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Title

The Role of TED Talks in Developing EFL Learners' Critical Thinking Skills: *The Case of Master's Students at the Department of English at MMUTO*

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Dedication

This humble work is dedicated to all those who made every step worthwhile:

To my beloved grandmother, whose memory continues to inspire me.

To my wonderful parents and beloved siblings.

To my cousin Younes and his wife Asma.

To my aunt and uncle.

To my dearest friends and my amazing study partner Narimane.

Celina

To my loving grandmother, in memory.

To my treasured grandparents, a source of inspiration.

To my beloved parents and siblings pillars of love and support.

To all the cherished individuals I have met during my academic journey.

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Abstract

The present study analyses the role of TED Talks in developing EFL students' critical thinking skills. This research seeks to fulfil two main objectives. The first aims to examine students' opinions about the role of TED Talks videos on their critical thinking abilities. The second seeks to investigate the implementation of critical thinking standards in their shows. To achieve these goals, this research relies on Paul-Elder's (2001) critical thinking framework and adopts a mixed-methods approach. Data were randomly collected from YouTube's TED Talks channel and a questionnaire was distributed to 60 masters' students. A descriptive statistical methods is used to analyze the data collected from the questionnaire, and a relational content analysis is used for the scrutiny of the videos. The findings have demonstrated that TED Talks integrate 78.75% of the critical thinking principles as revealed by the evaluation of the ten selected videos. The outcomes have also indicated that the students at the department of English MMUTO perceive TED Talks as a valuable tool for enhancing their critical thinking abilities. Overall, the results have suggested that TED Talks can be a useful pedagogical tool for improving and fostering critical thinking in EFL Students.

Key words: Critical Thinking, EFL Students, TED Talks, Intellectual Standards of Critical Thinking.

List of Abbreviations and Acronyms

- *EFL*: English as a Foreign Language.
- *H*: Hypothesis
- *MMUTO*: Mouloud Mammeri University of Tizi-Ouzou.
- *Q*: Questions.
- *TED*: Technology, Entertainment, Design.

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General Introduction

Statement of the Problem

Delivering lessons in a captivating manner is a powerful way to foster students' engagement and active learning. Media advancement has already developed new appealing teaching methods that might be used by both students and teachers in the educational field using modern tools. Ted Talks is among the popular You Tube channels defined as “a series of informative, educational, inspiring and sometimes jaw-dropping talks that present ideas worth spreading” (Sailun & Idayani, 2018, p.66), due to the high-quality content delivered through realistic and content-based shows that aim at developing people's critical thinking.

In the academic environment, “Learning how to think is the central purpose of education” (Dewey,1933). Teachers may assume that their students already mastered basic academic skills such as writing, reading, speaking and listening ;however, the world is transforming and the basic skills acquired may not be sufficient for EFL learners in the context of higher education where they need to explore their ideas and scrutinise the provided information to feed their curiosity. In this regard, Commins (1981) claims that “learners are required to a language in the service of thinking and problem solving”. Thus, to encourage students to activate a critical mindset, and evaluate the knowledge rather than absorbing it in a passive state, which reduces their academic performance.

Critical thinking, education and learning are interrelated concepts that complete each other. Paul Richard, (2005,p.10), claims that “thinking requires content, substance, and something to think through”. Some principles of critical thinking such as emotional intelligence and skepticism can be developed intuitively according to the topic taught, the situation lived or the social interactions in which they participate. Paul, R (2005) and many educators assert that the best way to teach critical thinking is by exposing students to a degree of uncertainty; thus to reflect on the type of the questions asked during classes, as he

insisted on the importance of rising the 'How' questions over the 'What' ones during classes in order to encourage learners to move beyond their comfort zone to take action, by trying to solve a problem, find a solution, and comment on colleagues' assumptions. Indeed, the goal of reducing the 'What' questions and replace them by the 'How' is to ensure that students are not just absorbing the content of the lecture, yet to acquire the intellectual dispositions at the same time because “thinking leads man to knowledge”, (Paul ,2005,p.9).

Promoting critical thinking skills according to Lian, (2011), is also related to higher educations' goal of building responsible citizens, because the recent life challenges requires individuals who think skeptically, and manage to evaluate different beliefs and assumptions to protect themselves from manipulation and misleading information. Several studies have explored the issue of critical thinking, each varying in interpretation and objectives, such as the investigation of “ TED talks Comments To Enhance Critical Thinking Skills In An Undergraduate reading and writing Course ”, which has been conducted by Allagui in 2021, where students were involved to analyse comments on TED Talks , using four criteria ; Critical thinking, consistency, Objectivity , and informativeness .The findings assert that these comments improved students' critical skills and offered them multiple perspectives to think precisely, and suggested it to be an effective tool for teaching Critical thinking. “Using Ted Talks Videos to Enhance Students’ Communication and Critical Thinking skills”, is another investigation which has been explored by Salama Saif Hamed AL-Siqabi (2024) in the University of Sultanate Oman. This study mostly directed its focus on the communicative skills rather than critical abilities; however, the findings showed that the participants have demonstrated a sort of critical thinking when they tried to understand the topics and ask a range of questions. More likely other studies were conducted at the department of English at MMUTO , namely “Students representation of critical thinking and application of intellectual standards’ investigated by Dendaouin, R & Achour, GH,(2017), following an empirical

investigation which revealed that the learners are aware about the concept and familiar with it, but they do not apply it in their writings properly.

Despite the great deal of research dedicated to the subject, its exploration in relation to digital platforms remained disregarded in the Algerian context, and limited attention was paid to the investigation of these channels, particularly TED Talks to strengthen the enrolees' skills to think critically. This shortcoming creates a research opportunity which this study aims to explore.

Aims and Significance of the Study

The overall aim of the study is to examine the presence of critical thinking principles in different videos of TED Talks and report students' perceptions regarding the role of TED Talks on their capacities to think critically. This study covers two main objectives; The first to investigate the implementation of critical thinking standards in their shows; The second is to examine students' opinions about the role of TED Talks videos on their critical thinking abilities

The significance of the study lies in pioneering new ground research in the department of English at MMUTO about critical thinking in relation to digital networks , since the previous studies focused mainly on the written materials. Besides, learners and teachers will be encouraged to use the online platform, cultivate critical abilities, and improve comprehension.

Research Questions and Hypotheses

To achieve the highlighted objectives, two research questions are formulated as follow:

- To what extent do TED Talks incorporate critical thinking principles in their videos?

- What are students' perceptions on the role of TED Talks in developing their critical thinking skills?

Based on the previous research questions, the following hypotheses are proposed:

- TED Talks integrate critical thinking standards in their videos.
- EFL learners believe that TED Talks improve their critical thinking abilities.

Research Techniques and Methodology

The present research explores if TED Talks integrate the critical thinking principles in their episodes and examines the students' views regarding the contribution of TED Talks presentations to enhance their critical thinking skills, at the department of English at Mouloud Mammeri University of Tizi Ouzou. This study employs a mixed-methods research design, initially a qualitative approach in which the corpus of YouTube videos is selected randomly. Afterward, these talks are analysed relying on qualitative content analysis approach. Paul Richard theory of critical thinking (1992), underpins this study. This framework asserts that critical thinking encompasses a variety of stages that learners need to foster in order to achieve a high level of critical thinking competence. The choice of this model results from the fact that the principles highlighted could be flexible from one context to another, allowing learners to interact with different experiences. Supplementing the qualitative approach, a survey is distributed for 60 masters' students to analyse their perceptions on the impact of TED Talks videos on their opinions. The collected data are then quantitatively analysed through descriptive statistics.

The Structure of the Dissertation

The current dissertation is designed according to the traditional simple model of dissertations. It is divided into a general introduction, four chapters and a general conclusion. Initially, the general introduction involves the identification of the research problem, aims,

and significance of the study, research questions, hypotheses, methodology and the structure of the dissertation. The first chapter named the review of literature deals with the core theoretical foundations related to our research. The second chapter, entitled the research design and methodology, offers a detailed explanation about the relational content analysis procedure used to analyse the videos and the operation used to quantify students' answer on the survey. The third chapter is the presentation and the discussion of the outcomes which summarizes all the obtained findings, and discusses the interpretation of the videos and students' answer on the questionnaire. Ultimately a general conclusion where the facets of the research are simplified clearly and further research options are suggested.

Review of the Literature

Introduction

This chapter explores the literature related to our field of inquiry, highlighting the educational value of YouTube channels, particularly TED Talks, in enhancing the learning experience. The first part provides definitions and background information about Ted Talks focusing on their use in education and their role in developing various academic skills. Then it examines the relation between the acquired cognitive abilities and the development of critical thinking. Finally, the chapter offers an in-depth exploration of critical thinking, including an overview of Richard Paul's work and a presentation of Paul Elder's Critical Thinking Model which serves as the theoretical framework of our study.

1. TED Talks in Academic Contexts

1.1. Background and Definition

The term Ted is a converged acronym of the three following concepts Technology, Education and Design, which first appeared in 1984 in Monterey, California in a form of conferences. Over the past 30 years, those conferences prospered resulting independent organized TED events in different parts of the world. In 2006, Ted Talks organizers established a website to share recorded versions with a wider audience, particularly those unable to attend. Consequently, the effective dissemination of the shows has increased the number of views to reach a global audience.

As TED Talks hold an important role in education nowadays, Rubenstein L, D (2012), defines it as “one of the most prominent video-delivering sites that provides fresh content in video form”, and “contains a good presentation with excellent topics or opinions from native speakers that can improve students' language learning”, (Chang, T and Huang, H.T. 2015).

That is to say, Teds are well organized and structured episodes that provide informative and educative content to inspire the viewers and spread new constructive ideas.

In the vein of educational content on YouTube, Ted Talks have already made huge impact in learning. Bol-Tastan ,et al (2018) , that “ instructors may utilize Ted Talks to pique learners interest and passion about certain subject” , through exposing them to its shows that “ serve as a genuine resource in which learners may examine how language is used in real life situations and learn from their mistakes ”,(Tilwani S,Aet al , 2020,p.2), this is specially in the context of English Foreign Language Teaching , where the ability to communicate effectively is viewed among the crucial skills required in Foreign Language classroom. “Using Ted Talks as an authentic source has some advantages that can improve listening comprehension” (Tilwani S,Aet al , 2020,p.7), that is to say, teachers can rely on the videos of ted talks in listening and speaking classes as an audio visual tool, that effectively create positive attitudes and strategies enhancing students’ language mastery.

Other studies highlight further educational benefits of using TED Talks in EFL classrooms. Following on Tilwani’s et al (2022,p.105) view, “The easy access to TED Talks and their highly stimulating contents can be the main characteristics of TED Talks that can motivate EFL learners to develop their English language learning”. They add that integrating TED Talks into the classroom dynamics can enable students to generate databases about the topics, model presenters in oral presentations, and improve their body language. Ultimately, TEDs’ role as a mean of displaying knowledge may help them discover their entity and their field of interest.

1.2. Ted Talks in the Educational Context

As claimed by different researchers reflecting on digital materials such as TED Talks in the educational environment can successfully engage learners and help teachers while

doing their work. Olga Nezhyva (2022,p.2), assert that “during foreign language classes it is necessary to use digital technologies which create educational material that is accessible, interesting and motivating for students”. Mainly the same was supported by Frank, R et al, (2014), saying that “those talks are a curious phenomenon for educators to observe”, since they help on spreading curiosity within the learners.

Considering the formal structure of the academic inquiry, TED Talks have been recognized to be more scholarly as they seem. Ted Talks are not as unstructured as they may appear, presenters are well coached and instructed to follow a specific presentation formula, which maximizes storyboarding and highlights passion for the subject”. (Frank, R. Jeffic, C.and Patrik, J, 2014). Similarly to Ahluwalia ,G and deepiti, G (2018) words’ “ it is now relevant to turn to Ted Talks videos , which is a source for learning a modern foreign language ”. This simply means that the coordinators of TED Talks have made increasing efforts to preserve the formality of the platform by offering a high level of expertise and prudence while establishing the structure and the content of the talks .As noted by Gurleen (2018,p.81), “ Ted is well aware of its potential utility , to the world of education , so has devoted an entire website ed.Ted.com to using Ted in the classroom”.

TED Talks is “a great platform for classroom discussions and offers many different kinds of educational experience which can be creative, exciting and rewarding for the students” (Gurleen, A, 2018,p.80). Consistent with this perspective, Olga. (2022,p.11) affirms that those videos are worth using since they play “a powerful tool for preparing students to communicate in an English speaking professional and academic environment”.

Correspondingly, “Ted platform could also be used as an active-learning strategy where students are either asked to critique an exciting Ted or design their own Ted Talks regarding a particular topic of interest or relevance”, (Romanelli, F. Cain, J. Mc Namara, P,

2014,p.4). In parallel, the pedagogical benefits do not stand only for students. It also aligns with the needs of teachers in the sense that “if one has flipped the classroom, though it is also highly effective in creating compelling homework”, (Gurleen, A, 2018,p.81). To illustrate this, higher education gives students opportunity and chance to interact and engage with lessons, and the use of Ted videos as a material when establishing the flipped approach will increase the understanding level of the topic, promote informed class discussions among students and achieve the objectives of the lecture correctly. As for teachers, Ted also “serve the faculty members in which those videos might be able to improve their own delivery skills by observing Ted Talks, and adopting techniques used by presenters “(Gurleen, A, 2018), which means , by modelling these talks educators can gain informative insight to deliver effective presentations and storytelling techniques that keeps students more engaged and motivated.

1.3.The Impact of Ted Talks in Developing Listening Speaking and Communication Skills

The role of Ted Talks in education has shaped the attitudes and the outcomes of the users mainly learners in a positive way, where researchers have noticed an improvement in different skills such as speaking and listening among students.

the educational value if Ted Talks as an online resource which helps to develop listening speaking and interaction skills was confirmed and therefore their use should continue to be fostered in helping to sustain motivation and engagement among both those learning and those teaching.

(Kozinska, K, 2021,p.220)

Accordingly, TED Talks is a helpful instrument to foster academic skills such listening and speaking , as it keeps teachers and students more engaged and interested more in learning.

Likewise, Nursafira, M.S, (2020) assert that, this platform is increasingly recommended for use where English functions as a foreign language, by teachers in order to facilitate knowledge acquisition for students, foster speaking abilities, motivate them and release their anxiety to speak confidently, Thus , indicates the more the platform becomes popular in the in foreign language setting, teachers may use it to help students learn better and understand English easily through practicing speaking safely and make them feel confident and less anxious when using the platform, which consequently keep them motivated to speak and improve their English skills.

1.4. Ted Talks as a Multimodal Resource

The broad range of TED Talks topics and fields of interest has transformed the platform to a multimodal resource. The term multimodal indicates:

Different semiotic modes for instance language and image are combined and integrated in a given instance of discourse or kind of discourse, spoken discourse for instance integrates language with intonation voice quality, facial expression, gesture and posture as well as aspects of self-presentation such as dress and hairstyle.

Van Leeuwen (2011)

Aligning with van Leeuwen words the diversity of modes such as language, images, voice tone and facial expression have a paramount role in the process of meaning making and shaping thoughts. In this regard multimodality can be clearly observed in TED Talks, in which speakers combine the spoken language with a variety of visual and audio elements in order to transmit their messages in a clear, engaging, and effective way. Rowley-Jolivet (2002) claims that, "visuals could provide presentations with novelty and immediacy" as they "meet the three metafunctions that the Systemic Functional Linguistic establishes (ideational, textual, interpersonal)." Simply put, the content delivered by TED presenters explores the ideational metafunction by conveying the facts through the use of images in some situations

alongside with the uttered explanations, and reinforces the interpersonal one through the integration of colours and facial expressions, as they use diagrams for example to clarify the relationships between concepts. Accordingly, this goes by side with Hyland's (2006) words (as cited by Garcia-Pinar & Pallejá, 2018,p.22), that "visuals can provide information, help to structure the talk and draw the audience's attention". In the sense that these visuals in the context of TED Talks make the presentations clearer and engaging, due to the powerful effect of these non-verbal elements on the viewer's perception and interpretation of the received knowledge, and its impact on the effectiveness of the presentation especially on the matter of illustrating complex concepts and raising the attention of the audience.

1.5. Ted Talks and the Cognitive Skills

Cognitive skills are the essence of effective learning, as they allow the learner to assess, memorize, and apply what they have already learned.

Starting from the earliest levels of the learning journey educational programs devoted their efforts to train students to reflect on their thoughts and ideas; thereby, activating metacognition which refers to the process of "thinking about thinking" (Lai,2011,p.17). As Morphey, J.W et al, (2020,p.3) state , "metacognition is the act of thinking and reflecting on one's cognitive process". Psychologists agree that metacognition entails two important components that are both necessary for learning. The first is metacognition which is defined by Lai, E.R, (2011,p.18), as the knowledge about oneself as a learner and about the factors that might impact performance (declarative), knowledge about strategies (procedural), and knowledge about when and why to use strategies (conditional), which exemplifies what a person know about himself as a learner, and what method is preferred to use for solving proper problems, alternatively to understand your weaknesses and your strengths. Whereas, the second is the metacognitive regulation which is about "the monitoring of one's cognition

and includes planning activities, monitoring or awareness of comprehension and task performance, and evaluation of the efficacy of monitoring processes and strategies”, so that the individuals check their improvements in their work and adjust the retained knowledge each time.

In cognitive science , critical thinking is directly related to the brain in which it is viewed as “ one of the most important cognitive skills that one can develop through the practice of thoughtful thinking , and it contributes to making a positive change in an individual’s life on both professional and personal levels ”, (Sutour ,2020). Thus, “The presence of cognition and values means that being aware of the context and being empathetic plays a crucial role in being a critical thinker”(Enciso,O.L.U et al , 2017,p.81) . Building upon what has been said by Cary and McCardle (2011) as cited by Hanna (2013), “practicing self-awareness, tolerating ambiguity when faced with ethical dilemmas, and applying knowledge gained from multiple sources are all key components to critical thinking”. Indeed, when we consider this statement we understand that both self-awareness and ambiguity toleration that encourages a person to keep focused are functions of cognition, that involves metacognition, reflection, flexibility and open mindedness, and thus summarizes how these two concepts are interrelated.

