scores - Problem Solving / Finding procedures

Author: Sarsoza, G. (2020)

Figure 3: Pre and Post Test – Problem Solving/ Finding procedures



Source: Pre-test and Post-test scores - Problem Solving / Finding procedures

Author: Sarsoza, G. (2020)

Figure 3 describes the results of the pre and post-tests based on the skill of Problem-Solving Finding Procedures. In the pre-test, students got 1.27, but they got 1.75 in the post-test. It can be observed that Ted talks and the questions included in the lesson plan were useful to improve the skill of Finding Procedures because the average of the score in the post-test was higher than the one of the pre-tests.

#### Pre-Post Test Problem Solving/ Identifying similarities

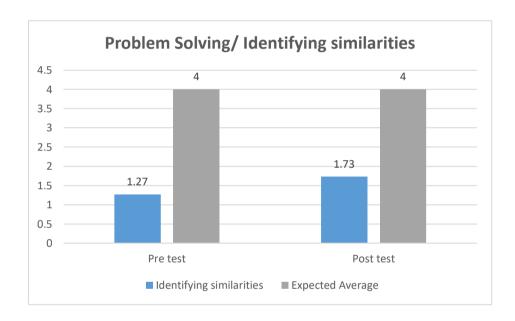
Table 4: Pre-Post Test Problem Solving / Identifying similarities

PROBLEM SOLVING- IDENTIFYING SIMILARITIES				
Thinking skills				
Problem Solving / Identifying similarities	1.27	1.73	4	

Source: Pre-test and Post-test scores - Problem Solving / Identifying similarities

Author: Sarsoza, G. (2020)

Figure 4: Pre and Post Test – Problem Solving/ Identifying similarities



Source: Pre-test and Post-test scores - Problem Solving / Identifying similarities

Author: Sarsoza, G. (2020)

The results of Problem-Solving Identifying Similarities are shown in the graph above. The students had a score of 1.27 in the pre-test but they got 1.73 in the post-test. It reveals that applying Ted talks with the exercises provided in class as the lesson plan describes were advantageous to students to improve Identifying Similarities skills

#### Pre-Post Test Critical Thinking/ Identifying main conclusion

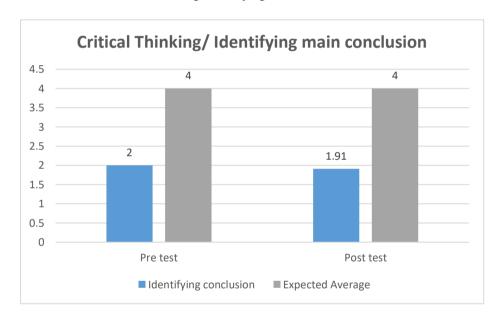
Table 5: Pre-Post Test Critical Thinking/ Identifying main conclusion

CRITICAL THINKING/ IDENTIFYING MAIN CONCLUSION			
Thinking skills	Pre test	Post test	Expected average
Critical Thinking/ Identifying main	2.00	1.91	4
conclusion			

Source: Pre-test and Post-test scores - Critical Thinking/ Identifying main conclusion

Author: Sarsoza, G. (2020)

Figure 5: Pre and Post Test – Critical Thinking/ Identifying main conclusion



Source: Pre-test and Post-test scores - Critical Thinking/ Identifying main conclusion

Author: Sarsoza, G. (2020)

Figure 5 presents the results of the pre and post-tests of the skill Critical- Thinking Identifying Main Conclusion. The students had a score of 2 in the pre-test, but they got 1.91 in the post-test. It indicates that they got a lower score after the experiment. However, this skill was excluded from the lesson plan because it was one of the highest scores in the pre-test.

#### Pre-Post Test Critical Thinking/ Identifying an assumption

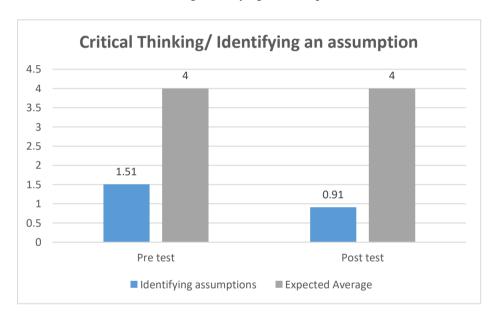
Table 6: Pre-Post Test Critical Thinking/ Identifying an assumption

CRITICAL THINKING/ IDENTIFYING AN ASSUMPTION			
Thinking skills	Pre test	Post test	Expected average
Critical Thinking/ Identifying an	1.51	0.91	4
assumption			

Source: Pre-test and Post-test scores - Critical Thinking/ Identifying an assumption

Author: Sarsoza, G. (2020)

Figure 6: Pre and Post Test – Critical Thinking/ Identifying an assumption



Source: Pre-test and Post-test scores - Critical Thinking/ Identifying an assumption

Author: Sarsoza, G. (2020)

The outcome in terms of the skill of Critical-Thinking Identifying an assumption is presented in figure 7. The students had a score of 1.51 in the pre-test, but they got 0.91 in the post-test. It exhibits that they got a lower score after the experiment. Even though the lesson plan included some activities to develop this skill, it could not reach the expected results.

#### Pre-Post Test Critical Thinking/ Assessing new evidence

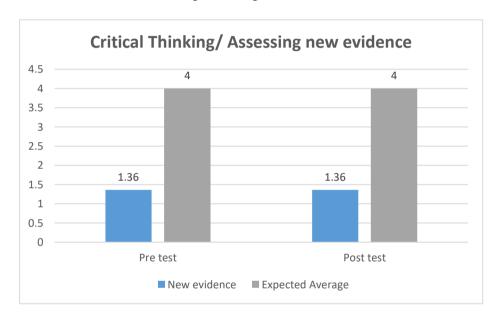
Table 7: Pre-Post Test Critical Thinking/ Assessing new evidence

CRITICAL THINKING/ ASSESSING NEW EVIDENCE			
Thinking skills	Pre test	Post test	Expected average
Critical Thinking/ Assessing new evidence	1.36	1.36	4

Source: Pre-test and Post-test scores - Critical Thinking/ Assessing new evidence

Author: Sarsoza, G. (2020)

Figure 7: Pre and Post Test – Critical Thinking/ Assessing new evidence



Source: Pre-test and Post-test scores - Critical Thinking/ Assessing new evidence

Author: Sarsoza, G. (2020)

Figure 7 presents the results of the pre and post-tests of the skill Critical- Thinking Assessing New Evidence. The students had a score of 1.36 in the pre-test and they remain with the same score of 1.36 in the post-test. It indicates that they did not suffer a change in this skill after the experiment. Moreover, it is worthy to express that this skill was not chosen to be part of the lesson plan used in the experiment.

#### **Pre-Post Test Critical Thinking/ Detecting errors**

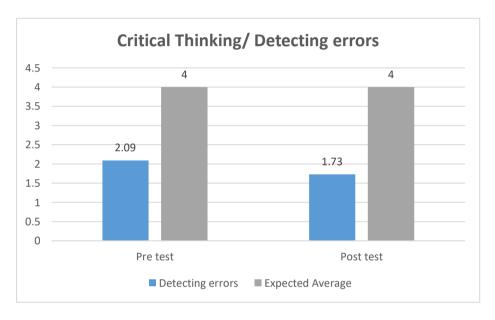
Table 8: Pre-Post Test Critical Thinking/ Detecting errors

CRITICAL THINKING/ DETECTING ERRORS			
Thinking skills	Pre test	Post test	Expected average
Critical Thinking/ Detecting errors	2.09	1.73	4

Source: Pre-test and Post-test scores - Critical Thinking/ Detecting errors

Author: Sarsoza, G. (2020)

Figure 8: Pre and Post Test – Critical Thinking/ Detecting errors



Source: Pre-test and Post-test scores - Critical Thinking/ Detecting errors

Author: Sarsoza, G. (2020)

Critical Thinking Detecting errors graph presents some results about the pre and pos-tests on this skill. The students had a score of 2.09 in the pre-test, but they obtained 1.73 in the post-test. It manifests that they did not improve, but they got a lower score after the experiment was applied. Although this skill was included in the lesson plan, it seems to not have positive results.

#### **Pre-Post Test Critical Thinking/ Applying principles**

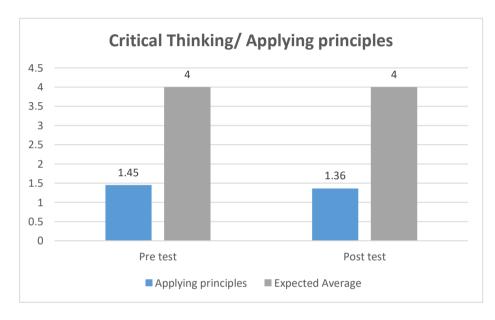
Table 9: Pre-Post Test Critical Thinking/ Applying principles

CRITICAL THINKING/ APPLYING PRINCIPLES				
Thinking skills	Pre test	Post test	Expected average	
Critical Thinking/ Applying principles	1.45	1.36	4	

Source: Pre-test and Post-test scores - Critical Thinking/ Applying principles

Author: Sarsoza, G. (2020)

Figure 9: Pre and Post Test – Critical Thinking/ Applying principles



Source: Pre-test and Post-test scores - Critical Thinking/ Applying principles

Author: Sarsoza, G. (2020)

Figure 9 describes the results of the pre and post-tests of the skill Critical- Thinking Applying principles. The students had a score of 1.45 in the pre-test, but they got 1.36 in the post-test. It communicates that they got a lower score after the experiment was applied. Even though the skill was considered in the lesson plan of the experiment, the results were not helpful.