In this regard, one of the significant theories related to cognition, and learning is the Bloom’s Taxonomy. According to Armstrong, P. (2010), the framework is developed by Benjamin Bloom in 1956, as a hierarchical organization of six cognitive skills that guides educators and students to set their objectives are knowledge, comprehension, application, analysis, synthesis and evaluation. The operation starts by remembering the information learned before, then it explores more complex processes like analysis, evaluation, and creation

“Critical thinking involves both cognitive skills and dispositions” (Lai, E, 2011,p.2). As the definition confirms, critical thinking requires not only processing the information, as explained by Benjamin Bloom (1956) but also it involves the beliefs and the attitudes that influence the individuals thinking and behaviour toward any information, such as asking questions to learn more or being open-minded to various perspectives.

2.Critical Thinking

2.1. Definition and Importance

Critical Thinking is often lined as one of the crucial skills in both personal and professional life. This multifaceted concept has been defined and interpreted by various approaches and scholars in different ways. Starting by the philosophical approach, scholars focused more on valuing the qualities and the characteristics of a person rather than the actions that comes as a result of Critical Thinking (as stated by Lai, E, R.2011). Accordingly, Ennis (1985), argued that critical thinking refers to “a reflective and reasonable thinking that is focused on deciding what to believe or do”. Another definition was provided by Lipman (1988) as stated by Lai(2011,p.6), asserting that this notion is “a result of skilful, responsible thinking that facilitates good judgement because it (1) relies upon criteria, (2) it is self-correcting (3) and is sensitive to context”. Simply put, critical thinking is the way a person can make informed decisions and correct himself in the obstacle he faces to end up by well-reasoned and thoughtful decisions.

Second, we have the cognitive psychological approach which highlights the meaning of critical thinking by focusing on the types of actions or behaviours that might be done by a critical thinker saying that, “critical thinking is the mental processes, strategies, and representations people use to solve problems, make decisions and learn new concepts”

(Sternberg,1986, as stated by Lai2011, p.7). Similarly, Halpern (1998), noted that critical thinking “is the use of those cognitive skills or strategies that increase the probability of a desirable outcome”,(as cited in Lai,2011,p.7), which indicates as soon as a person think smarter and use effective techniques in particular situations or reflections will get more positive results.

According to Facione (2008, as cited in Lai ,2011,p.6), critical thinking is a judgment process. Its goal is to decide what to believe and/or what to do in a given context, in relation to the available evidence, using appropriate conceptualizations and methods, and evaluated by the appropriate criteria”. Differently put, critical thinking is about understanding how individuals actively engage with the information to reach reasoned decisions according to the situation in which it is embodied based on the existed information in order to build a judgement on something. Building on this perspective, Bailin et al. (2003), assert that “Critical thinking is viewed as strictly analytic and evaluative, an algorithmic process that consists in arriving at the correct evaluations of ideas, arguments, or products” That is to say, it involves a fair evaluation of the data according to the criteria or the circumstances that control the situation and the rule that determines the concept such as the questions of Paul-Elder. As he briefly defined critical thinking being “first and foremost, a variety of good thinking”, (Bailin et al.2003).

Additionally, Kress, (2004), asserts that critical thinking is “involving the ability to explore a problem, question, or a situation; integrate all the available information about it: arrive a solution or hypothesis, and justify one’s position”. This means carefully using thinking abilities to solve problems, make decisions, and reach good and oriented conclusions in order to reach a clear goal, by checking reasons, and ensuring that the ideas make sense in the situation. Furthermore, Paul-Elder as cited by Kress, (2004), assert that critical thinking is

“the mode of thinking about any subject, content or problem in which the thinker improves the quality of his or her thinking by skilfully taking charge of the structures inherent in thinking and imposing intellectual standards upon them”.

critical thinking is of a paramount importance which cannot be overstated, as it has a significant role in developing decision-making, problem-solving, and effective communication. The ability to evaluate information objectively, question assumptions, and consider multiple perspectives, in the sense that it promotes a better decision making by prioritizing rationality which considers clarity and logic over emotional reaction. In this regard Raj, T, et al, (2022), claims that students who use these talents have larger perspectives of the world and are more capable of making crucial choices in school and in life”. Thus, they are more likely to achieve their academic and professional objectives.

2. Paul Richard’s Critical Thinking Theory

According to Linda Elder (2007), the Paul- Elder framework of critical thinking may be the most appropriate approach for various uses due to its effectiveness and versatility in different contexts. Elder affirms that this model is comprehensive, integrated and applicable to multiple aspects of life, including academic and professional domains. The framework, stresses ethical reasoning, self –improvement, and universal principles that transcend subjects and disciplines inspired by Socrates. When Paul establishes the framework of critical thinking from early years 1937, he advocates for living an examined life, encouraging people to think deeply and cultivate intellectual development and growth that enable them questioning assumptions and make informed decisions.

2.1. Paul’s and Elder’s Critical Thinking Framework

The current research is built upon Paul Elder's critical thinking framework (2001) which encompasses three interconnected components: the elements of thought which consist of the fundamental aspects of reasoning, the intellectual standards which serve as guidelines for assessing these elements, and the intellectual traits which exemplify the qualities and the characteristics that a critical thinker develops by consistently applying these standards to the elements of thought.

According to Paul, and Elder, (2001), an impressive critical thinker requires a command of the intellectual standards, that enables to become the guide to better reasoning which are as follows:

- **Clarity:** It is the first ingredient that sheds light on critical thinking, which is about understanding issues, problems, goals and objectives, which means it involves expressing thoughts and ideas in a straightforward manner in order to make the meaning understandable and free from ambiguity. According to Paul, R we can check the clarity of something by these questions:

- Could you elaborate?
- Could you illustrate what you mean?
- Could you give me an example?

- **Accuracy:** To say that this information is accurate, means to find answers to these questions:

- How could we find out if that is true?
- How could we verify or test that?
- How could we check on that?

- **Precision:** refers to a process of asking for more clarification in order to see the information clearly:

- Could you be more specific?
- Could you give me more details?
- Could you be more exact?

- **Relevance:** The relevance of something, refers to the extent to which the information is directly related to the issue, for example:
 - How does that relate to the problem?
 - How does that bear on the question?
 - How does that help us with the issue?
- **Depth:** As the name denotes, depth is about processing the information in a deep manner to understand:
 - What factors make this different?
 - What are some of the complexities of the question?
 - What are some of the differences we need to deal with?
- **Breadth:** It is concerned more on assessing the variety of standpoints that differs in any issue or situation by looking at:
 - Do we need to look at this from another perspective?
 - Do we need to consider another point of view?
 - Do we need to look at this in other ways?
- **Logic:** simply signifies the reasonable information free of irony and goes with the truth of the world and evidences:
 - Does all this make sense?
 - Does your first paragraph fit in with the last one?
 - Does your claim logically arise from evidence?
- **Fairness:** It is the last component of the intellectual standards, which refers to evaluating an information in an objective open minded and no biased manner, which implies answering the following questions:
 - Is my thinking justifiable in context?
 - Am I taking into account the thinking of others?
 - Am I using my concepts in keeping with educated usage or am I distorting them to get what I want?

The checklist above, is directly derived from the Paul-Elder Critical Thinking Framework (2001), which provides a systematic and structured approach to analysing thought processes through a series of questions . The framework is selected for its clarity, coherence, and easiness in identifying the characteristics of critical thinking within a given subject and context , as it involves critical thinking by focusing on eight main elements , such as the purpose behind a particular idea , the issue being addressed, the information or evidence used by the person , the assumptions and the beliefs behind it , the considered point of view and the concepts involved, and also the conclusions reached, alongside the possible consequences an idea may bring . Accordingly, these elements may encourage individuals to think more clearly and carefully by considering different aspects of their thinking and highlight any weaknesses or improvement in their thinking . In this study, the framework makes the analysis more easier ,due to the clear and the organized way of identifying the critical thinking principles in the videos.

Conclusion

This chapter examined the literature related to the topic of investigation. It is divided into five headings. The first heading has provided a definition of Ted Talks and background information about its existence. The second is about the impact of Ted use in education and how it succeeded to cover a variety of academic skills. Thirdly, it introduces TED Talks as a multimodal resource, then it offers a brief overview of the motivating factors that fosters critical thinking which is about the role of the cognitive skills in this process. Finally, it explores Paul-Elder (2001) theory of critical thinking which serves as the analytical framework of the present research.

Research Design and Methodology

Introduction

The current chapter is concerned with the methodological tools and the research design used in this inquiry, which mainly aims at investigating the integration of critical thinking principles in various Ted Talks videos. It is divided into three main sections. The first section focuses on explaining the research design and the methods that underpins the study. The second part introduces the data collection instruments of the investigation, merely the qualitative and quantitative tools. Ultimately, the last section outlines the data analysis approach selected for the data examination.

2.1 Research Method and Design

2.1.1 Mixed-Methods Research

To ensure an in depth exploration of the topic, a mixed methods approach is adopted. As a method, it serves to combine both qualitative and quantitative epistemologies for a better understanding of the gap. It is defined by Deboral, and Michael, (2010) , as an approach of “utilizing two or more data collection methods whose validity and reliability problems counterbalance each other , enables us to triangulate in on the ‘ true’ result ” . That is to say, adopting this method and analysing the issue from different angles increases the accuracy and the validity of the findings as it results from combining various tools _such as questionnaires, interviews, and observations which contributes to a more comprehensive understanding of the topic and a higher level of confidence in the results.

In parallel with our research, the mixed-methods approach is applied in the survey-based study, through the use of the questionnaire to gather the participants’ view on the use of Ted Talks. In addition, a corpus-based analysis aims to interpret the extent to which these TED Talks influence critical thinking competency.

2.2 Data Collection Procedure

2.2.1 Context and Sample

This research is conducted at the level of the department of English at MMUTO within the academic year 2024-2025. In order to conduct the investigation, a population of 60 participants from the same institution, including master one and master two students of different majors is selected.

A random sampling approach is applied in the research for both the questionnaire and the corpus because “it makes sure that every person in a population has an equal probability of being chosen as a response” (Thomas, 2020). This ensures the engagement of students of different levels. As for the Ted Talks selection, the research relies on ten videos listed on the official website of ted talks entitled ‘Most popular TED Talks for all time’ which are randomly chosen from the 25 published videos updated each year. The corpus follows this selection in order to avoid any biases and reach reliable results.

2.2.2. Data Collection Tools

2.2.2.1 Questionnaire

A questionnaire is a structured form of a list of questions designed to be used in academic context. According to Jenn, N.C. (2006), a questionnaire is used to gather information from the respondents to answer the research questions, and it is a “very convenient way of collecting information from a large number of people within a short period of time”.

In this investigation, the questionnaire is designed for masters’ students at MMUTO department of English. It consists of a series of close ended questions, requiring the students

to respond by selecting appropriate options based on their experience within the use of TED Talks. The organization of the survey is divided into two main sections. The first part introduces the topic of Ted's role in developing EFL learners' critical thinking skills, and guarantees anonymity for the participants. The second part encompasses three elements: students' background information, their experience with TED Talks, and their perceptions of critical thinking.

Initially, the questionnaire was distributed for five (5) students as part of a pilot study, in order to assess and check the clarity of the questions. After receiving feedback modifications were made by adding a space to questions number 6 , 7 and 9 for students to share their comments alongside the closed-ended options .Additionally, two questions from the part concerned with Critical Thinking were reformulated as follow : Do you feel that watching TED Talks helps you think more critically about different topics ? and the second "How likely are you to apply Critical Thinking skills learned from Ted Talks in real- life situation."

2.2.2.2 Corpus of the study

In this inquiry the corpus exclusively embodies videos from the You Tube channel Ted Talks from which a variety of talks in different topics and fields of interest such as education, sport, technology and entertainment are randomly selected. The analysis of the videos, allows us to analyse the content delivered from different perspectives. It also helps us to facilitate the process of assessing the content from a critical thinking standpoint and enables us to determine whether critical thinking is present in this context.

2.3 Data Analysis Procedures

To examine the information collected, two methods are used. The first one is the descriptive statistical method which analyses the quantitative data. The second is the qualitative content analysis (QCA) which aligns with the qualitative analysis of the corpus along with the comments of the participants in the questionnaire.

2.3.1 Descriptive Statistical Method

According to Kaur, et al, (2018), “descriptive statistical method is a quantitative data analysis technique used to organize data into concise summary by outlining the connection between variable in a sample or population”. This method is highly quantitative data analysis device that serves to frame the data in a straightforward manner. Correspondingly, this study depends on the rule of three to analyse the collected data from close ended questions, and present the results in a form of charts and diagrams.

2.3.2 Relational Content Analysis

According to Prasad, (2008), content analysis is described as “the scientific study of content of communication. It involves content with reference to the meanings, contexts and intentions contained in messages”. Similarly, colorado state University website (2014) defines content analysis as:

a research tool used to determine the presence of certain words or concepts within texts or sets of texts researchers quantify and analyse the presence meanings and relationships of such words and concepts then make inferences about the messages within the texts the writer(s) the audience and even the culture and time of which these are a part.

Building on the provided definitions, this inquiry employs a qualitative content analysis which refers to “a systematic and objective means of describing and quantifying phenomena” (Krippendorff 1980, Downe-Wamboldt 1992, as stated by Satu, E Helvi, K, 2008). In simple terms, the approach carefully looks at what the transmitted messages are

sharing and how. Among the available qualitative approaches such as the thematic and the narrative analysis this research primarily focuses on relational content analysis.

Relational analysis (As stated in Colorado state University website (2014) is a type of content analysis which aims at identifying the important ideas or concepts in texts or discourse, and looks at how they are connected to each other and what relationships they have, in order to gain a deeper meaning of the content. This approach is described by Palmquist, Dale, and Carley (1997), as "a semantic analysis," since it focuses on the meaning created by the links between concepts. Similarly, this was affirmed by Wouter van Atteveldt et al. (2006), as being "useful to analyse content by coding it as a graph of relations between points.". That is to say, an effective content analysis starts by breaking down the text or the discourse intended to analyse into small pieces and units and then identifying the ideas in common and the themes that are related to each other.

The rationale behind adopting the relational content analysis is to determine the presence, or the absence, of Paul-Elder's critical thinking principles within the selected corpus. The analysis, opts on coding each principle with a plus sign (+) when present and a minus sign (-) when absent. After the codification; relational content analysis is used to interpret the results obtained from the coding table, and explain how the principles appear together, and relate to one another. Mainly to provide a structured and systematic approach to explore the patterns of critical thinking principles in the corpus, thereby facilitating the identification of Paul Elder Critical Thinking framework in the data.

Conclusion

The different parts of the chapter have provided a clear explanation of the research design adopted in this investigation. The first step has outlined the method selected for this inquiry, followed by a description of the setting, sample, the data collection procedures, and

the data collection tools used to gather information, and finally it has explained the data analysis protocol.

Results and Discussion

Introduction

The current chapter presents and discusses all the findings retrieved from our investigation at the level of the Department of English at MMUTO. It aims to answer the research questions stated in the general introduction, as it examines the validity of the suggested hypotheses. This part contains two sections. The first one presents the findings of the (10) analysed videos of the TED Talks, and discusses them to the review of literature, and the analytical framework on which this study is built upon. Whereas the second section displays the results of the distributed questionnaire which has been answered by sixty (60) master one and master two students of different majors, and interprets their perceptions on the role of TED Talks in developing their critical thinking abilities.

3.1 Results of the Corpus Analysis

Table : 01/10

<i>Video 01 : Do schools Kill Creativity</i>		
<i>Critical Thinking Principles</i>	<i>-/+ indicator</i>	<i>Examples</i>
Clarity	+	is that creativity now is as important in education as literacy, and we should treat it with the same status.
Accuracy	+	When I was a student, if you had a degree, you had a job. If you didn't have a job, it's because you didn't want one .
Precision	-	_____
Depth	+	Our education system has mined our minds in the way that we strip-mine the earth for a particular commodity.

Breadth	+	The speaker explores various concepts such as creativity education , academic inflation , able to be wrong and educational approaches .
Relevance	+	We need to radically rethink our view of intelligence.
Logic	+	if you're not prepared to be wrong, you'll never come up with anything original if you're not prepared to be wrong. And by the time they get to be adults, most kids have lost that capacity. They have become frightened of being wrong .
Fairness	+	I think math is very important, but so is dance. Children dance all the time if they're allowed to, we all do.

<i>Presence</i>	+
<i>Absence</i>	-

The first video of the corpus is delivered by Mister Ken Robinson in 2007, under the title “*Do schools kill creativity*”. The content is divided into subheadings in which he introduced each one clearly during the explanation. The speaker uses a humorous and funny storytelling style with simple language and provides inspiring stories and experiences from his life and his experience in education. According to Paul Richard criteria of critical thinking, clarity is noticed in the video where Robinson introduces the topic using simple and understandable words, that helps the audience evaluate the relevance of the information presented. Accuracy has also a significant role in the video, where he provides examples from the actual academic state and his personal experience in higher education. Through an in-depth analysis that covers all of the key terms directly related to the topic, the speaker breaks down the complicated concepts like academic inflation into small pieces of information in order to make it more legible. Additionally, his arguments flow logically and support his main ideas which makes his reasoning justifiable in context and promotes fairness throughout his talk. However, precision is not well demonstrated, despite the clarity of the message but it

remains too general. Starting by advocating the value of creativity, the speaker did not provide a clear way or guidance to implement these changes in real-life situations or a method to value creativity. Similarly, when he emphasized on the need to adjust the principles of the educational system, he did not specify what these new principles or approaches would entail or exemplify them in the real context. Thus, the questions provided by Paul Richard to assess critical thinking were largely answered except for precision which fails and lacks in the video.

Table: 02/10

Video 02: How to Make Stress Your Friend		
<i>Critical Thinking Principles</i>	<i>-/+ indicator</i>	<i>Examples</i>
Clarity	+	“For years I’ve been telling people, stress makes you sick. It increases the risk of everything from the common cold to cardiovascular disease.” “Let’s say you are in a stressful situation, and your heart is bounding normally we interpret this as anxiety or a sign that we are not coping well.”
Accuracy	+	“This study tracked 30,000 adults in the united states for eight years”
Precision	+	“Your heart has receptors for this hormone , and oxytocin helps heart cells regenerate and heal from any stress-induced damage .”
Depth	-	_____
Breadth	-	_____
Relevance	+	“When you choose to view your stress response as helpful, you create the biology of courage, and when you choose to connect with others under stress, you can create resilience. “Stress may only be bad for you if you believe it.”
Logic	+	“Your body is preparing you to meet this challenge. And when you view stress in that way, your body believes you.”
Fairness	+	“I no longer want to get rid of your stress. I want to make you better at stress.”

The second video of the corpus is presented by a health psychologist Kelly McGonigal in 2013, under the title “*How to Make Stress Your Friend*”. In this talk, McGonigal shares her personal perspective regarding stress, and how she used to consider it as a harmful state, rather than a positive mood. The video was dominated by a warm and friendly tone, with simple, clear and direct language aiming at transmitting personal stories and results from extensive studies. Following on Paul Richard’s criteria of critical thinking clarity is evident in McGonigal’s speech, as she gives a clear explanation of the concepts and accurate representation of the findings that support what she said. This helps the audience grasp her ideas easily. She is also precise in her explanation as she includes detailed comparative results and outcomes mainly by decoding the complex concepts to small pieces of information. Relevance also shines through relating her insights to our daily experiences and real life application. In addition, logic and fairness are effectively maintained in establishing a clear flow and a chronological, reasoned and structured way of organizing the ideas in order to make the understanding more balanced between different perspectives. Consequently, the questions provided by Richard are mostly addressed except for breadth and depth. The content did not explore the complexities and nuances of the topic in the sense that it ignores the diversity of perspectives. It only discusses the way stress is a positive phenomenon, and ignores to explore how stress functions or is experienced in different contexts. That is to say, the video failed to answer the questions of “What factors make this different”, and “Do we need to consider other view points”.

Table 03/10

Video 03: Inside the mind of a master procrastinator		
<i>Critical Thinking Principles</i>	<i>-/+ indicator</i>	<i>Examples</i>
Clarity	+	"The Instant Gratification Monkey lives entirely in the present moment. He has no memory of the past, no knowledge of the future, and he only cares about two things: easy and fun."
Accuracy	-	_____
Precision	+	"There's two kinds of procrastination. Everything I've talked about today, the examples I've given, they all have deadlines. But there's a second kind of procrastination that happens in situations when there is no deadline."
Depth	-	_____
Breadth	-	_____
Relevance	+	"These people were writing with intense frustration about what procrastination had done to their lives, about what this Monkey had done to them."
Logic	+	"If the procrastinator's only mechanism of doing these hard things is the Panic Monster, that's a problem, because in all of these non-deadline situations, the Panic Monster doesn't show up."
Fairness	-	_____

"*In the Mind of a Master Procrastinator*", is the title of the video delivered by Tim Urban 9 years ago. The show is dominated by humorous and storytelling style which encompasses some of the critical thinking principles and answers the questions related to clarity, precision, relevance, and logic. Urban's video is characterized by the use of a simple and clear language to explain complex ideas such as the "Gratification Monkey" and defines terms precisely, like long and short-term procrastination. Additionally, he has also used real-

life examples and structured arguments to make the concepts more relatable. However, some critical thinking principles were not well demonstrated namely, depth, breadth, accuracy, and fairness, as the speaker primarily focuses on personal experience and neglects to explore broader contextual and societal factors that lead to procrastination. Furthermore, the discussion lacks a psychological explanation of the mechanisms that occurs in the brain and how it functions which may not be fully understandable by the audience.

Table: 04/10

Video 04 : Stroke of insight .		
<i>Critical Thinking Principles</i>	<i>-/+ indicator</i>	<i>Examples</i>
Clarity	+	"I grew up to study the brain because I have a brother who has been diagnosed with a brain disorder schizophrenia..."
Accuracy	-	_____
Precision	+	"The two hemispheres do communicate with one another through the corpus callosum, which is made up of some 300 million axonal fibers."
Depth	+	"So I was mapping the micro circuitry of the brain, which cells are communicating with which cells with which chemicals and then in what quantities of those chemicals..."
Breadth	+	"We are energy beings connected to one another through the consciousness of our right hemispheres as one human family..."
Relevance	+	" I regained the ability to speak by I lost my ability to process language and speak "
Logic	+	"So when I lost the functioning of my left hemisphere I lost the ability to notice details , to sequence things , to understand words "
Fairness	-	_____

This analysis is centred on the video presented by Jill Bolte Taylor in 2012, entitled "*Stroke of Insight*." The content explores Taylor's personal experience with her stroke and how she transformed it into her field of interest, mainly psychology. She starts her talk by sharing her experiences with mental illnesses and the motivation that led her to choose this field. The scientist clearly describes the structure of the brain and identifies the key concepts related to it such as the left and right hemispheres. Then, she connects the details of her personal experience to her earlier explanations in order to maintain relevance throughout her talk. Thus, Taylor provides an in-depth exploration of the topic and discusses broader perceptions about humans and consciousness. Furthermore, she provides a logical explanation of the brain's hemispheres by using the analogy of parallel and serial processors. However, she does not provide strong supporting arguments or visuals regarding its structure, which reduces the accuracy of the explanation. Following Richard's questions, it is evident that fairness is not well demonstrated in the video, as the speaker relies solely on her personal experience, which made her thinking justifiable mainly in relation to her own situation. At that stage integrating insights from other researchers would have strengthened her arguments and made them more fair and accurate.

Table: 05/10

Video 05: The next outbreak? We are not ready.		
<i>Critical Thinking Principles</i>	<i>-/+ indicator</i>	<i>Examples</i>
Clarity	+	"If anything kills over 10 million people in the next few decades, it's most likely to be a highly infectious virus rather than a war."
Accuracy	-	_____
Precision	+	"The World Bank estimates that if we have a worldwide flu epidemic, global wealth will go down by over three trillion dollars."

Depth	-	_____
Breadth	-	_____
Relevance	+	"These investments offer significant benefits beyond just being ready for the epidemic... make the world more just as well as more safe."
Logic	+	"We have invested a huge amount in nuclear deterrents. But we have actually invested very little in a system to stop an epidemic."
Fairness	-	_____

"The Next Outbreak? We Are Not Ready" is one of the most popular TED Talks, delivered by Bill Gates in 2015. The video explores a scientific issue, centred on the risk of a global pandemic. The speaker showcases a sense of sensibilization and spreads awareness about the phenomenon. He uses simple and understandable words with a relaxed and comfortable tone. Relying on relational content analysis, four (4) principles of critical thinking were well demonstrated, including clarity of information and the explanation of pandemic risks, supported by specific and precise arguments. Additionally, he provided relevant and logical connections between the health matter, the global health system, and the economic state. However, despite stressing the most relevant concepts, the video content fails to address depth, breadth, fairness, and accuracy. While calling for action, it did not address the complexities of the proposed solutions, nor did it provide any suggestions or examples regarding the health system or vaccine distribution. Moreover, there was no clear way to verify the accuracy of the information, making the video more a form of reporting rather than a critically supported argument.

Table: 06/10

Video 06: Power of vulnerability.

<i>Critical Thinking Principles</i>	<i>-/+ indicator</i>	<i>Examples</i>
Clarity	+	“The only people who don't experience shame have no capacity for human empathy or connection”
Accuracy	+	"I spent two years researching 8,000 pieces of data..." “Thousands of stories, hundreds of long interviews, focus groups. at one point, people were sending me journal pages and sending me their stories thousands of pieces of data in six years. And I kind of got a handle on it. I kind of understood, this is what shame is, this is how it works”
Precision	+	“I had to put my data away and go find a therapist”
Depth	+	“They fully embraced vulnerability.they believed that what made them vulnerable made them beautiful. They didn't talk about vulnerability being comfortable,”
Breadth	+	“They had the compassion to be kind to themselves first and then to others, because, as it turns out we can't practice compassion with other people , if we can't treat ourselves kindly.”
Relevance	+	“when you ask people about love, they tell you about heartbreak. when you ask people about belonging, they'll tell you their most excruciating experiences of being excluded. and when you ask people about connection,the stories they told me were about disconnection.”
Logic	+	“if you cannot measure it, it does not exist.” “You can't numb those hard feelings without numbing the other affects, our emotions. You cannot selectively numb.”
Fairness	+	“We live in a vulnerable world , and one of the ways we deal with it is we numb vulnerability”

This video named “*The Power of vulnerability*“, presented by Brené Brown , 14 years ago , embodies various critical thinking principles, including clarity, accuracy, precision, relevance, depth, breadth, logic, and fairness. The language used by the speaker was easy humorous and engaging. At the beginning of the video Brown, clearly defines a variety of concepts such as vulnerability and shame, which are supported by extensive research and specific examples. Then she has explored some complexities of the topic and discusses multiple aspects of wholehearted living, like compassion, and connection, in different

contexts in society. The scrutiny demonstrates a logical flow between concepts, like the effects of numbing emotions, by relying on real-life experiences and emotions, to clarify a thoughtful and well-reasoned exploration of the meaning of vulnerability, which consequently addresses all of Paul’s Richard critical thinking question.

Table: 07/10

Video 07: How to speak so that people want to listen		
<i>Critical Thinking Principles</i>	<i>-/+ indicator</i>	<i>Examples</i>
Clarity	+	" I'd like to suggest that there are four really powerful cornerstones, foundations, that we can stand on if we want our speech to be powerful and to make change in the world ”
Accuracy	+	“ Again, the research shows that we prefer voices which are rich, smooth, warm, like hot chocolate.”
Precision	+	“First, gossip , speaking ill of somebody who's not present. Not a nice habit, and we know perfectly well the person gossiping, five minutes later, will be gossiping about us”
Depth	+	“Some people have a blame thrower, they just pass it on to everybody else and don't take responsibility for their actions, and again, hard to listen to somebody who is being like that”
Breadth	+	“What would the world be like if we were speaking powerfully to people who were listening consciously in environments which were actually fit for purpose? Or to make that a bit larger, what would the world be like if we were creating sound consciously and consuming sound consciously and designing all our environments consciously for sound?”
Relevance	+	" We know people who are like this in conversation, and it's very hard to listen to somebody if you know that you're being judged and found wanting at the same time.”
Logic	+	“We vote for politicians with lower voices, it's true, because we associate depth with power and with authority. That's register.”
Fairness	+	“ I don't mean romantic love, but I do mean wishing people well, for two reasons ,first of all, I think absolute honesty may not be what we want I , mean, my goodness, you look ugly this morning , perhaps that's not necessary. tempered with love, of course, honesty is a great thing. But also, if you're really wishing somebody well, it's very hard to judge them at the same time. I'm not even sure you can do those two things simultaneously”

The featured video entitled “*How to Speak So That People Want to Listen*” is delivered by Julian Treasure in 2014, examines an interesting topic focuses on how to communicate effectively and powerfully. The speaker is recognized for his composure and ease while introducing the content, using simple straightforward language. The analysis of the video according to Richard’s principles reveals the effective application of critical thinking principles in his statements, which encompasses clarity, accuracy, precision, relevance, depth, breadth, logic, and fairness. The transcription demonstrates that the video answers all the questions; thus, the speaker clearly introduces the main ideas and cites research to support what he has explained. He precisely defines key concepts and connects the ideas logically while listing the "deadly sins". For the analysis of the complexities, Treasure considers broader implications and different perceptions, which are presented through rational and logical arguments in order to establish fairness and harmonizes all perspectives.

Table: 08/10

Video 08 : 10 Ways to Have a Better Conversation.		
Critical Thinking Principles	-/+ indicator	Examples
Clarity	+	"Don't multitask. Be present. Be in that moment. "
Accuracy	+	Few research did a study of 1000 American adults, and they found that at this moment, we are more polarized; we are more divided, than we ever have been in history. We're less likely to compromise, which means we're not listening to each other.
Precision	+	Start your questions with who, what, when, why, or how.
Depth	-	_____

Breadth	-	_____
Relevance	+	Most of us don't listen with the intent to understand. We listen with the intent to reply.
Logic	+	"If your mouth is open, you're not learning."
Fairness	+	If your mouth is open, you're not learning.

Celeste Headlee presents the eighth video of our corpus named “*10 Ways to Have a Better Conversation*” in 2016 dealing with the theme of how to establish an effective communication, through emphasising crucial habits that dominates our conversational abilities and offering strategies to enhance genuine dialogue. The video is characterized by its warm, friendly, and professional tone, and simple language use that facilitates the explanation and the transmission of the information. According to Paul Richard’s criteria for Critical Thinking, clarity is present in Headlee’s words in the way she explains each concept deeply, by providing specific techniques and clear examples. Focusing on concrete actions, she is an authority role in the sense she orients the audience exactly on what to do during conversations. The speaker relies on relevance consistently, as she connects conversational principles to real-life situations, stressing their importance in society. Logic and fairness occur in the video when emphasizing on the necessity of listening to learn and advising against treating personal experiences as universally applicable.

Table: 09/10

Video 9 :How Great Leaders Inspire Action		
<i>Critical Thinking Principles</i>	<i>-/+ indicator</i>	<i>Examples</i>

Clarity	+	“The goal is not to do business with everybody who needs what you have. The goal is to do business with people who believe what you believe”
Accuracy	+	“In biology, if you look at a cross-section of the brain from top down, you see that the human brain is actually broken into three major components.”
Precision	+	“The law of law of Diffusion of innovation tells us that the early majority will not try something until someone else has tried it first.”
Depth	-	_____
Breadth	-	_____
Relevance	+	“The goal is to do business with people who believe what you believe.”
Logic	+	“If you hire people who believe what you believe, they will work with blood, sweat, and tears. If you hire them just for the paycheck ,they will work only for the money.”
Fairness	+	“There were others who were smarter and better funded than the Wright brothers, but they didn’t succeed because they lacked a clear cause.”

The video above is presented by a leadership expert Simon Sinek in 2010, under the title “*How Great Leaders Inspire Action*”. In this talk, the speaker explores themes of leadership, motivation, and innovation through his concept of the “Golden Circle”. The show is characterized by an inspirational tone, conventional, and confident. Sinek demonstrates clarity by using simple language, repetition of key ideas, illustrative examples, and a logical structure which makes a complex psychological and leadership concept easy to understand. Sinek maintains accuracy by highlighting real-world examples, and scientific references like biology. The speaker showcases precision in detailing and simplifying each concept of the “Golden Circle” and makes it more relevant by consistently connecting his ideas to leadership and business strategy. Thus what upholds logic and fairness through a well- structured progression of thoughts, moving from the explanation of the concept to illustrative examples.

However, the video lacks breadth and depth. The focus remains on success stories that support his model. It can be said that the video failed in addressing questions such as” Do we need to look at this problem in different ways to solve it” and “What other factors, beyond purpose, contribute to success?”.

Table: 10/10

Video 10: The danger of a single story		
<i>Critical Thinking Principles</i>	<i>-/+ indicator</i>	<i>Examples</i>
Clarity	+	“I would like to tell you a few personal stories about what I like to call 'the danger of the single story”
Accuracy	+	“My American roommate was shocked by me. She asked where I had learned to speak English so well, and was confused when I said that Nigeria happened to have English as its official language
Precision	+	« There are 5,000 people apply for one job vacancy in Nigeria”
Depth	+	“I grew up under repressive military governments that devalued education, so that sometimes, my parents were not paid their salaries. And so, as a child, I saw jam disappear from the breakfast table, then margarine disappeared, then bread became too expensive, then milk became rationed.”
Breadth	+	“ What if my roommate knew about contemporary Nigerian music, talented people singing in English and Pidgin, and Igbo and Yoruba and Ijo, mixing influences from Jay-Z to Fela to Bob Marley to their grandfathers ”
Relevance	+	“What if my roommate knew about my Nigerian publisher, Muhtar Bakare, a remarkable man who left his job in a bank to follow his dream and start a publishing house?”
Logic	+	“The single story creates stereotypes, and the problem with stereotypes is not that they are untrue, but that they are

		incomplete. They make one story become the only story”.
Fairness	+	“I must say that before I went to the U.S., I didn't consciously identify as African. But in the U.S., whenever Africa came up, people turned to me... But I did come to embrace this new identity, and in many ways I think of myself now as African”

The last video of our corpus is delivered by Chimanda Adichie in 2009, under the name of “*One single story*”, in which she explains how believing in only one perspective or viewpoint about a person, group, or culture can lead to misunderstandings, oversimplifications, and prejudices. The speaker relies on a simple and clear language that makes the audience engaged, and motivated to listen to people’s stories in order to gain more accurate understanding of them and their cultures. Accordingly, the transcription demonstrates an effective implementation of critical thinking principles, including clarity, accuracy, precision, relevance, depth, breadth, logic, and fairness. Adichie’s argument are well-structured, coherent, and thought-provoking. She successfully explores the dangers of single stories and sustains about the importance of considering diverse perspectives. Thus, the talk exhibits a high level of critical thinking and answers all the questions of Richard Paul.

3.2. Discussion of the Corpus

This part answers the first research question of the inquiry by evaluating the transcriptions derived from TED Talks, with the aim of analysing the extent to which TED Talks incorporate critical thinking principles in their content. The results confirm the initial hypothesis, which suggested that TED Talks integrate critical thinking principles in their episodes. The analysis was conducted on ten randomly selected videos from the TED platform, categorized into three thematic areas to ensure content diversity. In this regard the

findings obtained reveal that videos 1, 6, 8, and 9 focused on educational topics relevant to academic and professional audiences. Videos 4 and 5 target the medical professionals and informed individuals as it addresses scientific topics related to healthcare and environmental sustainability, while videos 2, 3, 7, and 10 entails community groups as they are engaged with socio-cultural subjects, acknowledging cultural diversity and the management of social experiences. As Romanelli et al. (2014) noted, "TED Talks typically consist of brief, recorded conference presentations designed to inspire and inform within an 18-minute format". Thus, the corpus of this study includes five videos that reached the full timing, (videos 1, 4, 6, 9, and 10), while four others ranged between 10 to 15 minutes, and one video (video 5) lasted eight (8) minutes only. In addition, the speakers and presenters were mainly experts in their respective fields and showed expertise in the topic they explored and the narrative style varied across the sample. Most of the talks adopted a humorous, storytelling approach for engaging the audience, except for videos 5 and 9, which conveyed a more formal, inspirational, and assertive tone. Whereas the language used was consistently clear, accessible and understandable in all the videos as given in Paul-Elder's criteria about clarity. The analysis was codified using the eight intellectual standards for critical thinking proposed by Paul and Elder (2001), including clarity, accuracy, precision, relevance, depth, breadth, logic, and fairness. As the approach aims to reach an academic contribution the standards were not assessed arbitrarily but evaluated through the targeted questions developed by Paul-Elder in their framework, designed to test the presence or absence of each standard in the videos' content.