#### **Pre-Post Test Total Score Thinking Skills**

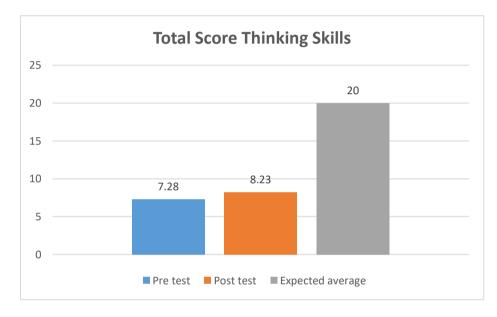
Table 10: Pre-Post Test Total Score Thinking Skills

TOTAL SCORE THINKING SKILLS				
Pre test	Post test	Expected average		
7.28	8.23	20		

Source: Pre-test and Post-test scores - Total Score Thinking Skills

Author: Sarsoza, G. (2020)

Figure 10: Pre and Post Test – Total Score Thinking Skills



Source: Pre-test and Post-test scores -Problem Solving and Critical Thinking

Author: Sarsoza, G. (2020)

The results in table 1 are the total scores of the pre and post-test to assess Thinking Skills. The total expected score is 20 points but the average obtained in the pre-test is 7.28 and 8.23 in the post-test. It proves that the students had low scores at the beginning but applying Ted talks in the classroom had a positive effect. Even though the increase is just of 0.95 in the total score, it is a little improvement that needs to be considered.

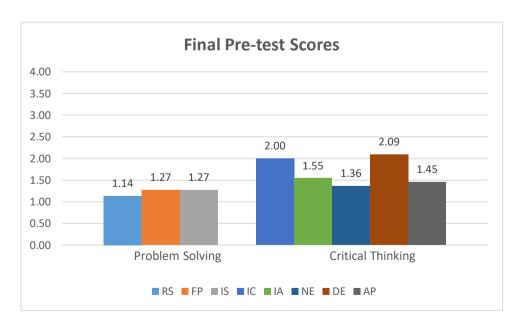
#### FINAL PRE-TEST SCORES

Table 11: Final Pre-test Scores

Thinking Skills	Sub skill	Pre-test	Expected Average
	Relevant	1.14	4
	Selection (RS)		
Problem Solving	Finding	1.27	4
	procedures (FP)		
	Identifying	1.27	4
	Similarities (IS)		
	Identifying Main	2.00	4
	Conclusion (IC)		
	Identifying	1.55	4
	Assumption (IA)		
Critical Thinking	Assessing New	1.36	4
	Evidence (NE)		
	Detecting Errors	2.09	4
	(DE)		
	Applying	1.45	4
	Principles (AP)		

Source: Final Pre-test Scores Author: Sarsoza, G. (2020)

Figure 11: Final Pre-test Scores



Source: Final Pre-test Scores Author: Sarsoza, G. (2020)

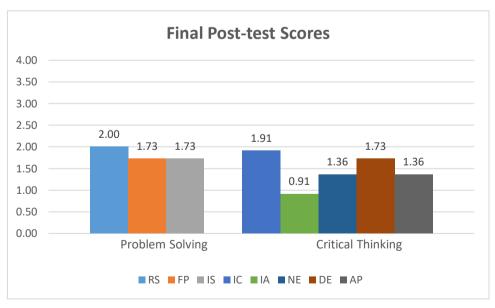
#### FINAL POST-TEST SCORES

Table 12: Final Post-test Scores

Thinking Skills	Sub skill	Pos-test	Expected Average
	Relevant	2.00	4
	Selection (RS)		
Problem Solving	Finding	1.73	4
	procedures (FP)		
	Identifying	1.73	4
	Similarities (IS)		
	Identifying Main	1.91	4
	Conclusion (IC)		
	Identifying	0.91	4
	Assumption (IA)		
Critical Thinking	Assessing New	1.36	4
	Evidence (NE)		
	Detecting Errors	1.73	4
	(DE)		
	Applying	1.36	4
	Principles (AP)		

Source: Final Pre-test Scores Author: Sarsoza, G. (2020)

Figure 12: Final Post-test Scores



Source: Final Post-test Scores Author: Sarsoza, G. (2020)

#### Discussion

Based on the articles described in the background information in this research, Ted talks have been in the educational context with positive results. For instance, Abdulrahman (2020), points out that Ted talks help improve listening comprehension and make students feel motivated. In the same way, Quizhpi (2015), reached to the conclusion that Ted talks provide excellent educational content which has a beneficial impact on English usage, motivation, and confidence. On the other hand, this study aimed to look for a relationship between Ted talks and Thinking Skills. Observing the results expressed in the graphs, it can be seen that the overall score improved in the posttest compared to the pretest but the verification of the hypothesis below indicates if this average of improvement was significant using a tool called T-student.

### 3.2 Verification of hypotheses

The current study used the T-student test to verify the hypothesis with the results of the pre and posttests. According to Goulden (1956), there are three types of T-test but the one used in this analysis is the Pair sampled T-test, which compare means (pre and post test) from the same group at different times. Additionally, the program SPSS was needed in order to have the verification as it follows:

Table 13: Paired Samples Statistics

Estadísticas de muestras emparejadas

		Media	N	Desviación estándar	Media de error estándar
Par 1	Pretest	7,27	22	4,177	,891
	Posttest	8,23	22	4,058	,865

Source: Paired Samples Statistics

Author: Sarsoza, G. (2020)

**Table 14: Paired Samples Correlations** 

Correlaciones de muestras emparejadas

		N	Correlación	Sig.
Par 1	Pretest & Posttest	22	,302	,171

Source: Paired Samples Correlations

Author: Sarsoza, G. (2020)

Based on the results obtained with the SPSS program, it can be observed that the scores got by the students in the post-test are higher than the pre- test scores. Nevertheless, when the significance is measured it gives a result of 0,171, that is higher than 0,05. Therefore, the null hypothesis is accepted: Ted Talks do not have a relationship with Thinking Skills of the students of Languages Career at Universidad Técnica de Ambato.

Table 15: Paired Samples Tests

	Prueba de muestras emparejadas								
				Diferencias empare					
					95% de intervalo de confianza de la				
			Desviación	Media de error	diferencia				
		Media	estándar	estándar	Inferior	Superior	t	gl	Sig. (bilateral)
Par 1	Pretest - Posttest	-,955	4,865	1,037	-3,111	1,202	-,920	21	,368

Source: Paired Samples Tests Author: Sarsoza, G. (2020)

# CHAPTER IV. CONCLUSIONS AND RECOMMENDATIONS 4.1 Conclusions

After analyzing the information obtained in the pre and post-test and having applied the experiment, there were determined the following conclusions:

- There is not a significant relationship between Ted talks and Thinking Skills. Although the average score of the students in the test used (TSA) was higher after applying the experiment, the T-test in the SPSS program reveals that it is not significant enough to establish a relationship. On the other hand, Problem Solving skills were the abilities that improved as shown in the post-test.
- The Ted talks that were useful to develop this study were short (10-15 minutes), and cover controversial issues that help students and teachers have discussions in class using Problem Solving and Critical Thinking abilities. Besides, they should be related to the main topic of the class. In this case, the themes of the Ted talks fitted in Sociolinguistics class.
- Thinking Skills have two main components that are Problem Solving and Critical Thinking. When it comes to Problem Solving it includes relevant selection, finding procedures, and identifying similarities. By contrast, Critical Thinking involves identifying the main conclusion, drawing a conclusion, identifying an assumption, assessing the impact of new evidence, detecting reasoning errors, matching arguments, and applying principles.
- Based on the International exam Thinking Skills Assessment, the students got low scores in Thinking Skills. Even though it increased after the experiment, it was still low compared to the total expected score of the test.

#### 4.2 Recommendations

In order to give advice for further research, the following recommendations are established:

- To apply Ted talks to develop Problem Solving skills. Although there were applied few lessons, the results in this area were positive. Additionally, further research can be done on Problem Solving and Critical Thinking.
- To evaluate Ted talks before using them in class. There are lots of Ted talks of different topics on Internet, but it is fundamental to analyze if they fit with student's needs or with the main topic of the lesson.
- Professors can consider Thinking Skills when creating their lessons. As Thinking
  skills are composed of some abilities, it can be difficult to integrate all of them in
  a lesson. However, if teachers try to include one or few of them in a lesson, it can
  make a difference.
- Students need to reinforce Thinking Skills. Learning a language has to be with transferring Problem Solving and Critical Thinking to the target language. For that reason, teachers should include some activities to help them develop higher Thinking Skills.

#### **Bibliography**

- Abdulrahman, Tryanti, and Universitas Islam As-syafi. 2020. "Ted Talks Video and Students' Listening Skills." *Asian ESP Journal* (July 2018).
- Chomsky, N. (1957). Syntactic Structures.
- Goulden, C. H. (1956). Methods of Statistical Analysis. New York.
- Harmer, J. (2018). The practice of English Language Teaching.
- Hervey, J. (1975). "Language as a System of Systems.".
- Journal, The, and Aotearoa New Zealand. 2012. "Vol 20, 2012." *The Tesolanz Journal* 20.
- Koch, J. (2016). Introduction to education. Boston, MA: Cengage Learning.
- Martínez M, Vargas Cuevas Junior A, and Ramírez Valencia Astrid. 2018. "TED Talks as an ICT Tool to Promote Communicative Skills in EFL Students." *English Language Teaching* 11(12):106.
- Masson, Maxime. 2014. "Benefits of TED Talks." *Canadian Family Physician* 60(12):1080.
- Pyune, J. (2015). Handbook of Research on Maximizing Cognitive Learning through Knowledge Visualization.
- Quizhpi, A., and T. Henley. 2015. "UNIVERSIDAD DE CUENCA TESIS.Pdf." Articulo Ecuador 1(5):1–127.
- Ratheeswari, K. 2018. "Information Communication Technology in Education." Journal of Applied and Advanced Research 3(S1):45.
- Reisberg, D. (2013). The Oxford Handbook of Cognitive Psychology.
- Romanelli, Frank, Jeff Cain, and Patrick J. McNamara. 2014. "Should TED Talks Be Teaching Us Something?" *American Journal of Pharmaceutical Education* 78(6):5–7.
- Scriven, M., & Richard, P. (1987).
- Setyarini, Sri, Ahmad Bukhori Muslim, Dwi Rukmini, Issy Yuliasri, and Yanuarius Mujianto. 2018. "Thinking Critically While Storytelling: Improving Children's HOTS and English Oral Competence." *Indonesian Journal of Applied Linguistics* 8(1):189–97.

State of the News Media. (2006).

Taibi, Davide, Saniya Chawla, Stefan Dietze, Ivana Marenzi, and Besnik Fetahu. 2015."Exploring TED Talks as Linked Data for Education." *British Journal of Educational Technology* 46(5):1092–96.

TEDtalks. (2020). Obtenido de https://www.ted.com/about/our-organization UNESCO. 2007. "Unesco." *The UNESCO ICT in Education Programme*.

Williams, R. (2015). *High-Order Thinking skills: Challenging All Students to Achieve. New York: Skyhorse Publishing.* 

#### **ANNEXES**

#### **Annex 1: Approval**

Ambato, 30 de abril de 2020

Dr. Marcelo Nuñez Presidente Unidad de titulación Carrera de Idiomas Facultad de Ciencias Humanas de la Educación

Lic. Mg. Sarah Iza Pazmiño en mi calidad de Coordinadora de la Carrera de Idiomas, me permito poner en su conocimiento la aceptación y respaldo para el desarrollo del Trabajo de Titulación bajo el Tema: "TED TALKS AND THINKING SKILLS" propuesto por la estudiante Gissela Alejandra Sarsoza Tapia, portador/a de la Cédula de Ciudadania, 1850252410, estudiante de la Carrera de Idiomas Facultad de Ciencias Humanas y de la Educación de la Universidad Técnica de Ambato.

A nombre de la Institución a la cual represento, me comprometo a apoyar en el desarrollo del proyecto.

Particular que comunico a usted para los fines pertinentes.

Atentamente

Lic. Mg. Sarah Iza Pazmiño

0501741060 2818175 0984060528

sj.iza@uta.edu.ec



# Thinking Skills Assessment Oxford

Specimen Paper

1 hour 30 minutes

# Inst

### SECTION 1 Thinking Skills Assessment

Instructions to Candidates

Please read this page carefully, but do not open this question paper until you are told that you may do so.

A separate answer sheet is provided for this section. Please check you have one. You also require a soft pencil and an eraser.

Please complete the answer sheet with your TSA candidate number, centre number, date of birth and name.

Speed as well as accuracy is important in this section. Work quickly, or you may not finish the paper. There are no penalties for incorrect responses, only points for correct answers, so you should attempt all 50 questions. All questions are worth one mark.

Answer on the sheet provided. Questions ask you to show your choice between five options. Choose the **one** option you consider correct and record your choice on the separate answer sheet. If you make a mistake, erase thoroughly and try again.

Any rough work should be done on this question paper.

Dictionaries and calculators may NOT be used.



Developed and administered on behalf of the University of Oxford by the Admissions Testing Service, part of Cambridge Assessment, a non-teaching department of the University of Cambridge.

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Please wait to be told you may begin before turning this page.

URL:

https://drive.google.com/file/d/1h-Ry5Y6fMMY8P8F5QAx2Ne6THMQ188pJ/view?usp=sharing

# THINKING SKILL ASSESSMENT (Modified)

1.

In order to qualify for a bonus, employees must fulfil certain criteria:

£1,000 bonus:	Absences less than 5%
	Production targets exceeded by at least 10%
	Rejects are less than 5% of output
£500 bonus:	Absences less than 10%
	Production targets met
	Rejects are less than 8% of output

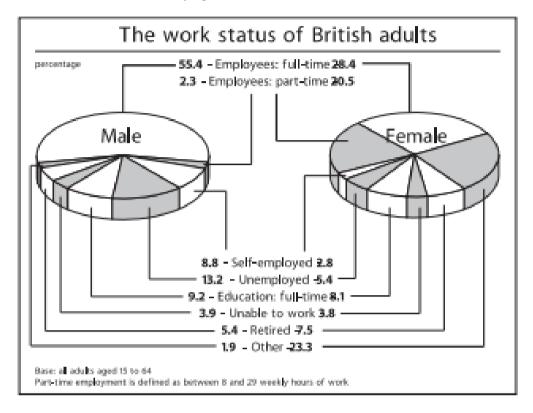
Workers performed as follows:

	Smith	Jones	Patel	Owololu	McKay
attendance (%)	95	90	100	96	97
over production target (%)	+5	+6	+12	0	-4
product accepted (%)	98	96	95	93	96

Who qualifies for a bonus?

- A Nobody
- B Smith
- C Patel and Smith
- D Owololu, Patel and Smith
- E Jones, Owololu, Patel and Smith

The chart below shows the employment status of British male and female adults.

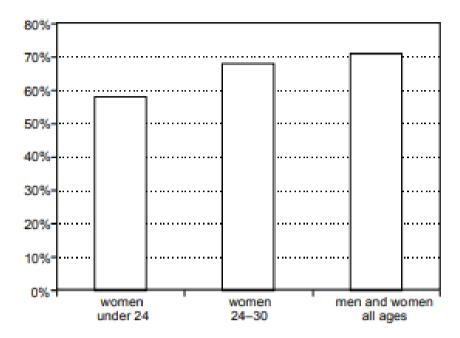


A person is employed if they are in full-time or part-time employment or if they are self-employed.

The difference between the percentage of men in employment and women in employment is

- A 8.8
- B 14.8
- C 15.9
- D 27.0
- E 66.5

The graph below shows the percentage of young women intending to vote at the next election compared with the figure for all ages of men and women.



Which of the following statements can be deduced from the information provided?

- 1 Women are more likely to vote as they get older.
- 2 Women are less likely to vote than men.
- 3 Women are less likely to vote than at the last election.
- A 1 and 2 only
- B 2 and 3 only
- C 1 and 3 only
- D all of them
- E none of them

It is 4.30 pm and Jane, Jean and June have just arrived together at the Ritzy cinema. Jane wants to see 'The Rock', but Jean is determined to see 'Mission Impossible' and June would rather see 'Empire Records', so they decide to split up.

# RITZY

#### CINEMA

GRAND PARADE HIGH STREET GRANCHESTER

From the creators of
"Dumb and Dumber"
Woody Harrelson Randy Quaid Bill Murray
KINGPIN (12)

Daily 12.00 3.30 5.50 8.10 (120 minutes)

# Jim Carrey is THE CABLE GUY (12)

Daily 12.50, 3.30, 5.50, 8.10 (120 minutes)

Expect the impossible!

# Tom Cruise MISSION IMPOSSIBLE (PG)

Daily 12.30, 3.00, 5.30, 8.10 (110 minutes)

# Sean Connery Nicholas Cage THE ROCK (15)

Daily 1.50, 4.50, 7.50 (135 minutes)

#### EMPIRE RECORDS (12)

Daily 2.50, 5.40, 8.20 (90 minutes)

What is the earliest possible time that Jane, Jean and June can arrange to meet together after their films?

A 6.45

B 7.05

C 7.10

D 7.20

E 8.20

Three thermometers are each accurate to within 2 degrees above or below the temperature they actually read. One reads 7°, one reads 9° and one reads 10°.

What is the minimum range in which the true temperature lies?

- A 5° 12°
- B 7° 9°
- C 8° 10°
- D 8° 9°
- E 7° 10°

6.

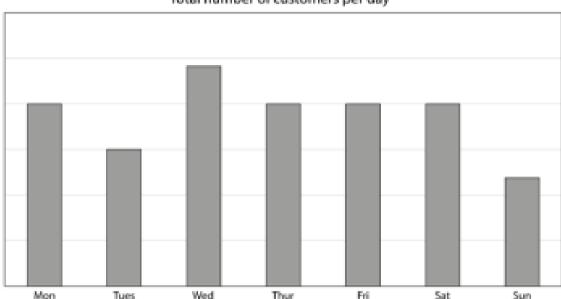
WHEELERS CYCLES
Bicycles for Hire
8 am - 8 pm Daily
Hourly Rate
8 am - 4 pm : £2 per hour

4 pm - 8 pm : £1 per hour All Day Hire : £15 Refundable Deposit : £10

How much will it cost me to hire a bicycle from Wheelers Cycles from 11 am for eight hours?

- A £ 13
- B £ 15
- C £ 16
- D £ 20
- E £ 23

Graham recorded the number of visitors to his shop each day last week and presented the results in the bar chart below:



Total number of customers per day

When he calculated the number of customers per hour he found that he had the same number for five of the days, but the values for Tuesday and Friday were slightly higher. The opening hours of the shop are as follows:

Day	Open	Close
Monday	8am	6pm
Tuesday	?	?
Wednesday	8am	8pm
Thursday	8am	6pm
Friday	7	7
Saturday	8am	6pm
Sunday	10am	4pm

Which one of the following could be the opening hours of the shop for Tuesday and Friday?

- A Tuesday 9.30am 5.30pm, Friday 8.00am 6.30pm
- B Tuesday 9.00am 4.30pm, Friday 8.30am 6.00pm
- C Tuesday 9.00am 4.30pm, Friday 8.00am 6.00pm
- D Tuesday 9.00am 5.00pm, Friday 8.00am 6.30pm
- E Tuesday 10.00am 5.00pm, Friday 8.30am 6.00pm

The table shows the numbers of male and female students studying a selection of subjects at a college.

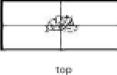
Subject	Male	Female
Biology	24	41
Geography	26	32
German	3	12
Mathematics	104	61
Music	6	10
Sociology	18	67

In which other subject was the balance of male and female students closest to that for Music?

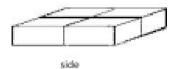
- A Biology
- B Geography
- C German
- D Mathematics
- E Sociology

9.

A 150 cm length of string is tied around a book measuring 30 cm x 20 cm x 2 cm as shown in the diagram. After knotting and tying a bow, 24 cm of string was left over.



bottom



A second piece of string, also 150 cm long, is used to tie up a parcel of several copies of the book stacked back cover to front cover. A bow similar to that on the first parcel is tied and then no string is left over.

How many copies of the book are there in the second parcel?

- A 3
- B 4
- C 8
- D 12
- E 15

32 Three lighthouses are visible from the promenade at Rivermouth. One flashes every 1½ minutes, another flashes every 2 minutes, and the third flashes every 50 seconds.

All three have just flashed at the same time.

How long will it be before they all flash at the same time again?

A 6.0 minutes
B 7.5 minutes
C 10.0 minutes
D 30.0 minutes
E 150.0 minutes

#### 11.

Vegetarian food can be healthier than a traditional diet. Research has shown that vegetarians are less likely to suffer from heart disease and obesity than meat eaters. Concern has been expressed that vegetarians do not get enough protein in their diet but it has been demonstrated that, by selecting foods carefully, vegetarians are able to amply meet their needs in this respect.