According to the videos number 6, 7, and 10 there were a remarkable integration of all eight critical thinking standards in which the talks provided clear ideas, practical examples, and contextualized explanations, that considered multiple perspectives, with fairness and balanced conclusions. However, the principles of 'breadth' and 'depth' were absent in the

videos 2, 3, 5, 8, and 9, as these talks failed to address questions such as “What factors make this topic complex or unique?” and “What alternative perspectives could be considered?”, relying instead on the speaker’s personal experiences without critically assessing the various points of view. Moreover, the analysis shows that videos 3, 4, and 5, mainly the scientific episodes, lacks two additional critical thinking standards which is the case of 'accuracy' and 'fairness', as a result of not providing references to check the evidence of the information and neglect the contextual factors, but instead they employed more descriptive explanations. Furthermore, only one principle was missing in the video 1 which is precision, which goes back to the lack of detailed explanation of the issue discussed in the topic in real-life, as for the videos 3 and 5, fairness is also absent due to the lack of considering opposing viewpoints which aims to establish unbiased reasoning. As the majority of principles are present in the videos, the absence of some of these standards may depend on the topic and speaker beliefs and expertise.

In the vein of the abovementioned data, the table below demonstrates the frequency of Paul-Elders’ criteria in the corpus in a statistical format.

Distribution of Critical Thinking Principles Application in TED Talk Videos:

Table:01

<u>Video Group</u> <u>Description</u>	<u>Number of Videos</u>	<u>Missed principles</u>	<u>Total Principles</u> <u>Missed</u>
Video 6, 7,10	3	0	0
Video 01	1	<i>precision</i>	1
Video 2,8, 9	3	<i>Breadth , depth</i>	6

Video 3,5	2	<i>Accuracy , breadth , depth , fairness</i>	8
Video 4	1	<i>Accuracy , fairness</i>	2
<u>Total</u>	10	–	17

According to the 10 analysed videos, **17 repeated principles** of critical thinking were not demonstrated, over the videos which represent 21.25% from the 80 possible occurrences of the critical thinking standards. This is to say, the critical thinking principles were applied in **78.75%** in all of the corpus, which showcases an effective presence of Paul and Elder’s criteria in the sample that ensures the content focus on reasoning, logic and clarity in the transmission of the knowledge. However, the absence of some of these principles didn’t eliminate the communicative aim but it may reduce its persuasiveness.

Accordingly, the confirmation of the hypothesis that TED Talks incorporate critical thinking principles is strengthened by these findings. The degree and consistency of the implementation appear to vary across content themes and individual presentations. While educational and socio-cultural talks in the sample tended to perform better, the scientific talks showed particular limitations when evaluated according to Paul and Elder’s intellectual standards of critical thinking.

3.3.1. The Results of the Questionnaire

The questionnaire is divided into two main sections; the first one is entitled “Students Background Information”, and the following is Students’ experience with TED Talks, and the last is Students’ Views towards TED Talks as a means to Enhance their Critical Thinking.

3.3.2. Results of section one: Students’ Background Information

Question 01: What is your major?

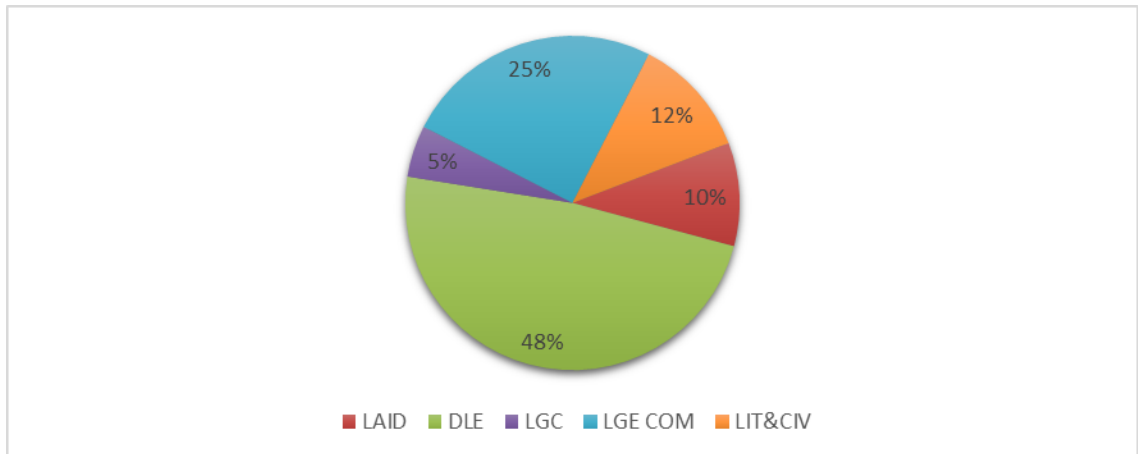


Diagram 1: Students' major

Diagram 01 indicates that student population is predominantly composed of Didactic major who represent 48% of the sample, followed by 25% Language and communication, while Literature and Civilization students make up approximately 12%. Additionally, 10% of the students are enrolled in Literature and interdisciplinary approaches, and 5% are from General and Comparative literature.

Question 02 : What level are you enrolled in?

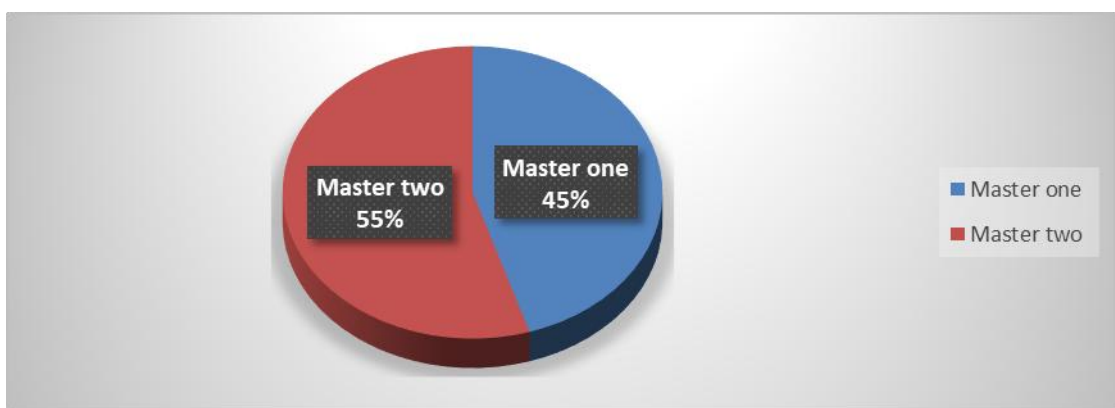


Diagram: 2 Students' level of study

Diagram 02 reflects the level of the participants. The majority of the students are Master two students by the average of 55%, whereas 45% others are Master one students.

The diminution of percentages among the five majors, in which the majority of the participants are didactics and language and communication, may suggest the varying levels of interest and relevance of research among students and the methods adopted according to their specialties, as each has a specific academic requirement and particular formula to work with. Furthermore, a comparable pattern is observed in the demographic distribution of participants' academic levels in which 55% are master two students. This could significantly result from the fact that those students have a deeper understanding of the research inquiry, as well as more experience in the field, which likely to demonstrate a better mastery and academic advancement.

3.3.3. Results of Section Two: Students' experience with TED Talks

Question 03 : How often do you watch Ted Talks ?

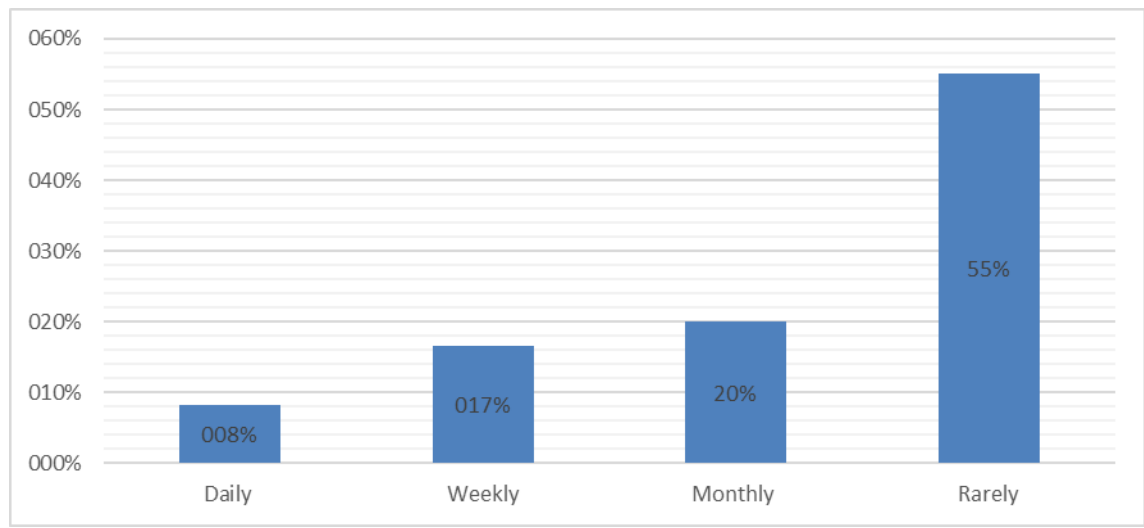


Diagram 3: TED Talks Viewing Habits Frequency

The third diagram indicates students' frequency of watching TED Talks. reveals that 55% of the students rarely watch the TED Talks , while 20% view them monthly .In contrast 16.60% are engaged weekly , and only 8.30% watch them daily.

Question 04: For which purposes do you watch Ted Talks? Explain?

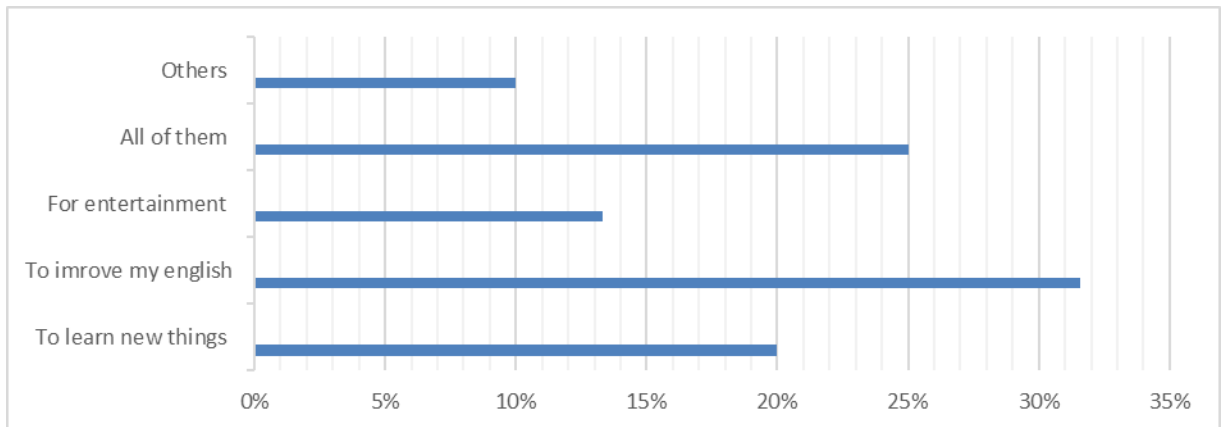


Diagram 4: Purposes of TED Talks viewing

This figure shows that 31.60% of the students watches TED Talks to improve their language proficiency, and 20 % , of them use it to learn new things. As well for the others 25% are having access to the platform to improve all these abilities, whereas 13.30% are using it for entertainment and the rest 10% for others purposes.

The frequency of watching TED Talks, as shown in Diagram (3), reveals that (55%) of the students are rarely involved with TED Talks. By contrast, the remaining students show varying levels of interest with only a portion of (8.30%) of them demonstrates significant engagement and regular exploration of the resource. This aligns with Romanelli et al,(2014)'s words , “students familiar with the TED Talk paradigm may hold lecturers to a higher standard given the effectiveness of the platform ”. The limited access may suggest the students are impacted by factors and barriers that lower their commitment, even though the majority are familiar with the platform. On the other hand,

the results demonstrate that students use TED Talks for various purposes (see diagram 4), primarily centred around academic and personal development, notably (31.60%) seeking to enhance their language proficiency, while (20%) aim to acquire new knowledge. Furthermore, (25%) of the students exploit the platform to develop a broad range of skills, indicating their satisfaction with its multifaceted benefits. However, a small portion of (10%), uses TED Talks for other motivations.

From this perspectives students' answers on the use of TED Talks showcase a variety of purposes and motivations primarily for language improvement and knowledge acquisition. As one student argued, "I use TED Talks to improve my English because they expose me to natural speech, diverse accents, and rich vocabulary." the participants' responses show an appreciation on the talks' ability to cover a wide range of interesting topics, and making learning easier. Moreover, students are aware that TED Talks serve not only entertainment purposes but also motivational and educational contributions, and featuring real-life experiences with evident insights from experts. As another participant put, "TED Talks help people learn new ideas in a fun and easy way".

Question 05 : How important are TED Talks in expanding your knowledge? Explain?

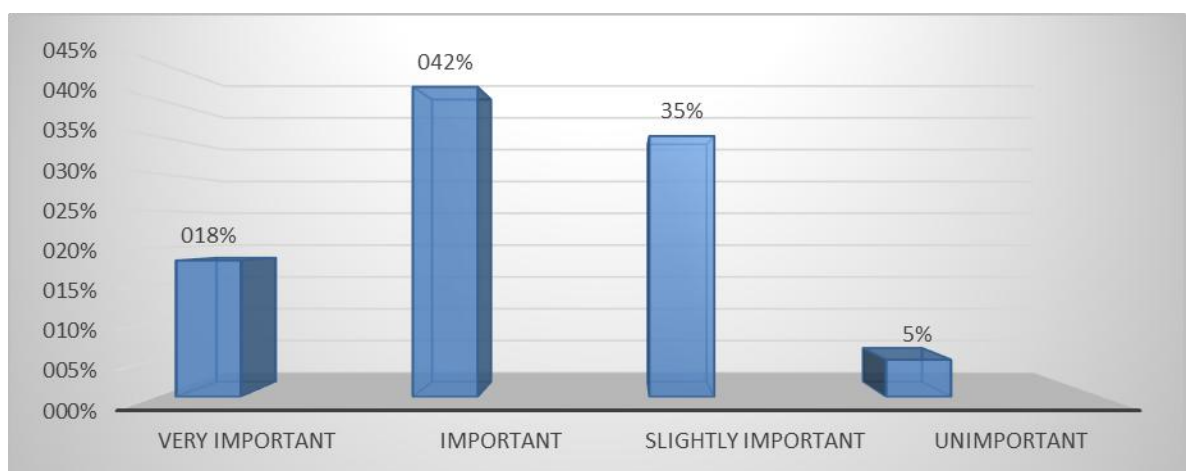


Diagram 5: Perceived Importance of TED Talks for Learning

The figure above displays students' perception on the importance of TED Talks in learning. Results indicate that 41.60 % of the students consider the platform import and useful for learning in learning, while 35% acknowledge its slight importance. Additionally, only 18.30% recognize its significance and value. However 5% of the students refute their contribution in expanding knowledge.

On the one hand, we have asked students to choose one answer and then justify their choice. 25 of the students representing 41.60%, highlighted the significance of TED Talks in expanding knowledge, fostering critical thinking and improving linguistic skills. One of the participants has explained “TED Talks are important to expand our knowledge and gain extra information, learn new things and in turn it improves our own lifestyle and change habits which can affect our progress positively”. Another added “I believe that TED Talks are important because they present ideas and concepts by experts in various fields in a simple and concise way, as they help us discover new perspectives and think critically about different issues”. On the other hand, 11 participants who represent an average of 18,30% have insisted that TED Talks are very important for knowledge expansion saying that “TED Talks are important nowadays to improve my listening and speaking skills, furthermore it helps me to be successful in communication by encouraging me to be a part in contractive debates and challenge other people beliefs, and feed my curiosity making me watch more and more videos”. As for the remaining students, 5% have voted for its unimportance, and leaved the explanation empty. Whereas, the rest of the 21 students representing 35% portion argued that TED Talks has a slight importance in expanding their knowledge as two of them claimed “TED Talks may be useful, but they often lack depth, and I see them more motivational than educational”, “I think yes, it has a slight importance to improve self-confidence in giving presentations and learn to use the body language”.

In the light of the results mentioned, it can be deduced that learners make efforts to find new sources for learning by exposing themselves to a variety of new concepts and fields as they try to be open to learn new things. Thus indeed was stated by Maria, et al, (2018). that TED Talks is “a platform where interesting videos about a wide variety of topics spoken by specialist people in a natural and authentic way can be found. As such students may use it to address their communication weaknesses , gain more knowledge and speak with confidence.

Question (06) : Would you recommend TED Talks to others ?

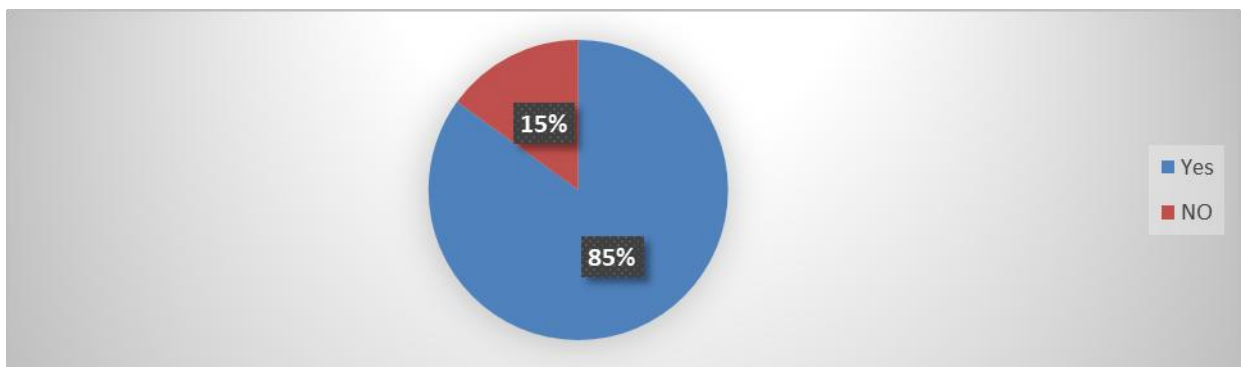


Diagram 6: TED Talks Recommendation

Diagram 6 illustrates that (85%) of the participants would recommend TED Talks for others, but merely (15%) of them do not share the same point of view.