Which of the following best expresses the main conclusion of the above argument?

- A vegetarian diet can be better for health than a traditional diet.
- B Adequate protein is available from a vegetarian diet.
- C A traditional diet is very high in protein.
- D A balanced diet is more important for health than any particular food.
- E Vegetarians are unlikely to suffer from heart disease and obesity.

Peat is organic matter which develops in wetland areas. It is the ideal growing medium for plants, and there is a tremendous demand for it from gardeners, both amateur and professional. But only three per cent of the earth's land surface is covered in peatland, and continued harvesting of peat will endanger these unique wetland habitats. Peat harvesting should be stopped immediately and gardeners should be encouraged to use an alternative.

Which of the following best expresses the main conclusion of the argument above?

- A Only three per cent of the land on our planet is covered in peatland.
- B Taking too much peat will destroy the unique wetland areas in which it develops.
- C Peat cannot develop except in wetland areas.
- No more peat should be extracted and a different growing medium for plants should be promoted.
- E Peat is a very popular growing medium used by amateur gardeners and professional growers.

#### 13.

People who write books revealing the inner workings of the secret service have usually been dismissed from the service or have retired with a sense of grievance against it. The result is that only the seedy side of the secret service is exposed. This is partly because those who would paint a more favourable picture are unwilling to flout the legal restrictions placed on all who have been employed in the secret service, and partly because the records of the organisations are not available to outsiders.

Which of the following is an underlying assumption of the argument above?

- A The records of the secret service are readily available to its former employees.
- B The work of the secret service is undervalued as a result of publication of distorted accounts of its working.
- C The seedy side of the secret service is of minor significance compared with the important work it carries out.
- D Legal restrictions against revealing the inner workings of the secret service do not apply to those who have been dismissed.
- E Those who have a grievance against the secret service are either unable or unwilling to give a balanced account of its workings.

School examination results in England this year reinforce the trend in improving pass rates. There is, however, no other evidence of improvements in school leavers' abilities - such as the data coming from employers or universities. One can reasonably conclude, therefore, that teachers are simply succeeding in coaching their pupils better for examinations than in previous years.

Which one of the following is an underlying assumption of the above argument?

- A School examination results are a reliable indicator of pupils' abilities.
- B The level of difficulty of examinations has not been falling.
- C Employers' expectations of school leavers are unrealistic.
- D Teachers in previous years did not attempt to coach pupils for examinations.
- E Abilities of school pupils vary from year to year.

#### 15.

Polar bears in captivity frequently engage in obsessive patterns of behaviour, pacing back and forth on the same spot, swinging their heads from side to side, and other signs of stress. They do this even when their living areas are quite spacious. What this shows is that conditions of captivity are not a satisfactory substitute for the natural environment of the polar bear species.

Which of the following, if true, would most weaken the above argument?

- A Polar bears are especially ill-suited to a life in captivity.
- B Many polar bears in the wild engage in obsessive patterns of behaviour.
- C Polar bears in captivity are much better fed than those living in the wild.
- D Polar bears in the wild cover many miles a day when they are hunting for food.
- E Polar bears which have been reared in captivity are incapable of surviving in the wild.

According to a recent survey, people believe that about a quarter of the population will become victims of a violent crime in the next year, whereas crime statistics show that it is only about 1 per cent. Furthermore, those with the greatest fear of crime are the least likely to be affected. The elderly are the most fearful, although victims are most likely to be young males. Over the last few years there has been an increase in the number of television programmes which show re-enactments of crimes. Though they are often done with the best of motives, these re-enactments add to people's fears about violent crime by making it look more common than it is. It is time that we stopped making such programmes.

Which of the following, if true, would most weaken the above argument?

- A Crime re-enactments are made to look more realistic than they used to be.
- B Most elderly people are unaware of the statistics of violent crime.
- C Some types of violent crime have declined over the last few years.
- D The elderly are the group least likely to watch crime re-enactments on television.
- E Attempts have been made to ensure that statistics of violent crime are accurate.

#### 17.

What causes the periods of strong and widespread stormy weather that Earth sometimes suffers? The answer is sunspots. Periodically, the sun develops relatively cool dark areas known as sunspots. Scientists have found that periods of high sunspot activity coincide with the stormy periods on Earth.

Which of the following is the best statement of the flaw in the argument above?

- A It disputes the fact that storms are the result of low-pressure systems in the Earth's atmosphere.
- B It ignores the influence of periods of low sunspot activity on Earth's weather systems.
- C It assumes that because two events coincide, one is the cause of the other.
- D It overlooks the fact that there is always a storm somewhere on Earth.
- E It ignores the fact that there are stormy periods in some areas but not in others while there is sunspot activity.

Every year in Britain there are nearly 25 000 car fires, yet it is estimated that only five per cent of motorists travel with a fire extinguisher in their car. If more motorists could be encouraged to carry fire extinguishers then the number of car fires could be considerably reduced.

Which of the following is the best statement of the flaw in the argument above?

- A It ignores the fact that millions of motorists never experience a car fire.
- B It assumes that carrying a fire extinguisher will enable fires to be put out.
- C It implies that the occurrence of car fires is related to the lack of an extinguisher.
- D It overlooks the possibility that fires might not be put out with an extinguisher.
- E It ignores the fact that there are different extinguishers for different kinds of fires.

19.

Smokers who suffer from heart disease which is caused by their smoking should not be allowed to get free health treatment. That is because this is an example of self-inflicted illness. Those whose actions have caused illness or injury to themselves should make a financial contribution to their treatment.

Which one of the following best illustrates the principle underlying the argument above?

- A Children should get free dental treatment, even if they eat sweets which cause dental decay.
- B Heart disease sufferers who can afford to pay for health treatment should not receive free treatment.
- C Smokers who cannot afford to pay for health care should be allowed free treatment when they are ill.
- D People who are injured in car accidents should receive free treatment regardless of whether they were wearing a seat belt.
- E Motor cyclists whose head injuries are caused by not wearing a crash helmet should make a financial contribution to their treatment.

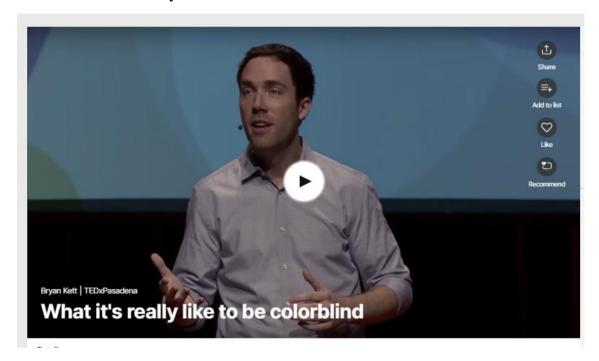
Every motorist pays the same amount for road tax, regardless of how much they use the roads: someone who covers as little as 1 000 miles pays the same as someone who covers 20 000. This is unfair. Road tax should be scrapped and the money raised by an increase in the tax on car fuel. Making this change would ensure that those who use the roads more would pay more. This would not only be a fairer system, but could also bring in more revenue.

Which of the following best illustrates the principle underlying the argument above?

- A People should receive free medical treatment only if they cannot afford to pay for it.
- B People who travel to work every day by train should pay a lower fare than those who travel only occasionally.
- People who earn more than double the average wage should be made to pay much higher charges for dental treatment.
- D Television channels should be paid for by subscription so that only those people who watch them should be made to pay.
- E Telephone charges should be higher for business customers than for domestic customers because they are using the system only to make money.

### **Annex: Ted talks**

Ted talk 1: What's really like to be colorblind



https://www.ted.com/talks/bryan\_kett\_what\_it\_s\_really\_like\_to\_be\_colorblind

Ted talk 2: What if cultural stereotypes follow you?



https://www.ted.com/talks/chemin\_song\_what\_if\_cultural\_stereotypes\_follow\_you

Ted talk 3: How to teach kids to talk about taboo topics



 $\frac{https://www.ted.com/talks/liz \ kleinrock \ how \ to \ teach \ kids \ to \ talk \ about \ taboo \ topi \\ cs\#t-698022$ 

Ted talk 4: Euphemisms



https://tedxsydney.com/talk/euphemisms/

### **Annex 3: LESSON PLAN TEMPLATE**

### **Annex 3.1:** Lesson plan template

Yasue Shinomiya. (2020). A Lesson Plan to Activate Critical Thinking Using a TED Talk Presentation.

#### TED Talk titled "Lessons from fashion's culture" by Blakley (2010).

The four class activities.

Activity 1." Food for Thought"

Activity 2. TED Talk presentation video as an input for CT

Activity 3. Evaluating the TED Talk through cooperative learning and team discussion

Activity 4. Construction of judgments showing evidence and rationality

URL:

https://docs.google.com/document/d/1-

3COj8iCii0k7EN9VJg00AVcnlYj9gCv1wwxghDO4SI/edit?usp=sharing

# **ANNEX 4: EXPERIMENT DESIGN**

#### **INTRODUCTION**

The following experiment was designed implementing the use of Ted talks in the classroom to develop Thinking Skills. Cambridge (2020) divides Thinking skills in Problem Solving and Critical Thinking, for that reason the lesson plans that are displayed below are divided in classes with Problem Solving and Critical Thinking activities. The class contains a Ted talk about the topic of the class and the activities include questions that use Thinking Skills. The 22 students of the study belong to Universidad Técnica de Ambato Languages Career and they are the ninth semester of Sociolinguistics class.

# Scope

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Lesson plan 4- Annexes	

# **Experiment chart description**

Lesson plan	Date	Time	Topics	Ted talk topic	Thinking Skill
#1	July 10 <sup>th</sup> ,2020	2 hours	Color in language	What is really like to be colorblind.  https://www.ted.com/tal ks/bryan_kett_what_it_s _really_like_to_be_colo rblind	*Relevant Selection *Finding procedures *Identifying similarities
#2	July 13 <sup>th</sup> ,2020	2 hours	Prototypes	What if cultural stereotypes follow you? https://www.ted.com/t alks/chemin_song_wh at_if_cultural_stereoty pes_follow_you	Critical Thinking *Identifying assumptions *Detecting errors *Applying principles
#3	July 17 <sup>th</sup> ,2020	2 hours	Taboo	How to teach kids to talk about taboo topics https://www.ted.com/ta lks/liz_kleinrock_how_ to_teach_kids_to_talk_ about_taboo_topics	*Relevant Selection *Finding procedures *Identifying similarities
#4	July 20 <sup>th</sup> ,2020	2 hours	Euphemism	Euphemisms  https://tedxsydney.co m/talk/euphemisms/	Critical Thinking: Identifying assumptions, detecting errors, and applying principles Problem Solving Relevant Selection, finding procedures, identifying similarities

In this experiment, Ted talks were used to develop Thinking Skills. The 4 lesson plans were applied to 22 students in the Sociolinguistics' class. On July 10th, 13th, 17th, and 20th, 2 hours per class were dedicated in order to develop these plans. Furthermore, the Ted talks used were chosen according to the topic of the lesson as can be observed in the table above. Additionally, the classes were divided as follows: one lesson for Problem Solving skills, one for Critical Thinking and one for both.

#### **Annex 3.2: Lesson plans**

#### Thinking skills lesson plan #1

Number of students: 22

**Level:** 9<sup>th</sup> semester

**Subject:** Sociolinguistics

**Objective:** Students will be able to solve problem-solving exercises using information

related to the Ted talk "what is really like to be colorblind" by Bryan Kett.

**Topic:** Color in language

#### Warm- up (20 minutes)

Students will be divided in two groups: males and females. They will complete two activities. (Annex 1).

For the first activity, they will organize a range of colors depending on the tones.

For the second activity, students will choose the color for a certain color term.

#### **Activity 1. "Food for Thought"** (40 minutes)

- Listening about two approaches of color (Annex 2): After the recording, students will be asked: Are color terms arbitrary, or is there a general pattern? If there is a pattern, what are their characteristics and why might it exist, and is it color an objective reality, or does it depend on our interpretation?
- ➤ Problem solving questions: Once the students have observed a Power Point presentation about characteristics of basic color terms, they will respond to a questionnaire with problem solving questions such as relevant selection, finding procedures and identifying similarities.

#### **Activity 2. TED Talk presentation video as input.** (20 minutes)

- ➤ Presentation of Ted talk "What is really like to be colorblind". https://www.ted.com/talks/bryan\_kett\_what\_it\_s\_really\_like\_to\_be\_colorblind
- > Comprehension questions:
  - What was Brian's problem in his sight? Is there a cure for this disorder?
  - -When did he realize of that?
  - Which struggles did he face?
  - How does he feel about it?

**Activity** 3. Evaluating the TED Talk through cooperative learning and team discussion. (20 minutes)

➤ Team discussion: Students are divided in groups of four and share information about the video.

➤ Team quiz: There will be 5 problem solving questions (Annex 4) and students should decide who will answer questions 1,2,3 and so on, before showing the question because they cannot help one another after the quiz starts. They will have 1 minute per question.

# **Activity 4. Construction of judgments showing evidence and rationality.** (20 minutes)

> The teacher asks these questions:

Are color terms arbitrary, or is there a general pattern? If there is a pattern, what are their characteristics and why might it exist?

Is it color an objective reality, or does it depend on our interpretation?

# Lesson plan 1 - annexes Annex 1

1. Rearrange the blocks on the left in the right column to see the gradation from the first tone to the last. (Order the numbers starting from the purple tone)

I	
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	

# 2. Identify the option for the following color terms.

1. Which of the following is "Turquesa" color?



2. Which of the following is "Lila" color?



3. Which of the following is "Borgoña" color?



4. Which of the following is "Melocotón" color?



5. Which of the following is "Verde menta" color?



Correct answers: D, C, B, B, D

#### Annex 2

#### **Listening transcript**

Our world is a world of color except to those blinded to it, but it is not everywhere treated in the same way. The terms people use to describe color give us means to explore languages and cultures. An interesting issue is how colors are referred to in different languages. Besides, two different approaches have been displayed about color terminology in languages: the theory of physical color and the other against it. According to Kelleher (2013), the first approach tells us that color has to be with light waves. It is a property of light itself and it is not depending on human perception. On the other hand, Lucy (1997), claims that color is in our perceptual interpretation of light. Color systems are considered as social constructions rather than biologically determined ones.

#### Annex 3

1. According to Wardhaugh (2006), there are two ways of seeing color terminology as shown in the chart. After watching the Ted talk "What is really like to be colorblind". Which one of the following could be most alike to agree with Bryan's view?



Color spectrum is an objective reality. It is "out there". Humans divide the spectrum in a systematic way. We can access to their knowledge, asking speakers of a language to name chips from the Munsell array of color.



Lucy(1997), color is not "out there" but in our perceptual interpretation of light. Visual experience do not lie in the biology but in linguistic systems.

- A. Bryan's perspective of color is objective and he thinks that color is out there.
- B. Bryan's view is neutral; he thinks that it is determined by biological facts.
- C. Bryan disagrees with Lucy's perspective because color is determined by linguistic systems.
- D. Bryan shares Lucy's view in the sense that color perspective is relative and everyone has a unique vision of it.

2. Based on Berlin and Kay (1969), there are eleven basic color terms. Besides, there is some reason to believe that communities that show little technological development employ the fewest color terms. Some languages divide color as follows:

Western	11 colors
languages	
Himba tribe	5 colors
Tiv of Nigeria	3 colors
Hanunóo of	4 colors
Philipines	

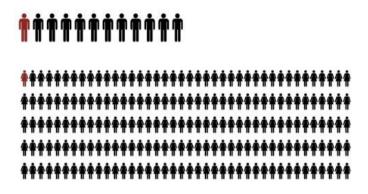
Which is approximately the difference of technological advance between Western languages and Himba tribe language according to this argument?

- A. 55%
- B. 36%
- C. 100%
- D. 45%
- 3. A study conducted by Porter (2015), showed the following results when someone with colorblindness disorder is asked "what color is it?". In the Ted talk, Bryan also talks about it. Comparing both information, which of the following statement is true?



- A. Bryan agrees on the fact that it doesn't bother him at all because people feel curious about it.
- B. Bryan considers himself as part of the group that feels neutral about it.
- C. Bryan doesn't mention how he feels about people asking this question.
- D. Bryan is most likely to be placed in 6 or above the scale because he mentions that people don't ask about struggles or lineage but they want verify this.

4. Bryan claims that men have more probabilities to have colorblindness as the graphs show. The number of the population of women is twenty times the population of men plus half dozen plus six. Which number does replace "X" in the chart?



Prevalence of colorblindness				
Men 1 out of 12				
Woman	1 out of X			

- A. 246
- B. 254
- C. 250
- D. 252
- 5. The next graph shows the average incidence of Colour-Blindness in different States/Union Territories of North-West India.

State/Union Territory	Number of Population Groups	Total number Tested	Color Blind (Red- Green deficient)
Jammu and Kashmir	18	3289	149(4.53)
Himachal Pradesh	36	3964	110(2.77)
Punjab	111	6642	214(3.22)
Chandigarh	3	1582	86(5.44)
Haryana	16	1961	31(1.58)
Delhi	16	2607	82(3.15)
Punjab & Delhi	1	217	10(4.61)
Uttaranchal	18	3092	114(3.69)
Uttar Pradesh	23	2528	83(3.28)
Rajasthan	3	237	4(1.69)
Uttar Pradesh & Rajasthan	4	1280	89(6.95)
North-West India	249	27399	1090(3.98)

Figures in parentheses are percentages.

Which of the groups in the graph are the three with most population?

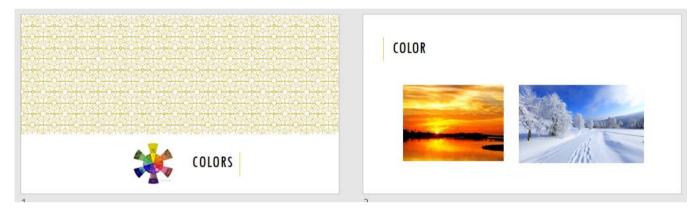
- A. Rajasthan, Uttaranchai, Jammu and Kashmir
- B. Jammun and Kashmir, Punjab, Chandigarh
- C. Jammun and Kashmir, Himachai Pradesh, Punjab

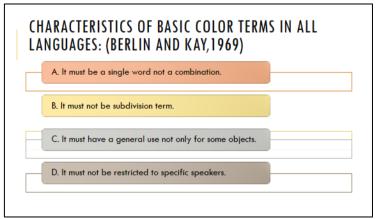
# D. Punjab, Himachai Pradesh, Rajasthan

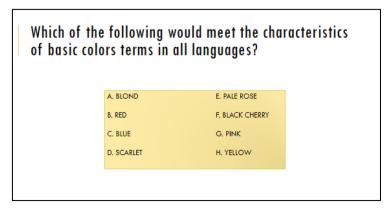
#### Correct answers:

- 1. D
- 2. D
- 3. D
- 4. C
- 5. C

#### **Power Point Presentation**







# APPROACHES TO COLOR TERMINOLOGY



Color spectrum is an objective reality. It is "out there". Humans divide the spectrum in a systematic way. We can access to their knowledge, asking speakers of a language to name chips from the Munsell array of color.

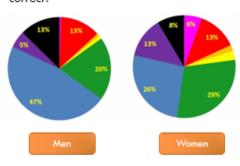


Lucy(1997), color is not "out there" but in our perceptual interpretation of light. Visual experience do not lie in Biology but in linguistic systems.