Question (07): Do you believe that TED Talks would be a beneficial resource to be used in some modules in our Department?

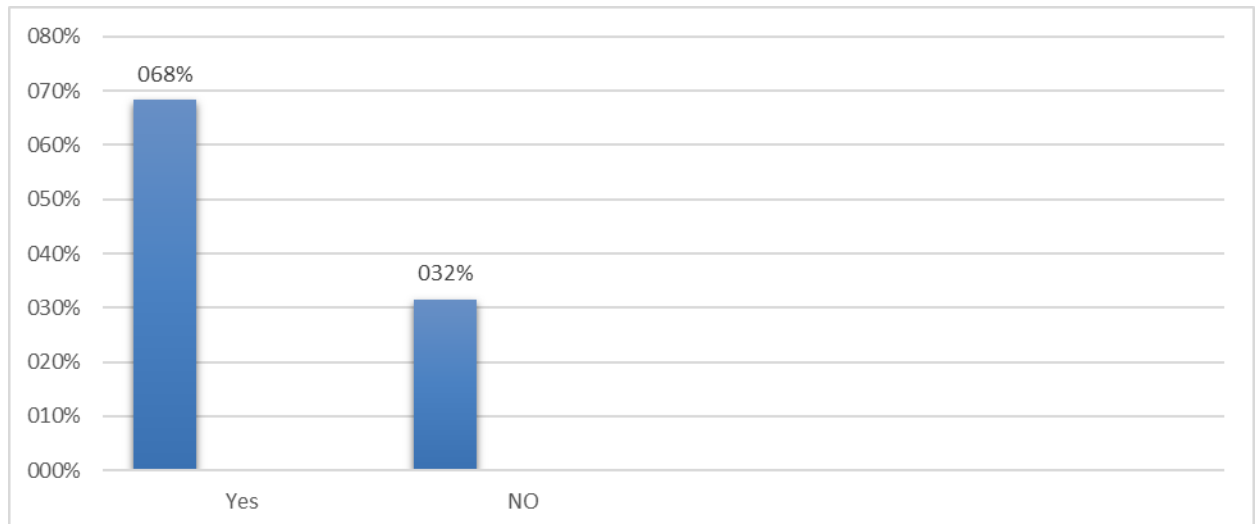


Diagram 7: Perceived Benefits of TED Talks

The preceding diagram is about students' assumption on using TED Talks in some modules in our department, (68,30%) of the students support the idea, however (31,60%) do not share the same opinion. The considerable majority (85%) recommending ted talks in diagram 6 indicates a high satisfaction with the content and information quality which supports the credibility of this resource, and they are recommending the platform for others. As claimed by one of them "I would recommend this to develop students mind-set and encourage them confront their challenges and rely on it to develop listening and speaking skills». Another added "It is helpful because it allows us to have different opinions on several subjects and inspire people to think differently to understand the world". According to students' TED Talks recommendation, (68,30%) of them believe that ted talks would be beneficial in the listening and speaking module in their words " it would be amazing to use to use the techniques of the show in the speaking module , it would give students greater chance to improve their skills " , and precisely in the module of psychology saying " I think this would be a good idea to use in the module of psychology to foster students understanding of concepts like selfishness and ego ".It is

also suggested for broader use in different modules as one of them argued “ It could be beneficial to use TED Talks in our department especially as a supplementary material , to inspire discussion , introduce real world examples and make the learning experience engaging and use it alongside to encourage critical thinking ” . This indicates the potential for enhancing learning experience and reflects students, excitement to integrate new methods mainly technological ones as TED Talks in the curriculum , although the (31,60 %) portion that remains unconvinced is possibly due to the different interest of each person. These results support TED Talks as an educational resource highlighting positive perceptions of the students , which goes by side with the findings of Mojgan. R, et al, (2019) who assert that “TED talks can be used as authentic materials in the listening classes and is consistent with research on self-directed learning”.

3.3.4. Results of the third section: Students’ Views towards TED Talks as a means to Enhance their Critical Thinking

Question (08): Do you feel that watching TED Talks helps you think more critically about different topics?

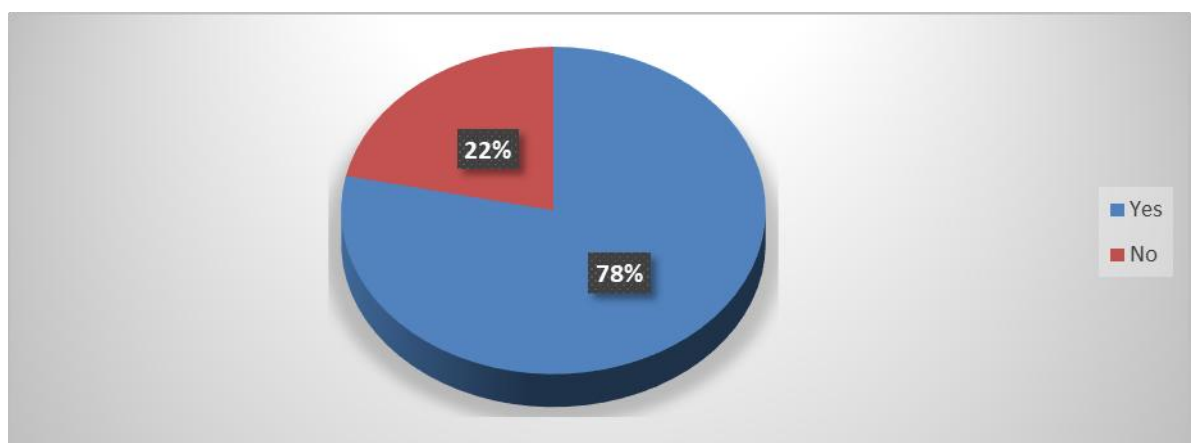


Diagram 8: Perceived Impact of TED Talks on Critical Thinking

The eighth diagram indicates that 78% of the students improve their critical thinking using TED Talks and 22% do not consider it useful for this purpose.

Question (09): Do TED Talks help you in developing your problem solving abilities?

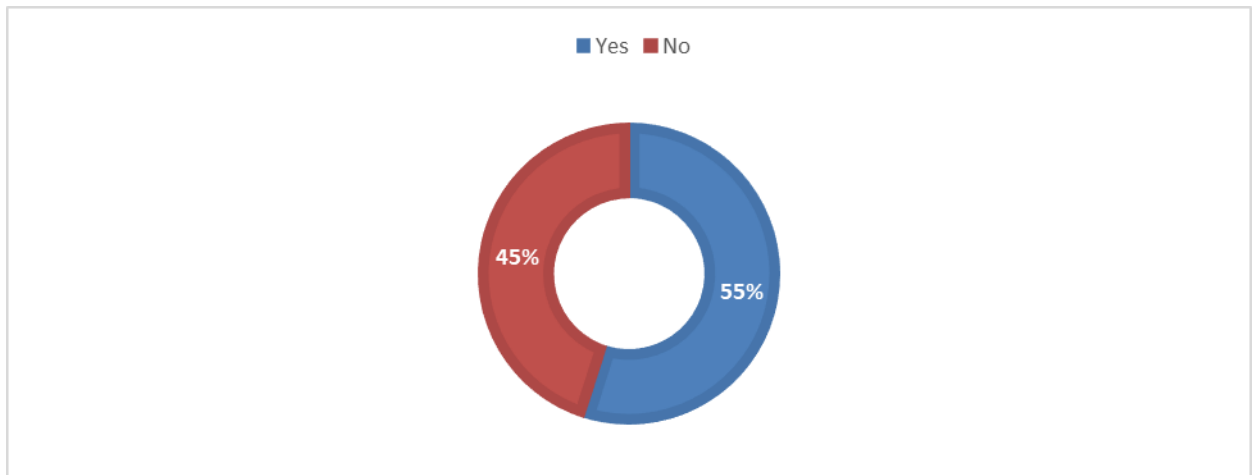


Diagram 9: Ted Talks effect on problem solving skills

The diagram above reveals that students are merely equal in their answers, in the sense the percentages are close 55% of the students confirms the role of TED Talks in developing their critical thinking skills, and only 45% have not felt any improvement.

Question (10): Have TED Talks improved or changed your opinion about a particular subject

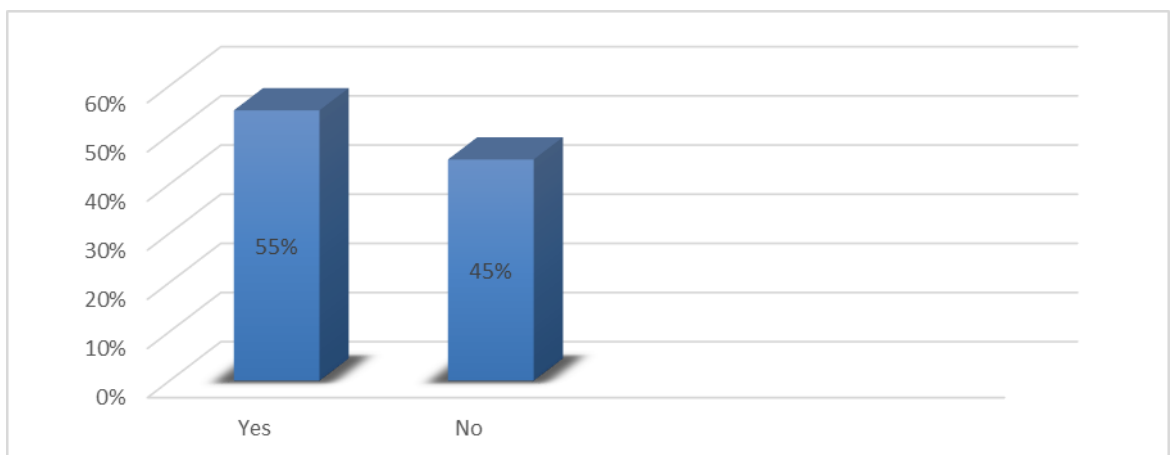


Diagram 10: Impact of TED Talks on Attitudes and Opinions

The diagram shows that 55% of the students have a positive experience on building new assumptions and 45% portion do not assume that TED Talks help them to enlighten their perceptions.

Question (11): How likely are you to apply Critical Thinking skills learned from Ted Talks in real- life situation?

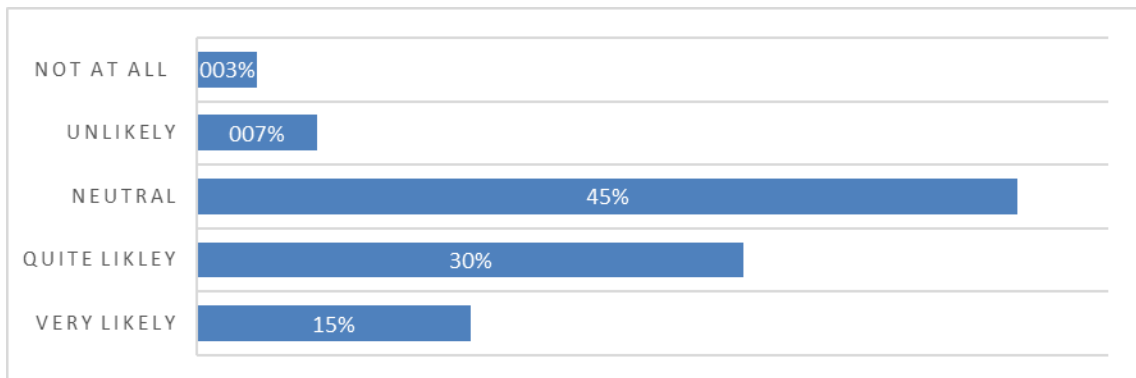


Diagram 11: Critical Thinking Principles Application

The diagram illustrates the range of responses, 45 % were neutral, 30% voted for quite likely and 15 % deeming it very likely. Meanwhile 3,3 % consider it unlikely, and 6,6% do not consider it at all.

Question (12): Do you find that speakers effectively communicate and provide you with new insights when watching TED Talks?

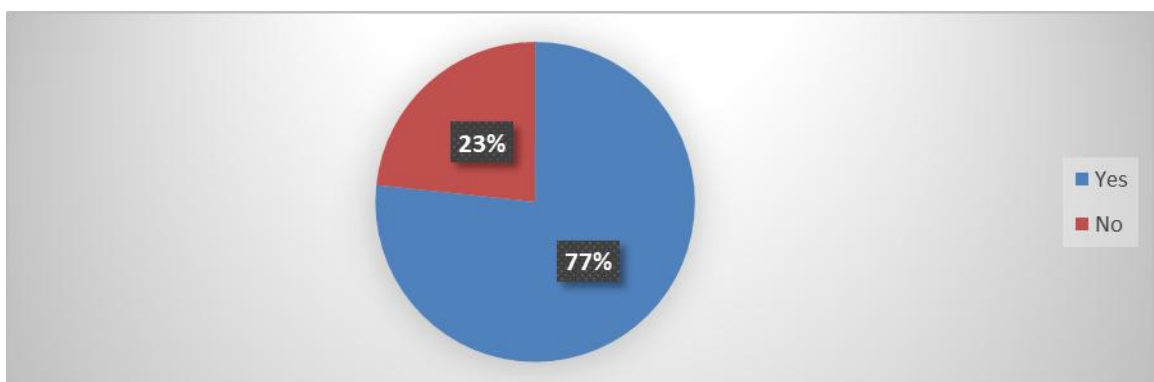


Diagram 12: Speakers' Effectiveness in TED Talks

The diagram 12 displays the opinions of students about TED Talks speakers' mastery of information delivery. The results indicate that 77% of the students are inspired and motivated, whereas 23% do not perceive the same thing.

The third part of the survey displays the implication of TED Talks on enhancing critical thinking, problem-solving skills, and beliefs are different among participants. A recognizable majority, 78% of sample (Diagram 8), associate their increased critical thinking skills to watching TED Talks, which expose them to a diverse range of perspectives and ideas. As said by one of the participants, "Watching TED Talks helps us change our opinion on different topics in a positive way and catch interest on new fields." This sentiment is echoed by the 55% of participants who credit TED Talks with helping them develop problem-solving skills (Diagram 9), citing the talks' ability to provide innovative approaches to challenges and problems. Notably, one participant highlighted " the topics include problems, stories and experiences of our daily life, I find myself better managing situations and it pushes me to think in different context before I take action". Another added " it influences my way of thinking so that i started facing my problems with more calmness and easiness". Additionally, students' answers on question number 10 " Have TED Talks improved or changed your opinion about a particular subject, the findings demonstrate that (55%) of participants observe a transformation in their perception on particular subjects after watching a TED Talk video (see Diagram 10). A pertinent illustration is provided by one of the participants, saying " I used to think that AI is a great discovery until I watched a ted video about how dangerous it could be". As another affirms " honestly it is so beneficial, I am interested in psychology and it helped me understand how childhood trauma affect our health and it changed my mind about addiction." Furthermore, participants' answers regarding the application of critical thinking skills in real-life situations were more varied (see Diagram 11), perspectives of TED Talk speakers, further underscoring the talks' value in promoting critical thinking and

problem-solving skills. This variation of responses showcases the importance of consistent exposure to TED Talks in fostering critical thinking skills. As the majority preferred to be neutral, participants who regularly watch TED Talks are more likely to develop a deeper understanding of complex issues, challenge their assumptions, and cultivate critical thinking skills as it appears in their answers. As one of them noted, "Watching TED Talks helps us think more critically because their purpose is to know how to be a critical thinker and how to use it." As such, the findings suggest that regular engagement with TED Talks can have a profound impact on an individual's critical thinking abilities, thus its benefits increases with the repeated exposure.

. In TED Talks context, learning through content expansion could significantly foster the cognitive abilities, through recalling the knowledge of facts and ideas, as the viewers remember key aspects from the talk. Following by Comprehension, where viewers understand and interpret the presenters' message. As it came the application, of the new ideas in practical contexts, they may engage in class discussions or make personal reflection. Subsequently, the analysis stage where students assess the arguments, and how the ideas are connected and structured in the talk. Furthermore, the synthesis level which encourages them to combine insights and viewpoints from various talks in order to evaluate the challenges and assess the credibility, and the relevance of the speaker's and content. Ted Talks motivate the cognitive abilities and harness other dispositions such as personal belief and attitudes , so that learners , build new routines and mindsets through watching episodes from the show in order to acquire new habits and enlighten their thoughts by the captivating and thought provoking videos that introduce a range of information that challenges students' expectations, and foster the mental skills ,which consequently train them to improve their thinking capacities naturally and prevent them from making mistakes.

The results of the questionnaire above shed light on the prominent impact of TED Talks on enhancing students' critical thinking skills, in which the majority of the sample show a noticeable improvement in their abilities to think critically and share their experiences in real life, which demonstrates the practical application of the mentioned principles. These outcomes underscore how the exposure to diverse ideas and perspectives through TED Talks encourages students to think more critically and reflectively. Ultimately, based on the reported findings, we can conclude that the second hypothesis that is of the research question is confirmed.

The findings of the present study are considered in relation to those reported in previous research. In this regard, according to Allagui, in (2021) in the study 'TED talks Comments to Enhance Critical Thinking Skills in an Undergraduate reading and writing Course' Talks can successfully contribute to the development of critical thinking among learners. The study suggested that students who are exposed to and actively engaged with ted talks build the ability to understand complex issues and question assumptions as shown in the analysis of their comments. In the light of the current research findings, the results of the Allagui's study are reinforced, in the sense that the participants in this investigation have acknowledged usefulness of ted talks to in enhancing their critical thinking capacities. Similarly, Lian (2011) emphasized on the importance of critical thinking in higher education as a means of preparing responsible citizens who are able to evaluate any information critically. The results of this study demonstrated a positive path through which learners raise their awareness to make critical reflection on real-world contexts and train students to address modern issues related to language teaching.

At the level of higher education, more precisely, at the postgraduate level, fostering critical thinking is of a paramount importance, not only for the development of individual

abilities, but also to be consistent with the objectives of language studies at the university of Mouloud Mammeri. As the results have demonstrated positive outcomes using such platforms with undergraduate levels in suitable modules such as listening and speaking may better support learners to become critical thinkers. At the same time, students can benefit from such resources to develop other academic skills as it is shown in the aforementioned studies.