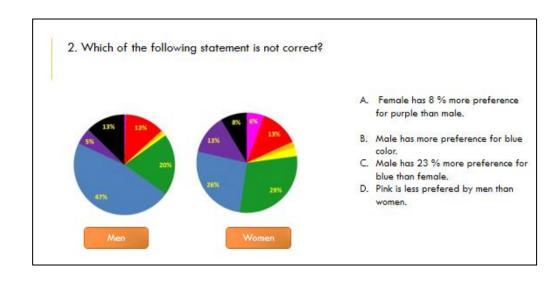


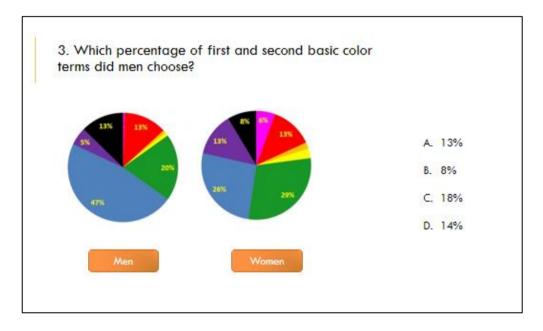
# QUESTIONNAIRE

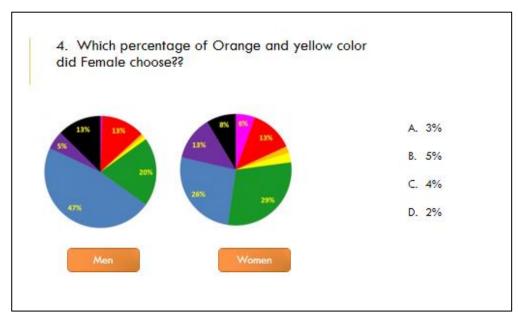
1. Ellis (2001), created the following graph with the favorite color of a group of men and women. Based on the graph, which of the following statements is correct?

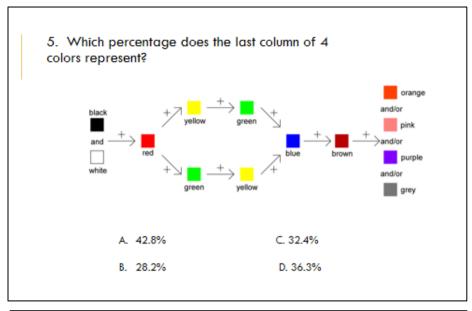


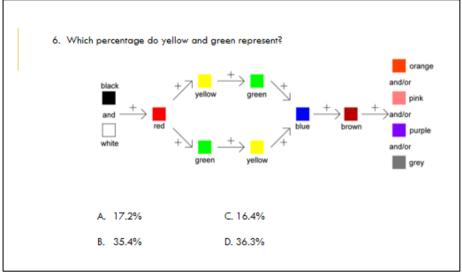
- The third basic color term is mostly prefered by men.
- The third basic color term is mostly preferred by women.
- C. The third color basic term is equally preferred by men and women.
- D. Green is mostly prefered by men.

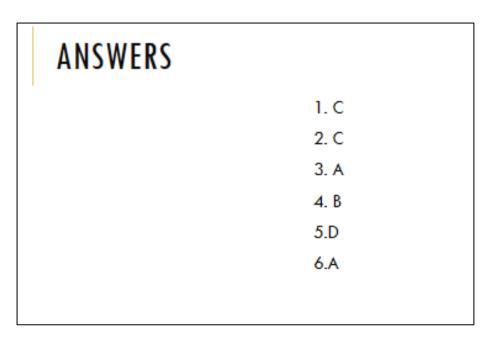












#### Thinking skills lesson plan #2

Number of students: 22

**Level:** 9<sup>th</sup> semester

**Subject:** Sociolinguistics

**Objective:** Students will be able to answer critical- thinking questions using information

related to the Ted talk ""What if cultural stereotypes follow you?" by Chemin.

**Topic:** The theory of prototypes

#### **Activity** 1. "Food for Thought" (30 minutes)

➤ Reading about the theory of prototypes (Annex 1). After reading, students will be asked:

What is a prototype?

Does language influence our prototypes?

Can prototypes be applied to the social field?

➤ Critical thinking questions: Once the students have observed a Power Point presentation about the theory of prototypes, they will respond to a questionnaire. The questions included will be identifying assumptions, detecting errors and applying principles.

#### Activity 2. TED Talk presentation video as input. (20 minutes)

Presentation of Ted talk "What if cultural stereotypes follow you?".
<a href="https://www.ted.com/talks/chemin song what if cultural stereotypes follow">https://www.ted.com/talks/chemin song what if cultural stereotypes follow</a> you

Where is Chemin from?

What situation did she face when moving to another place?

How Chemin felt about the moving?

Do you think Chemin's classmates have a prototype or a stereotype of Korean girls? Why?

## Activity 3. Evaluating the TED Talk through cooperative learning and team discussion. (30 minutes)

➤ Quiz: There will be 6 critical-thinking questions (Annex 2) and students should answer them. They will have 1 minute per question. The type of questions tested will be the same type of the questionnaire in activity 1.

#### **Activity 4. Construction of judgments showing evidence and rationality.** (20 minutes)

➤ The teacher asks these questions: What is a prototype? Give an example.

Do you understand better a concept based on its features or do you create a prototype? If so, does language influence it?

Are stereotypes and prototypes the same? Explain.

#### Wrap- up (20 minutes) (optional)

Students will play "Kahoot" with the questions provided in Annex 3. They will choose one word that comes to their mind when mentioning a certain concept.

#### Lesson plan 2- annexes

#### Annex 1

#### The theory of prototypes

E. Rosch and her group in the early 1970s considered the prototype as "the most suitable specimen and even the best case, the best representative or central case of a category", but later on, it was defined as" the ideal specimen commonly associated with a category". In this way, the gradual aspects of proximity to the prototype within the category are defined by the frequency of use or allocation between the subjects.

This point is crucial since it displaces the analytical form of the model into the social sphere. It is not a question of establishing "true" categories, but of understanding the "real" psychic mechanisms by which we establish categories. From the categorization model, a whale is as "mammal" as a cow. Based on the experiential model, a whale would be further from the prototype of a mammal that became a reference or center.

Additionally, Rosch et al (1975), found that highly representative members of a category are most likely to come to mind first when subjects are asked to list as many instances of a concept as possible within a time constraint. For example, when required to generate members of the category furniture, individuals will list chair and sofa long before they list hat rack and reading lamp. In addition, subjects are quicker to classify a prototypical target example of a category than an atypical example. That is, robin and sparrow are identified as members of the category bird more rapidly than are eagle or hawk, which are, in turn, classified more rapidly than are goose or chicken.

Finally, with a concern for psychological application by researchers, the prototype is linked to our modes of cognition. Rosch claims that the prototype acts as a "cognitive reference point" for the classification processes of the elements of our experience.

Kleiber, G., & Rodríguez, A. (1995). La semántica de los prototipos. Madrid: Visor Libros.

#### Annex 2

- 1. Chemin was told that she should not be in standard class but in higher-level class. According to the Ted talk "What if cultural stereotypes follow you?", which of the following is an underlying assumption?
- A. Chemin displayed a remarkable academic performance since the beginning of the course.
- B. Chemin's classmates had an impression of a typical Korean girl.
- C. Chemin marks were good enough to enroll in the advanced class.
- D. Chemin had more knowledge than her friends.
- 2. According to the Ted talk, Chemin talked about how people relate Koreans and academics, although their perception was wrong. Which of the following is the best statement of the flaw in the argument?
- A. It ignores the cultural circumstances where Chemin was.
- B. It overestimates the influence of social relationships.
- C. It generalizes the perception that Koreans are really into academics.
- D. It lacks an example that supports the perception.
- 3. Chemin mentioned that she wanted to make a great first impression when she went to her class, but her plan was over because her classmates already had a fixed impression because of other Korean girls in her class. Which one of the following best illustrates the principle underlying this argument?
- A. A teenager playing a guitar trying to impress his friends but not being such a good player
- B. A person giving a gift to his buss to impress him but getting his gift back.
- C. A daughter presenting a good mark to her parents but not being rewarded.
- D. A student who has excellent grades trying to do sports but being seen as not good at it.
- 4. Chemin was told that she speaks English better than someone could expect. According to the Ted talk, which of the following is an underlying assumption?
- A. Chemin had had bad grades in English.
- B. Chemin was too young to be bilingual.
- C. People did not expect that a Korean can speak English so well.
- D. People expect Chemin to be smart enough to learn English perfectly.

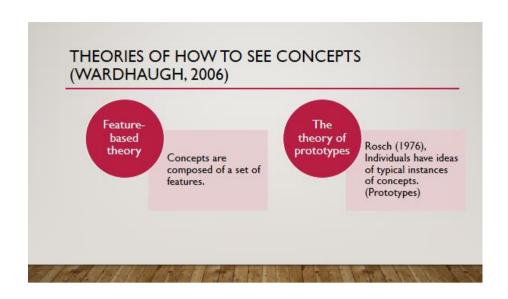
- 5. At the end of her speech, Chemin mention that it is natural to relate certain characteristics or features when we think about certain culture or group, so she must think that stereotyping is good. Which of the following is the best statement of the flaw in the argument?
- A. There are not enough supporting points to reach that conclusion.
- B. Chemin did not mention those words.
- C. Chemin used this information for her introduction.
- D. Chemin thinks that stereotyping could be sometimes good not always.
- 6. When Chemin told jokes, her friends told her "you are Korean and you are active, talkative and funny, (...) you are not normal" Which one of the following best illustrates the principle underlying this argument?
- A. It is not normal to find friends who consider you normal.
- B. Most of the people from the coast region are extroverted and direct.
- C. It is weird for a normal person to be funny.
- D. American people are rich and eat junk food.

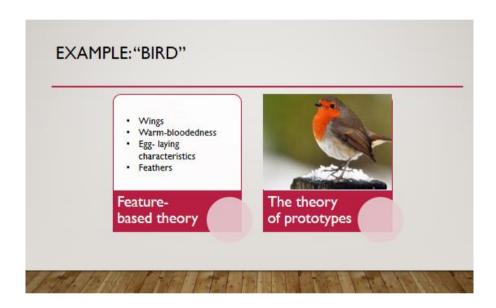
#### Correct answers:

- 1. B
- 2. C
- 3. D
- 4. C
- 5. A
- 6. D

#### **Power Point Presentation**

# PROTOTYPES





## PROTOTYPE THEORY IN SOCIAL SITUATIONS (HUDSON, 1996)

A way to achieve social compentence.

We judge circumstances as being typical and we place people in the same way. Ex: the typical teacher, American, teenager. Then, we attempt to use language appropriate to the other as we perceive him or her and to the situation we are in.



#### FROM PROTOTYPES TO STEREOTYPES.

 The process of stereotyping works very similarly to that of prototyping, generating explanations in the context of social interactions. D'Alfonso (2017).