Conclusion

This chapter has demonstrated the findings of The scrutiny of Ted Talk videos as well as the analysis of the investigation conducted with (60) students at the level of the Department of English at Mouloud Mammeri University of Tizi-Ouzou. The study has underscore the critical thinking principles present in the TED Talks videos, and has acknowledged students' perceptions towards the use of TED Talks.

General Conclusion

The present study has explored the role of TED Talks in fostering critical thinking skills among EFL students, and the extent to which these videos incorporate the principles of critical thinking. This investigation has been conducted with Master's students at the department of English, at MMUTO.

This inquiry, has aimed to achieve two main objectives. Initially, to examine the extent to which TED Talk videos integrate the principles of critical thinking. Secondly, to explore students' views regarding the effectiveness of this platform in enhancing their critical thinking abilities. As an attempt to answer the research questions, these hypotheses have been advanced: TED Talks integrate critical thinking standards in their videos, and that EFL learners believe that TED Talks improved their critical thinking abilities. To do so, these research questions have been asked: "To what extent do TED Talks incorporate critical thinking principles in their videos?" and "What are students' perceptions on the role of TED Talks in developing their critical thinking skills?". To achieve these goals, the research has drawn on Paul-Elder's critical thinking framework (2001), which covers eight major principles, including clarity, accuracy, precision, relevance, depth, breadth, logic and fairness. This is complemented by a descriptive statistical approach for the questionnaire data , and relational content analysis for the videos.

As for the sample, a mixed method has been used to collect both qualitative and quantitative data. First, ten randomly selected videos from the official website of TED Talks "Most popular videos of all time", have been analysed using a relational content analysis, Additionally, a questionnaire comprising both open and closed ended questions has been distributed to master students from different majors and completed by (60) random participants.

The analysis of the selected corpus, conducted via a relational content analysis has revealed that the majority of the videos have incorporated the principles of critical thinking

outlined in the framework of Paul-Elder (2001). Mainly, all the videos have integrated at least five to six principles in each episode, whereas the rest have included all of the standards. These results have shown a considerable presence of these skills in Ted Talk videos, which ultimately, answers the first research question of the inquiry and confirms the hypothesis that suggested that TED Talks incorporate critical thinking principles in their videos.

In relation to the second research question, the results of the questionnaire have shown that students at the department of English at MMUTO, hold a positive perception toward TED Talks. The scrutiny of the questionnaire has demonstrated that most of the students believe that TED Talks enhance their cognitive and critical thinking skills, as manifested in their responses in the open-ended questions. Accordingly, the second hypothesis of the research is also validated.

Similarly, to all the academic and scientific works, our investigation has faced a number of obstacles and limitations. The first challenge encountered during the data collection was the limited number of participants, as the study has aimed to explore a larger sample, more than 60 students. Additionally, the number of the videos selected was deliberately limited due to time constraints. Despite these challenges, it is hoped that the significance of the results would not remain overlooked. On the contrary the outcomes may open new opportunities to explore other educational resources, thereby contributing in the field of English language teaching. For future research, it is recommended to conduct an experimental study in the listening and speaking modules as suggested by the participants of the study to validate the platform's effectiveness. Moreover, a critical discourse analysis on the corpus is encouraged for a better exploitation of the content.

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Appendices

Questionnaire: TED Talks and critical thinking

Dear mates,

This questionnaire seeks to investigate “ The role of Ted Talks on developing EFL learners’ Critical Thinking skills at MMUTO , Department of English. In order to reach the objectives of the study , you are kindly invited to answer the following questions faithfully. Your answers are kept anonymous and used only for academic purposes.

Note : Please choose an adequate answer and complete where necessary .

Section One: Students’ Background Information

Q1: What is your major ?

Q2: What level are you enrolled in?

- Master one
- Master two

Section Two : Students’ experience with TED Talks

Q3: How often do you watch Ted Talks?

- Daily
- Weekly
- Monthly
- Rarely

Q4: For which purposes do you watch Ted Talks?

- To learn new things

- To improve your English
- For entertainment
- All of them
- Others

_Explain:.....
.....

Q5: How important are TED Talks to expand your knowledge?

Very important Important Slightly important Unimportant

Please, would you justify your choice?

.....
.....
.....

Q6: Would you recommend TED Talks to others ?

Yes No

Why?.....
.....

Q7: Do you believe that TED Talks would be a beneficial a resource to be used in some modules in our Department?

Yes No

If yes, How?

.....

.....
.....
Section Three: Students' Views towards TED Talks as a means to Enhance their Critical Thinking

Q8: Do you feel that watching TED Talks helps you think more critically about different topics ?

Yes No

If Yes , please explain .

.....
.....

Q9: Do TED Talks help you in developing your problem solving abilities ?

Yes No

How?.....
.....

Q10: Have TED Talks improved or changed your opinion about a particular subject

Yes, it has. No, it has not

What is it / are they?

.....
.....
.....

Q11: How likely are you to apply Critical Thinking skills learned from Ted Talks in real- life situation?

-Very likely

-Quite likely

-Neutral

-Unlikely

-Not at all

Q12: Do you find speakers effectively communicate and provide you with new insights when watching TED Talks?

Yes

No

THANK YOU FOR YOUR INSIGHTFUL RESPONSES .

Video Transcriptions

Do schools Kill creativity

Good morning. How are you? (Audience) Good. It's been great, hasn't it? I've been blown away by the whole thing. In fact, I'm leaving. (Laughter) There have been three themes running through the conference which are relevant to what I want to talk about. One is the extraordinary evidence of human creativity in all of the presentations that we've had, and in all of the people here—just the variety of it and the range of it. The second is that it's put us in a place where we have no idea what's going to happen in terms of the future. No idea how this may play out. I have an interest in education. Actually, what I find is, everybody has an interest in education. Don't you? I find this very interesting. If you're at a dinner party, and you say you work in education—actually, you're not often at dinner parties, frankly. (Laughter) If you work in education, you're not asked. (Laughter) And you're never asked back, curiously. That's strange to me. But if you are, and you say to somebody—you know, they say, "What do you do?" and you say you work in education—you can see the blood run from their face. They're like, "Oh my God. Why me?" (Laughter) "My one night out all week." (Laughter) But if you ask about their education, they pin you to the wall, because it's one of those things that goes deep with people, am I right? Like religion and money and other things. So I have a big interest in education, and I think we all do. We have a huge vested interest in it, partly because it's education that's meant to take us into this future that we can't grasp. If you think of it, children starting school this year will be retiring in 2065. Nobody has a clue, despite all the expertise that's been on parade for the past four days, what the world will look like in five years' time. And yet, we're meant to be educating them for it. So the unpredictability, I think, is extraordinary. And the third part of this is that we've all agreed, nonetheless, on the really extraordinary capacities that children have—their capacities for innovation. I mean, Sirena last night was a marvel, wasn't she? Just seeing what she could do. And she's exceptional, but I think she's not, so to speak, exceptional in the whole of childhood. What you have there is a person of extraordinary dedication who found a talent. And my contention is, all kids have tremendous talents, and we squander them pretty ruthlessly. So I want to talk about education, and I want to talk about creativity. My contention is that creativity now is as important in education as literacy, and we should treat it with the same status. (Applause) Thank you. That was it, by the way. Thank you very much. (Laughter) So, 15 minutes left. (Laughter) "Well, I was born..." (Laughter) I heard a great story recently—I love telling it—of a little girl who was in a drawing lesson. She was six, and she was at the back, drawing, and the teacher said this girl hardly ever paid attention, and in this drawing lesson, she did. The teacher was fascinated. She went over to her and said, "What are you drawing?" And the girl said, "I'm drawing a picture of God." And the teacher said, "But nobody knows what God looks like." And the girl said, "They will in a minute." (Laughter) When my son was four in England—actually, he was four everywhere, to be honest. (Laughter) If we're being strict about it, wherever he went, he was four that year. He was in the Nativity play. Do you remember the story? (Laughter) No, it was big. It was a big story. Mel Gibson did the sequel; you may have seen it. (Laughter) "Nativity II." But James got the part of Joseph, which we were thrilled about. We considered this to be one of the lead parts. We had the place crammed full of agents in T-shirts: "James Robinson IS Joseph!" (Laughter) He didn't have to speak, but you know the bit where the three kings come in? They come in bearing gifts: gold, frankincense, and myrrh. This really happened. We were sitting there, and I think they just went out of sequence, because we talked to the little boy afterward and said, "You OK with that?" They said, "Yeah, why? Was that wrong?" They just switched. The three boys came in—four-year-olds with tea towels on their heads. They put these boxes

down, and the first boy said, "I bring you gold." The second boy said, "I bring you myrrh." And the third boy said, "Frank sent this." (Laughter) What these things have in common is that kids will take a chance. They don't know; they'll have a go. Am I right? They're not frightened of being wrong. I don't mean to say that being wrong is the same thing as being creative. What we do know is, if you're not prepared to be wrong, you'll never come up with anything original—if you're not prepared to be wrong. And by the time they get to be adults, most kids have lost that capacity. They have become frightened of being wrong. And we run our companies like this. We stigmatize mistakes. And we're now running national education systems where mistakes are the worst thing you can make. And the result is that we are educating people out of their creative capacities. Picasso once said this: he said that all children are born artists. The problem is to remain an artist as we grow up. I believe this passionately, that we don't grow into creativity; we grow out of it. Or rather, we get educated out of it. So why is this? I lived in Stratford-on-Avon until about five years ago. In fact, we moved from Stratford to Los Angeles. So you can imagine what a seamless transition this was. (Laughter) Actually, we lived in a place called Snitterfield, just outside Stratford, which is where Shakespeare's father was born. Are you struck by a new thought? I was. You don't think of Shakespeare having a father, do you? Do you? Because you don't think of Shakespeare being a child, do you? Shakespeare being seven? I never thought of it. I mean, he was seven at some point. He was in somebody's English class, wasn't he? (Laughter) How annoying would that be? (Laughter) "Must try harder." (Laughter) Being sent to bed by his dad—to Shakespeare: "Go to bed, now!" To William Shakespeare. "And put the pencil down!" (Laughter) "And stop speaking like that." (Laughter) "It's confusing everybody." (Laughter) Anyway, we moved from Stratford to Los Angeles, and I just want to say a word about the transition. Actually, my son didn't want to come. I've got two kids; he's 21 now, my daughter's 16. He didn't want to come to Los Angeles. He loved it, but he had a girlfriend in England. This was the love of his life, Sarah. He'd known her for a month. (Laughter) Mind you, they'd had their fourth anniversary, because it's a long time when you're 16. He was really upset on the plane. He said, "I'll never find another girl like Sarah." And we were rather pleased about that, frankly. (Laughter) Because she was the main reason we were leaving the country. (Laughter) But something strikes you when you move to America and travel around the world: every education system on earth has the same hierarchy of subjects. Every one. Doesn't matter where you go. You'd think it would be otherwise, but it isn't. At the top are mathematics and languages, then the humanities. At the bottom are the arts. Everywhere on earth. And in pretty much every system, too, there's a hierarchy within the arts. Art and music are normally given a higher status in schools than drama and dance. There isn't an education system on the planet that teaches dance every day to children the way we teach them mathematics. Why? Why not? I think this is rather important. I think math is very important, but so is dance. Children dance all the time if they're allowed to; we all do. We all have bodies, don't we? Did I miss a meeting? (Laughter) Truthfully, what happens is, as children grow up, we start to educate them progressively from the waist up. And then we focus on their heads. And slightly to one side. If you were to visit education as an alien and say, "What's it for, public education?" I think you'd have to conclude, if you look at the output—who really succeeds by this, who does everything they should, who gets all the brownie points, who are the winners—I think you'd have to conclude the whole purpose of public education throughout the world is to produce university professors. Isn't it? They're the people who come out the top. And I used to be one, so there. (Laughter) And I like university professors, but, you know, we shouldn't hold them up as the high-water mark of all human achievement. They're just a form of life. Another form of life. But they're rather curious. And I say this out of affection for them: there's something curious about professors. In my experience—not all of them, but typically—they live in their heads. They live up there and

slightly to one side. They're disembodied, you know, in a kind of literal way. They look upon their body as a form of transport for their heads. (Laughter) Don't they? It's a way of getting their head to meetings. (Laughter) If you want real evidence of out-of-body experiences, by the way, get yourself along to a residential conference of senior academics and pop into the discotheque on the final night. (Laughter) And there, you will see it. Grown men and women writhing uncontrollably, off the beat. (Laughter) Waiting until it ends, so they can go home and write a paper about it. (Laughter) Our education system is predicated on the idea of academic ability. And there's a reason. Around the world, there were no public systems of education, really, before the 19th century. They all came into being to meet the needs of industrialism. So the hierarchy is rooted in two ideas. Number one, that the most useful subjects for work are at the top. So you were probably steered benignly away from things at school when you were a kid, things you liked, on the grounds you would never get a job doing that. Is that right? "Don't do music, you're not going to be a musician; don't do art, you won't be an artist." Benign advice—now, profoundly mistaken. The whole world is engulfed in a revolution. And the second is academic ability, which has really come to dominate our view of intelligence, because the universities design the system in their image. If you think of it, the whole system of public education around the world is a protracted process of university entrance. And the consequence is that many highly talented, brilliant, creative people think they're not, because the thing they were good at in school wasn't valued, or was actually stigmatized. And I think we can't afford to go on that way. In the next 30 years, according to UNESCO, more people worldwide will be graduating through education than since the beginning of history. More people. And it's the combination of all the things we've talked about: technology and its transformational effect on work, and demography and the huge explosion in population. Suddenly, degrees aren't worth anything. Isn't that true? When I was a student, if you had a degree, you had a job. If you didn't have a job, it's because you didn't want one. And I didn't want one, frankly. (Laughter) But now kids with degrees are often heading home to carry on playing video games, because you need an MA where the previous job required a BA, and now you need a PhD for the other. It's a process of academic inflation. And it indicates the whole structure of education is shifting beneath our feet. We need to radically rethink our view of intelligence. We know three things about intelligence. One, it's diverse. We think about the world in all the ways that we experience it. We think visually, we think in sound, we think kinesthetically. We think in abstract terms, we think in movement. Secondly, intelligence is dynamic. If you look at the interactions of a human brain, as we heard yesterday from a number of presentations, intelligence is wonderfully interactive. The brain isn't divided into compartments. In fact, creativity—which I define as the process of having original ideas that have value—more often than not comes about through the interaction of different disciplinary ways of seeing things. By the way, there's a shaft of nerves that joins the two halves of the brain, called the corpus callosum. It's thicker in women. Following off from Helen yesterday, this is probably why women are better at multitasking. Because you are, aren't you? There's a raft of research, but I know it from my personal life. If my wife is cooking a meal at home, which is not often ... thankfully. (Laughter) No, she's good at some things. But if she's cooking, she's dealing with people on the phone, she's talking to the kids, she's painting the ceiling—(Laughter)—she's doing open-heart surgery over here. If I'm cooking, the door is shut, the kids are out, the phone's on the hook, if she comes in, I get annoyed. I say, "Terry, please, I'm trying to fry an egg in here." (Laughter) "Give me a break." (Laughter) Actually, do you know that old philosophical thing, "If a tree falls in a forest, and nobody hears it, did it happen?" Remember that old chestnut? I saw a great T-shirt recently, which said, "If a man speaks his mind in a forest, and no woman hears him, is he still wrong?" (Laughter) And the third thing about intelligence is, it's distinct. I'm doing a new book at the moment called *Epiphany*, which is based on a series of interviews

with people about how they discovered their talent. I'm fascinated by how people got to be there. It's really prompted by a conversation I had with a wonderful woman who maybe most people have never heard of, Gillian Lynne. Have you heard of her? Some have. She's a choreographer, and everybody knows her work. She did *Cats* and *Phantom of the Opera*. She's wonderful. I used to be on the board of The Royal Ballet, as you can see. (Laughter) Gillian and I had lunch one day. I said, "How did you get to be a dancer?" It was interesting. When she was at school, she was really hopeless. And the school, in the '30s, wrote to her parents and said, "We think Gillian has a learning disorder." She couldn't concentrate; she was fidgeting. I think now they'd say she had ADHD. Wouldn't you? But this was the 1930s, and ADHD hadn't been invented at this point. It wasn't an available condition. (Laughter) People weren't aware they could have that. (Laughter) Anyway, she went to see this specialist. So, this oak-paneled room, and she was there with her mother, and she was led and sat on this chair at the end, and she sat on her hands, For 20 minutes, while this man talked to her mother about all the problems Gillian was having at school—because she was disturbing people, her homework was always late, and so on—this little kid of eight sat there. In the end, the doctor went and sat next to Gillian and said, "I've listened to all these things your mother's told me. I need to speak to her privately. Wait here. We'll be back. We won't be very long." And they went and left her. But as they went out of the room, he turned on the radio that was sitting on his desk. And when they got out of the room, he said to her mother, "Just stand and watch her." And the minute they left the room, she was on her feet, moving to the music. And they watched for a few minutes, and he turned to her mother and said, "Mrs. Lynne, Gillian isn't sick. She's a dancer. Take her to a dance school." I said, "What happened?" She said, "She did. I can't tell you how wonderful it was. We walked into this room, and it was full of people like me—people who couldn't sit still, people who had to move to think." Who had to move to think. They did ballet, they did tap, jazz; they did modern; they did contemporary. She was eventually auditioned for the Royal Ballet School. She became a soloist; she had a wonderful career at the Royal Ballet. She eventually graduated from the Royal Ballet School, founded the Gillian Lynne Dance Company, and met Andrew Lloyd Webber. She's been responsible for some of the most successful musical theater productions in history, she's given pleasure to millions, and she's a multimillionaire. Somebody else might have put her on medication and told her to calm down. What I think it comes to is this: Al Gore spoke the other night about ecology and the revolution that was triggered by Rachel Carson. I believe our only hope for the future is to adopt a new conception of human ecology, one in which we start to reconstitute our conception of the richness of human capacity. Our education system has mined our minds in the way that we strip-mine the earth for a particular commodity. And for the future, it won't serve us. We have to rethink the fundamental principles on which we're educating our children. There was a wonderful quote by Jonas Salk, who said, "If all the insects were to disappear from the Earth, within 50 years, all life on Earth would end. If all human beings disappeared from the Earth, within 50 years, all forms of life would flourish." And he's right. What TED celebrates is the gift of the human imagination. We have to be careful now that we use this gift wisely, and that we avert some of the scenarios that we've talked about. And the only way we'll do it is by seeing our creative capacities for the richness they are and seeing our children for the hope that they are. And our task is to educate their whole being, so they can face this future. By the way—we may not see this future, but they will. And our job is to help them make something of it. Thank you very much.

https://www.ted.com/talks/sir_ken_robinson_do_schools_kill_creativity

Make stress your Friend

I have a confession to make but first, I want you to make a little confession to me. In the past year, I want you to just raise your hand if you've experienced relatively little stress. Anyone? How about a moderate amount of stress? Who has experienced a lot of stress? Yeah. Me too. But that is not my confession. My confession is this: I am a health psychologist, and my mission is to help people be happier and healthier. But I fear that something I've been teaching for the last 10 years is doing more harm than good, and it has to do with stress. For years I've been telling people, stress makes you sick. It increases the risk of everything from the common cold to cardiovascular disease. Basically, I've turned stress into the enemy. But I have changed my mind about stress, and today, I want to change yours. Let me start with the study that made me rethink my whole approach to stress. This study tracked 30,000 adults in the United States for eight years, and they started by asking people, "How much stress have you experienced in the last year?" They also asked, "Do you believe that stress is harmful for your health?" And then they used public death records to find out who died. (Laughter) Okay Some bad news first. People who experienced a lot of stress in the previous year had a 43 percent increased risk of dying. But that was only true for the people who also believed that stress is harmful for your health. (Laughter) People who experienced a lot of stress but did not view stress as harmful were no more likely to die. In fact, they had the lowest risk of dying of anyone in the study, including people who had relatively little stress.