Difference

In cultural terms, a prototype is a central tendency, while the stereotype is the assumption that all members of the culture are the same. Bryant (2018).

Similarity

Stereotypes and prototypes alike involve semantic information that is salient withing a category. Kristiansen(2008).

# EXAMPLE: TAKE THE IDEA OF ENTERING INTO A NEW BUSINESS PARTNERSHIP WITH A COMPANY BASED IN THE MIDDLE EAST. BRYANT (2018).

#### ESTEREOTYPE

The managers are Arabs and adhere to Muslim beliefs. The deal will require lengthy relationship building, because that's what Arabs like, and your new partners will be tough negotiators, because Arabs, culturally, have a history of haggling.

#### PROTOTYPE

You might reasonably assume that because the company is based in the Middle East, where relationship building is important, then this is how they will conduct business initially. But you need to look at other factors. Considering prototypes rather than stereotypes means adopting a wider viewpoint.

Where else do they have offices? Who owns the company? What is their trading history?



#### **QUESTIONNAIRE**

- 1. E. Rosch and her group in the early 1970s considered the prototype as " the most suitable specimen and even the best case, the best representative or central case of a category", but later on, it was defined as" the ideal specimen commonly associated with a category". In this way, the gradual aspects of proximity to the prototype within the category are defined by the frequency of use or allocation between the subjects.
- Which of the following is an underlying assumption of the argument?
- A. Both definitions of prototypes express the exact same meaning.
- B. The author suggests a contrast between two different definitions of prototypes based on some authors.
- The second definition was modified to emphasize the frequency of use of prototypes.
- The paragraph defines prototypes and its classification.

2. Rosch et al (1975), found that highly representative members of a category are most likely to come to mind first when subjects are asked to list as many instances of a concept as possible within a time constraint. For example, when required to generate members of the category furniture, individuals will list chair and sofa long before they list hat rack and reading lamp. Therefore, time constraints determines the prototypes used by someone.

Which of the following is the best statement of the flaw in the argument?

- A. It considers time as a cause and not a condition.
- B. The experiment lacks of sense.
- C. The example miss details of the population.
- All of the examples provided for furniture are prototypes.

3. From the categorization model, a whale is as "mammal" as a cow. Based on the experiential model, a whale would be further from the prototype of a mammal that became a reference or center.

Which one of the following best illustrates the principle underlying the argument?

- A. A rabbit is as white as a dove.
- B. A mirror is as part of the furniture as a chair.
- C. A dog is as friendly as a cat.
- D. A tomato is as vegetable as an orange.



#### TYPES OF QUESTIONS: CRITICAL THINKING/ IDENTIFYING AN ASSUMPTION

E. Rosch and her group in the early 1970s
 considered the prototype as " the most
 suitable specimen and even the best case,
 the best representative or central case of a
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- The paragraph defines prototypes and its classification.



Assumption: not stated in the argument, but which is taken for granted in order to draw the conclusion

#### TYPES OF QUESTIONS: CRITICAL THINKING/ DETECTING ERRORS

2. Rosch et al (1975), found that highly representative members of a category are most likely to come to mind first when subjects are asked to list as many instances of a concept as possible within a time constraint. For example, when required to generate members of the category furniture, individuals will list chair and sofa long before they list hat rack and reading lamp. Therefore, time constraints determines the prototypes used by someone.

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- A. It considers time as a cause and not a condition.
- B. The experiment lacks of sense.
- The example miss details of the population.
- All of the examples provided for furniture are prototypes.

You must explain why the conclusion does not follow from the reasons which are given. So you need to be clear about what the conclusion is, and what reasons are meant to support it.

#### TYPES OF QUESTIONS: CRITICAL THINKING/ APPLYING PRINCIPLES

3. From the categorization model, a whale is as "mammal" as a cow. Based on the experiential model, a whale would be further from the prototype of a mammal that became a reference or center.

Which one of the following best illustrates the principle underlying the argument?

- A. A rabbit is as white as a dove.
- B. A mirror is as part of the furniture as a chair.



- C. A dog is as friendly as a lion.
- D. A tomato is as vegetable as an orange.

A principle is a general recommendation, which, in the passage, will be applied to just one particular case, but which could also be applied to other cases. In order to answer this type of question, you first need to understand the argument, so look for the conclusion, and for the reasons, in the usual way.

#### Thinking skills lesson plan #3

**Number of students: 22** 

**Level:** 9<sup>th</sup> semester

Subject: Sociolinguistics

**Objective:** Students will be able to answer problem- solving questions using information related to the Ted talk "How to teach kids to talk about taboo topics" by Liz Kleinrock.

**Topic:** Taboos

#### **Activity** 1. "Food for Thought" (40 minutes)

- > Students will be proposed this situation: You are a teacher of kids talking about racism. Then, one student asks "Why are some people racist?". Then, another student answers "maybe some people don't like black people because their skin is the color of poop." Next, half of the class is laughing and other is upset. What would you do?
- ➤ Problem solving: Once the students have observed a Power Point presentation about taboos, they will respond to a questionnaire. The questions will include relevant selection, finding procedures and identifying similarities.

#### Activity 2. TED Talk presentation video as input. (30 minutes)

Presentation of Ted talk "How to teach kids to talk about taboo topics".
<a href="https://www.ted.com/talks/liz">https://www.ted.com/talks/liz</a> kleinrock how to teach kids to talk about taboo topics

Who is she?

Which taboo topics did her family have?

Does she think it is appropriate to talk about taboo topics with kids?

How did she manage a taboo topic in her class?

What could happen if Liz ignored Abby's comment?

## Activity 3. Evaluating the TED Talk through cooperative learning and team discussion. (30 minutes)

➤ Quiz: There will be 5 problem-solving questions (Annex 1) and students should answer them. They will have 1 minute and a half per question. The kind of questions evaluated are the same that the questionnaire in activity 1.

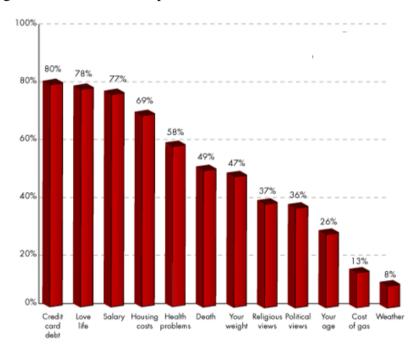
#### **Activity 4. Construction of judgments showing evidence and rationality.** (20 minutes)

➤ The teacher asks these questions: What is a taboo? As a teacher, would you talk about taboo topics in your class?

#### Lesson plan 3 – annexes

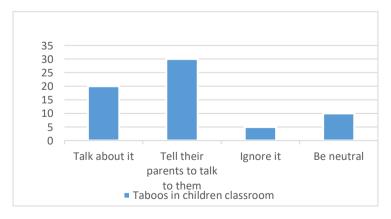
#### Annex 1

1. According to the Ted talk "How to teach kids to talk about taboo topics", Liz mentioned two principal taboo topics in her family. In the following chart, what is the average between these two topics?

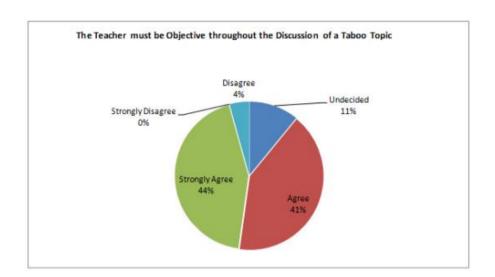


Source: Prater (2008).

- A. 28.5%
- B. 72%
- C. 36.5%
- D. 48
- 2. Liz expresses her opinion about what to do when children bring up taboo topics in the class. Which of the following statements is correct?



- A. Liz agrees with the 30 participants of this study who are considered as the biggest group.
- B. Liz agrees with the group of 20 participants because she practices that in her class.
- C. Liz agrees with 5 of the participants of this study who are considered as the smallest group.
- D. Liz doesn't agree with any of the statements provided.
- 3. Liz said that "teaching kids about equity in schools is not teaching them what to think. It is about giving them tools and strategies and language and opportunities to practice how to think." With which percentage is she more likely to agree?



- A. 4%
- B. 11%
- C. 44%
- D. 85%
- 4. Liz mentioned that when she asked her 3<sup>rd</sup>-grade students what to say if they were told they were too young to talk about issues such as equity, they all agree that it was their right to know about it. By contrast, the following chart shows the participants 'perception about certain taboo in an adult class. Even though both groups faced different social issues, they are considered taboos in their circumstances. Which of the following statements is correct?

#### Adultery/Pre-marriage Sex is an unspeakable topic for me

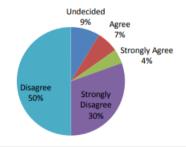
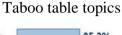
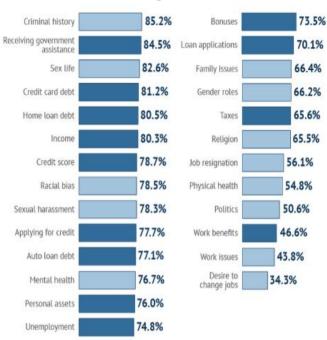


Figure 4: Participants' Perceptions about the Taboo Nature of Adultery/pre-marriage sex

Source: Mustafa (2011).

- A. Children are willing to talk about a taboo issue while most of adults don't.
- B. Neither children nor adults have decided if those topics are unspeakable or not.
- C. Most of adults accept to talk about a taboo topic while children don't.
- D. Most of adults as well as children have said that they are willing to talk about topics that are considered as taboos.
- 5. The list below show the taboo table topics. Which of the following statements is incorrect?





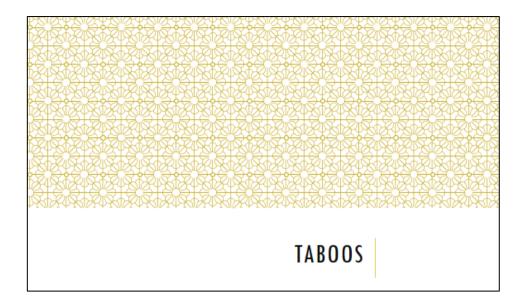
Categories (26)	Population
Financial	Financial
Nonfinancial	Nonfinancial
Total	1000

Source: The ascent (2019).

- A. There are more financial topics in the top ten list of taboo table topics.
- B. There are more nonfinancial taboo topics than financial ones.
- C. There were 1000 participants in the study.
- D. There are more nonfinancial topics in the 5 last taboo topics list.

#### **Correct answers**

- 1. C
- 2. B
- 3. D
- 4. D
- 5. B



#### DEFINITION(WARDHAUGH, 2006)

The prohibition or the avoidance in any society of behavior believed to be harmful to its members.

They would cause anxiety, embarrassment, or shame.

Language is concerned, certain things are not to be said.



#### TABOOED TOPICS

List 5

- 1. Unemployment
- 2. Sex
- 3. Religion
- 4. Politics
- 5. Death

#### TABOOS IN LANGUAGE: EXAMPLE



Kabana language, New Guinea.

Peple have names related to everyday objects.

There is a restriction against saying the names of someone's in- laws relatives used in objects.

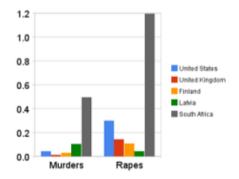
Fx-

Urae= fish.

When your in-law is called Urae, you refer to the fish as "moi".



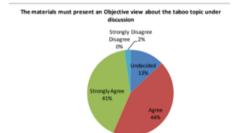
# 1. WHICH OF THE FOLLOWING NATIONS DO CONSIDER RAPES AS TABOO THE MOST?



Taboos topics. Image by Japan Probe

- A. United States and United Kingdom
- B. Finland and South Africa
- C. Latvia and United States
- D. South Africa and United States

# 2. THERE WERE 1000 PARTICIPANTS IN THIS STUDY ABOUT TABOO. HOW MANY PEOPLE DO AGREE WITH THE STATEMENT THAT THE MATERIALS MUST BE OBJECTIVE WHEN DISCUSSING A TABOO TOPIC?



A. 440

B. 850

C. 410

D. 900

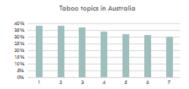
# 3. THE FOLLOWING CHART SHOWS THE TABOO TOPICS IN AUSTRALIA. WHICH PERCENTAGE DOES RELATIONSHIP HISTORY REPRESENT?

Taboo		% who are 'uncomfortable'
1	Opinions about partners friends	38%
2	Opinions about relatives and in-laws	38%
3	Money issues after death	37%
4	Relationship history	×
5	Opinions on how best to bring up children	32%
6	Religion and opinions on religion	31%
7	Politics and opinions on politics	30%

A. 32%

B. 37% C. 34%

D. 40%





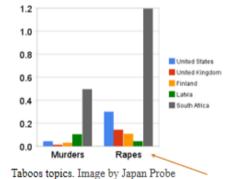
#### IDENTIFY THE TYPE OF QUESTION



# PROBLEM SOLVING: RELEVANT SELECTION

- The first step in solving the problem is to identify those bits of the information that
  are relevant. Questions testing this aspect present you with information which is not
  important, perhaps redundant, and possibly distracting.
- This kind of question demands Relevant Selection, in which the task is to select and apply only that information which is necessary and helpful in finding a solution.

# 1. WHICH OF THE FOLLOWING NATIONS DO CONSIDER RAPES AS TABOO THE MOST?



- A. United States and United Kingdom
- B. Finland and South Africa
- C. Latvia and United States
- D. South Africa and United States



RELEVANT INFORMATION

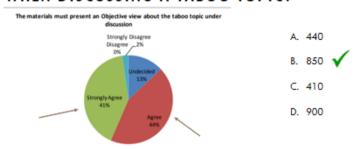
#### IDENTIFY THE TYPE OF QUESTION



# PROBLEM SOLVING: FINDING PROCEDURES

- Sometimes you will find that even if you have selected all of the relevant information, no solution presents itself. You then have to find a method or procedure which you can use to generate a solution.
- Typically you will have three or four numbers which have to be operated on.

# 2. THERE WERE 1000 PARTICIPANTS IN THIS STUDY ABOUT TABOO. HOW MANY PEOPLE DO AGREE WITH THE STATEMENT THAT THE MATERIALS MUST BE OBJECTIVE WHEN DISCUSSING A TABOO TOPIC?



#### IDENTIFY THE TYPE OF QUESTION



# PROBLEM SOLVING: IDENTIFYING SIMILARITY

- You will typically be presented with information or data represented in more than
  one way (including e.g. charts, tables, etc.).
- To answer the question, you will need to understand the relationships between these
  and to identify any similarity in the data they represent.

# 3. THE FOLLOWING CHART SHOWS THE TABOO TOPICS IN AUSTRALIA. WHICH PERCENTAGE DOES RELATIONSHIP HISTORY REPRESENT?

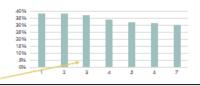
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6	Religion and opinions on religion	31%	
7	Politics and opinions on politics	30%	

A. 32%

B. 37%

C. 34%

D. 40%



Taboo topics in Australia

#### Thinking skills lesson plan #4

Number of students: 22

**Level:** 9<sup>th</sup> semester

Subject: Sociolinguistics

**Objective:** Students will be able to answer problem -solving and critical-thinking questions using information related to the Ted talk "Euphemisms" by Kate Burridge.

**Topic:** Euphemisms

#### **Activity** 1. "Food for Thought" (40 minutes)

➤ Problem- solving and Critical-thinking questions: Once the students have observed a Power Point presentation about euphemisms, they will respond to a questionnaire. The problem-solving questions in the presentation are relevant selection, finding procedures, and identifying similarities. Also, the critical-thinking questions include identifying assumptions, detecting errors and applying principles.

#### Activity 2. TED Talk presentation video as input. (20 minutes)

Presentation of Ted talk "Euphemisms". https://tedxsydney.com/talk/euphemisms/

## Activity 3. Evaluating the TED Talk through cooperative learning and team discussion. (30 minutes)

- ➤ Quiz: There will be a discussion with the following questions.
  - What are euphemisms?
  - What is their purpose?
  - Which examples did Kate provide?
  - Does she agree with the use of euphemisms?
  - According to Kate, where can we find euphemisms?
  - How would life be like without euphemisms?
  - Does everybody use euphemisms?

#### Activity 4. Construction of judgments showing evidence and rationality. (30 minutes)

> The teacher asks these questions:

Are euphemisms a dishonest disguise or are they a tool to talk about taboo topics? Do you use them? Give examples.

#### **Power Point Presentation**





Raj (2017). https://www.peptalkindia.com/100-popular-euphemisms-in-english-language/

#### **EUPHEMISMS-GEORGE ORWELL**

"Language desing to make lies to sound truthful, murder respectable and give an appearence of solidity to wind."



# WHAT ARE EUPHEMISMS? WARDAUGH(2006).

The "dressing up" in language in certain areas in life to make them more presentable and polite to public taste.

They allow us to talk about sickness, death, unemployment, and criminality.

It labels to unpleasant tasks and jobs to make them sound attractive.



I. The employees of this study refer to taboo topics with euphemism strategies. Based on the chart, which of the following is correct?

Topic	Strategy	Gender	Frequency	Percentage
Lying	Understatement	Male	27	40.30
		Female	40	59.70
	Taboo	Male	41	74.54
		Female	14	25.46
Deletion	Deletion	Male	27	64.28
		Female	15	35.72
Death Part-	Part-for-whole	Male	23	30.67
		Female	52	69.33
	Overstatement	Male	20	55.55
	Synonyms	Female	16	44.45
		Male	14	46.66
		Female	16	53.34
Bodily	General for Specific	Male	27	44.26
Functions		Female	34	55.74
	Metaphor	Male	23	40.35
		Female	34	59.65
Deletion	Deletion	Male	07	36.84
	Female	12	63.16	

Distribution of most employed euphemism strategies by the Saudis due to gender

- A. Men refer to death using synonyms more than women.
- B. Women refer to death using overstatements more than men.
- C. Women and men refer to death using synonyms equally.
- D. Women refer to death using synonyms more tan men.

2. What is the difference in frequency of use between economy and disability euphemisms?

Category of Euphemisms	Total Frequency of Use
Military euphemisms	239
Economy-related cuphemisms	165
Disability-related euphemisms	67
Sex-related euphemisms	88
Death-related euphemisms	59
Poverty-related euphemisms	182

A. 98

B. 232 C. 116

D. 92

3. What is the frequency of the euphemism "physically challenged person"?

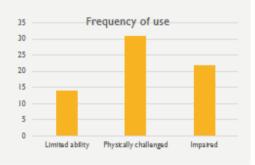
Euphemism	Frequency of Use
People/Those with limited ability	14
Physically challenged person/s/people	X
impaired person/s/people	22

A. 28

B. 15

C. 10

D.31



4. "Speakers seek the les offensive words to speak the unspeakable. (...) what would life be like without euphemism?, what would life be like if we all said exactly what is on our minds and in the plainest and most explicit of terms? Hell on earth.

Kate Burridge

Which of the following is an underlying assumption of the argument?

- A. The writer's comment is totally against euphemisms.
- B. The writer is most likely to support the use of euphemisms.
- C. The writer introduces a question to reflect being unbiased.
- D. The writer tries to convince the readers to use euphemisms just in familiar contexts.

5. The Supreme Court is more direct narrating rape cases. For example, It does not use euphemisms to refer to male and female organs. Even though they claim that it is because these cases require clear and direct description, I consider them being rude and impolite. Society needs to use euphemisms in all the circumstances. If they used softer terms, they would encourage respect.

Which of the following is the best statement of the flaw in the argument?

- The example provided is not understandable.
- B. The argument presents a supportive point but it is no well stated.
- The argument lacks support for her opinion.
- D. The opinion of the writer is objective.

6. An euphemism is a socially acceptable way of substituting agreeable wording for unpleasant or offensive truths. We use euphemisms all the time. For example, we say a loved one has passed away instead of saying that he or she has died. Evans (2003).

Which one of the following best illustrates the principle underlying the argument?

- We say that a child is happy even when it is not.
- B. We accept a job instead of being fired.
- We put a suffering pet to sleep instead of killing it.
- D. We criticize people instead of praise them.

## **CORRECT ANSWERS**

- I. D
- A
- 3. D
- 4. B
- 5. C
- 6. C