Now the researchers estimated that over the eight years they were tracking deaths, 182,000 Americans died prematurely, not from stress, but from the belief that stress is bad for you. (Laughter) That is over 20,000 deaths a year. Now, if that estimate is correct, that would make believing stress is bad for you the 15th largest cause of death in the United States last year, killing more people than skin cancer, HIV/AIDS and homicide. (Laughter) You can see why this study freaked me out. Here I've been spending so much energy telling people stress is bad for your health. So this study got me wondering: Can changing how you think about stress make you healthier? And here the science says yes. When you change your mind about stress, you can change your body's response to stress. Now to explain how this works, I want you all to pretend that you are participants in a study designed to stress you out. It's called the social stress test. You come into the laboratory, and you're told you have to give a five-minute impromptu speech on your personal weaknesses to a panel of expert evaluators sitting right in front of you, and to make sure you feel the pressure, there are bright lights and a camera in your face, kind of like this. (Laughter) And the evaluators have been trained to give you discouraging, non-verbal feedback, like this. (Laughter) Now that you're sufficiently demoralized, time for part two: a math test. And unbeknownst to you, the experimenter has been trained to harass you during it. Now we're going to all do this together. It's going to be fun. For me. Okay. (Laughter) I want you all to count backwards from 996 in increments of seven. You're going to do this out loud, as fast as you can, starting with 996. Go! (Audience counting) Go faster. Faster please. You're going too slow. (Audience counting) Stop. Stop, stop, stop. That guy made a mistake. We are going to have to start all over again. (Laughter) You're not very good at this, are you? Okay, so you get the idea. If you were actually in this study, you'd probably be a little stressed out. Your heart might be pounding, you might be breathing faster, maybe breaking out into a sweat. And normally, we interpret these physical changes as anxiety or signs that we aren't coping very well with the pressure. But what if you viewed them instead as signs that your body was energized, was preparing you to meet this challenge? Now that is exactly what participants were told in a study conducted at Harvard University. Before they went through the social stress test they were taught to rethink their stress response as helpful. That pounding heart is preparing you for action. If you're breathing faster, it's no problem. It's getting more oxygen to your brain. And participants who learned to

view the stress response as helpful for their performance, well, they were less stressed out, less anxious, more confident, but the most fascinating finding to me was how their physical stress response changed. Now, in a typical stress response, your heart rate goes up, and your blood vessels constrict like this. And this is one of the reasons that chronic stress is sometimes associated with cardiovascular disease. It's not really healthy to be in this state all the time. But in the study, when participants viewed their stress response as helpful, their blood vessels stayed relaxed like this. Their heart was still pounding, but this is a much healthier cardiovascular profile. It actually looks a lot like what happens in moments of joy and courage. Over a lifetime of stressful experiences, this one biological change could be the difference between a stress-induced heart attack at age 50 and living well into your 90s. And this is really what the new science of stress reveals, that how you think about stress matters. So my goal as a health psychologist has changed. I no longer want to get rid of your stress. I want to make you better at stress. And we just did a little intervention. If you raised your hand and said you'd had a lot of stress in the last year, we could have saved your life, because hopefully the next time your heart is pounding from stress, you're going to remember this talk and you're going to think to yourself, this is my body helping me rise to this challenge. And when you view stress in that way, your body believes you, and your stress response becomes healthier. Now I said I have over a decade of demonizing stress to redeem myself from, so we are going to do one more intervention. I want to tell you about one of the most under-appreciated aspects of the stress response, and the idea is this: Stress makes you social. To understand this side of stress, we need to talk about a hormone, oxytocin, and I know oxytocin has already gotten as much hype as a hormone can get. It even has its own cute nickname, the cuddle hormone because it's released when you hug someone. But this is a very small part of what oxytocin is involved in. Oxytocin is a neuro-hormone. It fine-tunes your brain's social instincts. It primes you to do things that strengthen close relationships. Oxytocin makes you crave physical contact with your friends and family. It enhances your empathy. It even makes you more willing to help and support the people you care about. Some people have even suggested we should snort oxytocin... to become more compassionate and caring. But here's what most people don't understand about oxytocin. It's a stress hormone. Your pituitary gland pumps this stuff out as part of the stress response. It's as much a part of your stress response as the adrenaline that makes your heart pound. And when oxytocin is released in the stress response, it is motivating you to seek support. Your biological response is nudging you to tell someone how you feel, instead of bottling it up.

Your stress response wants to make sure you notice when someone else in your life is struggling so that you can support each other. When life is difficult, your stress response wants you to be surrounded by people who care about you. Okay, so how is knowing this side of stress going to make you healthier? Well, oxytocin doesn't only act on your brain. It also acts on your body and one of its main roles in your body is to protect your cardiovascular system from the effects of stress. It's a natural anti-inflammatory. It also helps your blood vessels stay relaxed during stress. But my favorite effect on the body is actually on the heart. Your heart has receptors for this hormone, and oxytocin helps heart cells regenerate and heal from any stress-induced damage. This stress hormone strengthens your heart and the cool thing is that all of these physical benefits of oxytocin are enhanced by social contact and social support. So when you reach out to others under stress, either to seek support or to help someone else, you release more of this hormone, your stress response becomes healthier, and you actually recover faster from stress. I find this amazing, that your stress response has a built-in mechanism for stress resilience, and that mechanism is human connection. I want to finish by telling you about one more study. And listen up, because this study could also save a life. This study tracked about 1,000 adults in the United States, and they ranged in age from 34 to 93, and they started the study by asking «How much stress have you experienced in the

last year?" They also asked, "How much time have you spent helping out friends, neighbours, people in your community?" And then they used public records for the next five years to find out who died. Okay, so the bad news first: For every major stressful life experience, like financial difficulties or family crisis, that increased the risk of dying by 30 percent. But -- and I hope you are expecting a "but" by now -- but that wasn't true for everyone. People who spent time caring for others showed absolutely no stress-related increase in dying. Zero. Caring created resilience. And so we see once again that the harmful effects of stress on your health are not inevitable. How you think and how you act can transform your experience of stress. When you choose to view your stress response as helpful you create the biology of courage. And when you choose to connect with others under stress, you can create resilience. Now I wouldn't necessarily ask for more stressful experiences in my life, but this science has given me a whole new appreciation for stress. Stress gives us access to our hearts. The compassionate heart that finds joy and meaning in connecting with others, and yes, your pounding physical heart, working so hard to give you strength and energy. And when you choose to view stress in this way, you're not just getting better at stress, you're actually making a pretty profound statement. You're saying that you can trust yourself to handle life's challenges. And you're remembering that you don't have to face them alone Thank you. Chris Anderson: This is kind of amazing, what you're telling us. It seems amazing to me that a belief about stress can make so much difference to someone's life expectancy. How would that extend to advice, like, if someone is making a lifestyle choice between, say, a stressful job and a non-stressful job, does it matter which way they go? It's equally wise to go for the stressful job so long as you believe that you can handle it, in some sense? KM: Yeah, and one thing we know for certain is that chasing meaning is better for your health than trying to avoid discomfort. And so I would say that's really the best way to make decisions, is go after what it is that creates meaning in your life and then trust yourself to handle the stress that follows. CA: Thank you so much, Kelly. It's pretty cool.

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Inside the mind of a master procrastinator

I was a government major, which means I had to write a lot of papers. Now, when a normal student writes a paper they might spread the work out a little like this So, you know (Laughter) you get started maybe a little slowly, but you get enough done in the first week that, with some heavier days later on, everything gets done, things stay civil (Laughter) And I would want to do that like that. That would be the plan. I would have it all ready to go, but then, actually, the paper would come along, and then I would kind of do this. (Laughter) And that would happen every single paper. But then came my 90-page senior thesis, a paper you're supposed to spend a year on. And I knew for a paper like that, my normal work flow was not an option. It was way too big a project. So I planned things out, and I decided I kind of had to go something like this. This is how the year would go. So I'd start off light, and I'd bump it up in the middle months, and then at the end, I would kick it up into high gear just like a little staircase. How hard could it be to walk up the stairs? No big deal, right? But then, then funniest thing happened. Those first few months? They came and went, and I couldn't quite do stuff. So we had an awesome new revised plan. (Laughter) And then -- (Laughter) But then those middle months actually went by, and I didn't really write words, and so we were here.

And then two months turned into one month, which turned into two weeks. And one day I woke up with three days until the deadline, still not having written a word, and so I did the only thing I could: I wrote 90 pages over 72 hours, pulling not one but two all-nighters -- humans are not supposed to pull two all-nighters --sprinted across campus, dove in slow motion, and got it in just at the deadline. I thought that was the end of everything. But a week later I get a call, and it's the school. And they say, "Is this Tim Urban?" And I say, "Yeah." And they say, "We need to talk about your thesis." And I say, "OK." And they say, "It's the best one we've ever seen." (Laughter) (Applause) That did not happen. (Laughter) It was a very, very bad thesis. (Laughter) I just wanted to enjoy that one moment when all of you thought, "This guy is amazing!" (Laughter) No, no, it was very, very bad. Anyway, today I'm a writer-blogger guy. I write the blog Wait but Why and a couple of years ago, I decided to write about procrastination. My behaviour has always perplexed the non-procrastinators around me, and I wanted to explain to the non-procrastinators of the world what goes on in the heads of procrastinators, and why we are the way we are. Now, I had a hypothesis that the brains of procrastinators were actually different than the brains of other people. And to test this, I found an MRI lab that actually let me scan both my brain and the brain of a proven non procrastinator, so I could compare them. I actually brought them here to show you today. I want you to take a look carefully to see if you can notice a difference. I know that if you're not a trained brain expert, it's not that obvious, but just take a look, OK? So here's the brain of a non-procrastinator. (Laughter) Now ... here's my brain. (Laughter) There is a difference. Both brains have a Rational Decision-Maker in them, but the procrastinator's brain also has an Instant Gratification Monkey. Now, what does this mean for the procrastinator? Well, it means everything's fine until this happens. [This is a perfect time to get some work done.] [Nope!] So the Rational Decision-Maker will make the rational decision to do something productive, but the Monkey doesn't like that plan, so he actually takes the wheel, and he says, "Actually, let's read the entire Wikipedia page of the Nancy Kerrigan/ Tonya Harding scandal, because I just remembered that that happened. (Laughter) Then -- (Laughter) Then we're going to go over to the fridge, to see if there's anything new in there since 10 minutes ago. After that, we're going to go on a YouTube spiral that starts with videos of Richard Feynman talking about magnets and ends much, much later with us watching interviews with Justin Bieber's mom. (Laughter) "All of that's going to take a while, so we're not going to really have room on the schedule for any work today. Sorry!" (Sigh) Now, what is going on here? The Instant Gratification Monkey does not seem like a guy you want behind the wheel. He lives entirely in the present moment. He has no memory of the past, no knowledge of the future, and he only cares about two things: easy and fun. Now, in the animal world, that works fine. If you're a dog and you spend your whole life doing nothing other than easy and fun things, you're a huge success! (Laughter) And to the Monkey, humans are just another animal species. You have to keep well-slept, well-fed and propagating into the next generation which in tribal times might have worked OK, But, if you haven't noticed, now we're not in tribal times. We're in an advanced civilization, and the Monkey does not know what that is. Which is why we have another guy in our brain, the Rational Decision-Maker who gives us the ability to do things no other animal can do. We can visualize the future. We can see the big picture. We can make long-term plans. And he wants to take all of that into account. And he wants to just have us do whatever makes sense to be doing right now. Now, sometimes it makes sense to be doing things that are easy and fun, like when you're having dinner or going to bed or enjoying well-earned leisure time. That's why there's an overlap. Sometimes they agree. But other times, it makes much more sense to be doing things that are harder and less pleasant, for the sake of the big picture. And that's when we have a conflict. And for the procrastinator, that conflict tends to end a certain way every time, leaving him spending a lot of time in this orange zone, an easy and fun place that's entirely out of the

Makes Sense circle. I call it the Dark Playground. (Laughter) Now, the Dark Playground is a place that all of you procrastinators out there know very well. It's where leisure activities happen at times when leisure activities are not supposed to be happening. The fun you have in the Dark Playground isn't actually fun, because it's completely unearned, and the air is filled with guilt, dread, anxiety, self-hatred -- all of those good procrastinator feelings. And the question is, in this situation, with the Monkey behind the wheel, how does the procrastinator ever get himself over here to this blue zone, a less pleasant place, but where really important things happen? Well, turns out the procrastinator has a guardian angel, someone who's always looking down on him and watching over him in his darkest moments - someone called the Panic Monster. (Laughter) Now, the Panic Monster is dormant most of the time, but he suddenly wakes up anytime a deadline gets too close or there's danger of public embarrassment, a career disaster or some other scary consequence. And importantly, he's the only thing the Monkey is terrified of. Now, he became very relevant in my life pretty recently, because the people of TED reached out to me about six months ago and invited me to do a TED Talk. (Laughter) Now, of course, I said yes. It's always been a dream of mine to have done a TED Talk in the past. (Laughter) (Applause) But in the middle of all this excitement, the Rational Decision-Maker seemed to have something else on his mind. He was saying, "Are we clear on what we just accepted? Do we get what's going to be now happening one day in the future? We need to sit down and work on this right now." And the Monkey said, "Totally agree, but let's just open Google Earth and zoom in to the bottom of India, like 200 feet above the ground, and scroll up for two and a half hours till we get to the top of the country, so we can get a better feel for India." (Laughter) So that's what we did that day. (Laughter) As six months turned into four and then two and then one, the people of TED decided to release the speakers. And I opened up the website, and there was my face staring right back at me. And guess who woke up? (Laughter) So the Panic Monster starts losing his mind, and a few seconds later, the whole system's in mayhem. (Laughter) And the Monkey -- remember, he's terrified of the Panic Monster -- boom, he's up the tree and finally, the Rational Decision-Maker can take the wheel and I can start working on the talk. Now, the Panic Monster explains all kinds of pretty insane procrastinator behaviour, like how someone like me could spend two weeks unable to start the opening sentence of a paper, and then miraculously find the unbelievable work ethic to stay up all night and write eight pages. And this entire situation, with the three characters -- this is the procrastinator's system. It's not pretty, but in the end, it works. This is what I decided to write about on the blog a couple of years ago. When I did, I was amazed by the response. Literally thousands of emails came in from all different kinds of people from all over the world, doing all different kinds of things. These are people who were nurses, bankers, painters, engineers and lots and lots of PhD students. (Laughter) And they were all writing, saying the same thing: "I have this problem too." But what struck me was the contrast between the light tone of the post and the heaviness of these emails. These people were writing with intense frustration about what procrastination had done to their lives, about what this Monkey had done to them. And I thought about this, and I said, well, if the procrastinator's system works, then what's going on? Why are all of these people in such a dark place? Well, it turns out that there's two kinds of procrastination. Everything I've talked about today, the examples I've given, they all have deadlines. And when there's deadlines, the effects of procrastination are contained to the short term because the Panic Monster gets involved. But there's a second kind of procrastination that happens in situations when there is no deadline. So if you wanted a career where you're a self-starter - something in the arts, something entrepreneurial -- there's no deadlines on those things at first, because nothing's happening, until you've gone out and done the hard work to get momentum, get things going. There's also all kinds of important things outside of your career that don't involve any deadlines, like seeing your family or exercising and taking care of your health,

working on your relationship or getting out of a relationship that isn't working. Now if the procrastinator's only mechanism of doing these hard things is the Panic Monster, that's a problem, because in all of these non-deadline situations, the Panic Monster doesn't show up. He has nothing to wake up for, so the effects of procrastination, they're not contained; they just extend outward forever. And it's this long-term kind of procrastination that's much less visible and much less talked about than the funnier, short-term deadline-based kind. It's usually suffered quietly and privately. And it can be the source of a huge amount of long-term unhappiness, and regrets. And I thought, that's why those people are emailing, and that's why they're in such a bad place. It's not that they're cramming for some project. It's that long-term procrastination has made them feel like a spectator, at times, in their own lives. The frustration is not that they couldn't achieve their dreams; it's that they weren't even able to start chasing them. So I read these emails and I had a little bit of an epiphany -- that I don't think non-procrastinators exist. That's right -- I think all of you are procrastinators. Now, you might not all be a mess, like some of us, (Laughter) and some of you may have a healthy relationship with deadlines, but remember: The Monkey's sneakiest trick is when the deadlines aren't there. Now, I want to show you one last thing. I call this a Life Calendar. That's one box for every week of a 90-year life. That's not that many boxes, especially since we've already used a bunch of those. So I think we need to all take a long, hard look at that calendar. We need to think about what we're really procrastinating on, because everyone is procrastinating on something in life. We need to stay aware of the Instant Gratification Monkey. That's a job for all of us. And because there's not that many boxes on there, it's a job that should probably start today. Well, maybe not today, but ... (Laughter) You know. Sometime soon. Thank You.

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Stroke of insight

I grew up to study the brain because I have a brother who has been diagnosed with a brain disorder schizophrenia and as a sister and later as a scientist I wanted to understand why is it that I can take my dreams I can connect them to my reality and I can make my dreams come true what is it about my brother's brain and his schizophrenia that he cannot connect his dreams to a common and shared reality so they instead become delusion so I dedicated my career to research into the severe mental illnesses and I moved from my home state of Indiana to Boston where I was working in the lab of dr. Francine Venice in the Harvard Department of Psychiatry and in the lab we were asking the question what are the biological differences between the brains of individuals who would be diagnosed as normal control as compared with the brains of individuals diagnosed with schizophrenia schizo affective or bipolar disorder so we were essentially mapping the micro circuitry of the brain which cells are communicating with which cells with which chemicals and then in what quantities of those chemicals so there was a lot of meaning in my life because I was performing this type of research during the day but then in the evenings and on the weekends I travelled as an advocate for NAMI the National Alliance on Mental Illness but on the morning of December 10 1996 I woke up to discover that I had a brain disorder of my own a blood vessel exploded in the left half of my brain and in the course of four hours I watched my brain completely deteriorate in its ability to process all information on the morning of the haemorrhage I could not walk talk read write or recall any of my life I essentially became an infant in a woman's body if you've ever seen a human brain it's obvious that the two

hemispheres are completely separate from one another and I have brought for you a real human brain thank you sir so this is a real human brain this is the front of the brain the back of the brain with the spinal cord hanging down and this is how it would be positioned inside of my head and when you look at the brain it's obvious that the two cerebral cortices are completely separate from one another for those of you who understand computers our right hemisphere functions like a parallel processor while our left hemisphere functions like a serial processor the two hemispheres do communicate with one another through the corpus callosum which is made up of some 300 million axonal fibres but other than that the two hemispheres are completely separate because they process information differently each of our hemisphere think about different things they care about different things and dare I say they have very different personalities excuse me thank you it's been a joy our right human hemisphere is all about this present moment it's all about right here right now our right hemisphere it thinks in pictures and it learns kinaesthetically through the movement of our bodies information in the form of energy streams in simultaneously through all of our sensory systems and then it explodes into this enormous collage of what this present moment looks like what this present moment smells like and tastes like what it feels like and what it sounds like I am an energy being connected to the energy all around me through the consciousness of my right hemisphere we are energy beings connected to one another through the consciousness of our right hemispheres as one human family and right here right now we are brothers and sisters on this planet here to make the world a better place and in this moment we are perfect we are whole and we are beautiful my left hemisphere our left hemisphere is a very different place our left hemisphere thinks linearly and methodically our left hemisphere is all about the past and it's all about the future our left hemisphere is designed to take that enormous collage of the present moment and start picking out details and more details about those details it then categorizes and organizes all that information associates it with everything in the past we've ever learned and projects into the future all of our possibilities and our left hemisphere thinks in language it's that ongoing brain chatter that connects me in my internal world to my external world it's that little voice that says to me hey you got to remember to pick up a Nana's on your way home I need them in the morning it's that calculating intelligence that knows that reminds me when I have to do my laundry but perhaps most important it's a little voice that says to me I am I am and as soon as my left hemisphere says to me I am I become separate I become a single solid individual separate from the energy flow around me and separate from you and this is a portion of my brain that I lost on the morning of my stroke on the morning of the stroke I woke up to a pounding pain behind my left eye and it was the kind of pain caustic pain that you get when you bite into ice cream and it just gripped me and then it released me and then it just gripped me and then it released me and it was very unusual for me to ever experience any kind of pain so I thought okay I'll just start my normal routine so I got up and I jumped onto my cardio glider which is a full body full exercise machine and I'm jamming away on this thing and I'm realizing that my hands look like primitive claws grasping onto the bar and I thought that's very peculiar and I looked down at my body and I thought whoa I'm a weird-looking thing and it was as though my consciousness had shifted away from my normal perception of reality where I'm the person on the machine having the experience to some esoteric space where I'm witnessing myself having this experience there was all very peculiar and my headache was just getting worse so I get off the machine and I'm walking across my living room floor and I realized that everything inside of my body has slowed way down and every step is very rigid and very deliberate there's no fluidity to my pace and there's this constriction in my area of perception so I'm just focused on internal systems and I'm standing in my bathroom getting ready to step into the shower and I could actually hear the dialogue inside of my body I heard a little voice saying okay you muscles you got a contract and you muscles you relaxed and now I lost my balance propped up against the wall and I look down

at my arm and I realized that I can no longer define the boundaries of my body I can't define where I begin and where I end because the atoms and the molecules of my arm blended with the atoms and molecules of the wall and all I could detect was this energy and I'm asking myself what is wrong with me what is going on and in that moment my brain shattered my left hemisphere brain chatter went totally silent just like someone took a remote control and pushed the mute button total silence and at first I was shocked to find myself inside of a silent mind but then I was immediately captivated by the magnificence of the energy around me and because I could no longer identify the boundaries of my body I felt enormous and expansive I felt at one with all the energy that was and it was beautiful there and then all of a sudden my left hemisphere comes back online and it says to me hey we had a problem we got a problem we got to get some help but I'm going oh I got a problem I got a problem so it's like okay I got a problem but then immediately drifted right back out into the consciousness and I fictionally refer to this space as lala land but it was beautiful there imagine what it would be like to be totally disconnected from your brain chatter that connects you to the external world so here I am in this space and my job and any stress related to mine my job it was gone and I felt lighter in my body and imagine all of the relationships in the external world and any stressors related to any of those they were gone and I felt this sense of peacefulness and imagine what it would feel like to lose 37 years of emotional baggage oh I felt euphoria it was beautiful there and then again my left hemisphere comes online and it says hey you've got to pay attention we've got to get help and I'm thinking I've got to get help I got to focus so I get out of the shower and I mechanically dress and I'm walking around my apartment and I'm thinking I got to get to work I got to get to work can I Drive can I Drive and in that moment my right arm went totally paralyzed by my side did I realize oh my gosh am I having a stroke I'm having a stroke and then the next thing my brain says to me is wow this is so cool this is so cool how many brain scientists have the opportunity to study their own brain from the inside out and then it crosses my mind but I'm a very busy woman time for a strong it's like okay I can't stop the stroke from happening so I'll do this for a week or two and then I'll get back to my routine okay so I got a call help I got a call work I couldn't remember the number at work so I remembered in office I had a business card with my number on him so I go into my business room I pull out a three inch stack of business cards and I'm looking at the card on top and even though I could see clearly in my mind's eye what my business card looked like I couldn't tell if this was my card or not because all I could see were pixels and the pixels of the words blended with the pixels of the background and the pixels of the symbols and I just couldn't tell and then I would wait for what I call a wave of clarity and in that moment I would be able to reattach to normal reality and I could tell that's not the card that's not the card that's not the card it took me 45 minutes to get one inch down inside of that stack of cards in the meantime for 45 minutes the haemorrhage is getting bigger in my left hemisphere I do not understand numbers I do not understand a telephone but it's the only plan I have so I take the foam pad and I put it right here I take the business card I put it right here and I'm matching the shape of the squiggles on the card to the shape of the squiggles on the foam pad but then I would drift back out into lala land and not remember if when I come back and if I'd already dialled those numbers so I had to wield my paralyzed arm like a stump and cover the numbers as I went along and pushed them so that as I would come back to normal reality I'd be able to tell yes I've already dialled that number eventually the whole number gets dialled and I'm listening to the song and my colleague picks up the phone and he says to me whoa and I think that myself oh my gosh he sounds like a golden retriever and so I say to him clear in my mind I say to him this is Jill I need help and what comes out of my voice is I think oh my gosh I sound like a golden retriever so I couldn't know I didn't know that I couldn't speak or understand language until I tried so he recognizes that I need help and he and he gets me help and a little while later I'm riding in an ambulance from one hospital across Boston to

Mass General Hospital and I curl up into a little fatal ball and just like a balloon with the last bit of air of just right out of the balloon I just felt my energy lift and just I felt my spirit surrender and in that moment I knew that I was no longer the choreographer of my life and either the doctors rescue my body and give me a second chance at life or this was perhaps my moment of transition when I woke later that afternoon I was shocked to discover that I was still alive when I felt my spirit surrender I said goodbye to my life and my mind was now suspended between two very opposite planes of reality stimulation coming in through my sensory systems felt like pure pain light burned my brain like wildfire and sounds were so loud and chaotic that I could not pick a voice out from the background noise and I just wanted to escape because I could not identify the position of my body in space I felt enormous and expansive like

a genie just liberated from her bottle and my spirit soared free like a great whale gliding through a sea of silent euphoria nirvana I found nirvana I remember thinking there's no way I would ever be able to squeeze the enormosity of myself back inside this tiny little body but then I realized but I'm still alive I'm still alive and I have found nirvana and if I have found Nirvana and I'm still alive then everyone who is alive can find nirvana and I pictured a world filled with beautiful peaceful compassionate loving people who knew that they could come to this space at any time and that they could purposely choose to step to the right of their left hemispheres and find this peace and then I realized what a tremendous gift this experience could be what a stroke of insight this could be to how we live our lives and it motivated me to recover two-and-a-half weeks after the haemorrhage the surgeons went in and they removed a blood clot the size of a golf ball that was pushing on my language centres Here I am with my momma who's a true angel in my life it took me eight years to completely recover so who are we we are the life force power of the universe with manual dexterity and two cognitive minds and we have the power to choose moment by moment who and how we want to be in the world right here right now I can step into the consciousness of my right hemisphere where we are I am the life-force power of the universe I am the life-force power the 50 trillion beautiful molecular geniuses that make up my form and one with all that is or I can choose to step into the consciousness of my left hemisphere where I become a single individual a solid separate from the flow separate from you I am dr. Jill Bolte Taylor intellectual neuroanatomist these are the wee inside of me which would you choose which do you choose and when I believe that the more time we spend choosing to run the deep inner peace circuitry of our right hemispheres the more peace we will project into the world and the more peaceful our planet will be and I thought that was an idea worth spreading.

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The next outbreak

the disaster we worried about most was a nuclear war. That's why we had a barrel like this down in our basement, filled with cans of food and water. When the nuclear attack came; we were supposed to go downstairs, hunker down, and eat out of that barrel. Today the greatest risk of global catastrophe doesn't look like this. Instead, it looks like this If anything kills over 10 million people in the next few decades it's most likely to be a highly infectious virus rather than a war. Not missiles, but microbes. Now, part of the reason for this is that we've invested a huge amount in nuclear deterrents but we've actually invested very little in a system to stop an epidemic. We're not ready for the next epidemic. Let's look at Ebola. I'm sure all of you read about it in the newspaper, lots of tough challenges. I followed it carefully through the case analysis tools we use to track polio eradication. And as you look at what went on, the problem wasn't that there was a system that didn't work well enough, the

problem was that we didn't have a system at all. In fact, there's some pretty obvious key missing pieces. We didn't have a group of epidemiologists ready to go, who would have gone, seen what the disease was, seen how far it had spread. The case reports came in on paper. It was very delayed before they were put online and they were extremely inaccurate. We didn't have a medical team ready to go. We didn't have a way of preparing people. Now, Medicines Sans Frontiers did a great job orchestrating volunteers; But even so, we were far slower than we should have been getting the thousands of workers into these countries. And a large epidemic would require us to have hundreds of thousands of workers. There was no one there to look at treatment approaches. No one to look at the diagnostics. No one to figure out what tools should be used. As an example, we could have taken the blood of survivors, processed it, and put that plasma back in people to protect them. But that was never tried. So there was a lot that was missing. And these things are really a global failure. The WHO is funded to monitor epidemics, but not to do these things I talked about. Now, in the movies it's quite different. There's a group of handsome epidemiologists ready to go, they move in, they save the day, but that's just pure Hollywood. The failure to prepare could allow the next epidemic to be dramatically more devastating than Ebola. Let's look at the progression of Ebola over this year. About 10,000 people died, and nearly all were in the three West African countries. There's three reasons why it didn't spread more. The first is that there was a lot of heroic work by the health workers; They found the people and they prevented more infections. The second is the nature of the virus. Ebola does not spread through the air. And by the time you're contagious, most people are so sick that they're bedridden. Third, it didn't get into many urban areas. And that was just luck. If it had gotten into a lot more urban areas, the case numbers would have been much larger. So next time, we might not be so lucky. You can have a virus where people feel well enough while they're infectious that they get on a plane or they go to a market. The source of the virus could be a natural epidemic like Ebola, or it could be bioterrorism. So there are things that would literally make things a thousand times worse; In fact, let's look at a model of a virus spread through the air, like the Spanish Flu back in 1918. So here's what would happen: it would spread throughout the world very, very quickly. And you can see over 30 million people died from that epidemic.

So this is a serious problem. We should be concerned. But in fact, we can build a really good response system. We have the benefits of all the science and technology that we talk about here. We've got cell phones to get information from the public and get information out to them. We have satellite maps where we can see where people are and where they're moving. We have advances in biology that should dramatically change the turnaround time to look at a pathogen and be able to make drugs and vaccines that fit for that pathogen. So we can have tools, but those tools need to be put into an overall global health system. And we need preparedness. The best lessons, I think, on how to get prepared are again, what we do for war. For soldiers, we have full-time, waiting to go. We have reserves that can scale us up to large numbers. NATO has a mobile unit that can deploy very rapidly. NATO does a lot of war games to check, are people well trained? Do they understand about fuel and logistics and the same radio frequencies? So they are absolutely ready to go. So those are the kinds of things we need to deal with an epidemic. What are the key pieces? First, we need strong health systems in poor countries. That's where mothers can give birth safely, kids can get all their vaccines. But, also where we'll see the outbreak very early on. We need a medical reserve corps: lots of people who've got the training and background who are ready to go, with the expertise.

And then we need to pair those medical people with the military. taking advantage of the military's ability to move fast, do logistics and secure areas. We need to do simulations, germ games, not war games, so that we see where the holes are. The last time a germ game was done in the United States was back in 2001, and it didn't go so well. So far the score is germs:

1, people: 0. Finally, we need lots of advanced R&D in areas of vaccines and diagnostics. There are some big breakthroughs, like the Adeno-associated virus, that could work very, very quickly. Now I don't have an exact budget for what this would cost, but I'm quite sure it's very modest compared to the potential harm., The World Bank estimates that if we have a worldwide flu epidemic, global wealth will go down by over three trillion dollars and we'd have millions and millions of deaths. These investments offer significant benefits beyond just being ready for the epidemic. The primary healthcare, the R&D, those things would reduce global health equity and make the world more just as well as more safe. So I think this should absolutely be a priority. There's no need to panic. We don't have to hoard cans of spaghetti or go down into the basement. But we need to get going, because time is not on our side. In fact, if there's one positive thing that can come out of the Ebola epidemic, it's that it can serve as an early warning, a wake-up call, to get ready. If we start now, we can be ready for the next epidemic.

Thank

You.

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Power of vulnerability

So, I'll start with this: a couple years ago, an event planner called me because I was going to do a speaking event. And she called, and she said, "I'm really struggling with how to write about you on the little flyer." And I thought, "Well, what's the struggle?" And she said, "Well, I saw you speak, and I'm going to call you a researcher, I think, but I'm afraid if I call you a researcher, no one will come, because they'll think you're boring and irrelevant." (Laughter) And I was like, "Okay." And she said, "But the thing I liked about your talk is you're a storyteller. So I think what I'll do is just call you a storyteller." And of course, the academic, insecure part of me was like, "You're going to call me a what?" And she said, "I'm going to call you a storyteller." And I was like, "Why not 'magic pixie'?" (Laughter) I was like, "Let me think about this for a second. I tried to call deep on my courage. And I thought, you know, I am a storyteller. I'm a qualitative researcher. I collect stories; that's what I do. And maybe stories are just data with a soul. And maybe I'm just a storyteller. And so I said, "You know what? Why don't you just say I'm a researcher-storyteller." And she went, "Ha ha. There's no such thing." (Laughter) So I'm a researcher-storyteller, and I'm going to talk to you today -we're talking about expanding perception -- and so I want to talk to you and tell some stories about a piece of my research that fundamentally expanded my perception and really actually changed the way that I live and love and work and parent. And this is where my story starts. When I was a young researcher, doctoral student, my first year, I had a research professor who said to us, "Here's the thing, if you cannot measure it, it does not exist." And I thought he was just sweet-talking me. I was like, "Really?" and he was like, "Absolutely." And so you have to understand that I have a bachelor's and a master's in social work, and I was getting my Ph.D. in social work, so my entire academic career was surrounded by people who kind of believed in the "life's messy, love it." And I'm more of the, "life's messy, clean it up, organize it and put it into a bento box. (Laughter) And so to think that I had found my way, to found a career that takes me really, one of the big sayings in social work is, «Lean into the discomfort of the work." And I'm like, knock discomfort upside the head and move it over and get all A's. That was my mantra. So I was very excited about this. And so I thought, you know what, this is the career for me, because I am interested in some messy topics. But I want to be able to make them not messy. I want to understand them. I want to hack into these things that I know are important and lay the code out for everyone to see. So where I started was with connection. Because, by the time you're a social worker for

10 years, what you realize is that connection is why we're here. It's what gives purpose and meaning to our lives. This is what it's all about. It doesn't matter whether you talk to people who work in social justice, mental health and abuse and neglect, what we know is that connection, the ability to feel connected, is -neurobiologically that's how we're wired -- it's why we're here. So I thought, you know what, I'm going to start with connection., Well, you know that situation where you get an evaluation from your boss, and she tells you 37 things that you do really awesome, and one "opportunity for growth?" (Laughter) And all you can think about is that opportunity for growth, right? Well, apparently this is the way my work went as well, because, when you ask people about love, they tell you about heartbreak. When you ask people about belonging, they'll tell you their most excruciating experiences of being excluded. And when you ask people about connection, the stories they told me were about disconnection. So very quickly -- really about six weeks into this research -- I ran into this unnamed thing that absolutely unraveled connection in a way that I didn't understand or had never seen. And so I pulled back out of the research and thought, I need to figure out what this is. And it turned out to be shame. And shame is really easily understood as the fear of disconnection: Is there something about me that, if other people know it or see it, that I won't be worthy of connection? The things I can tell you about it: It's universal; we all have it. The only people who don't experience shame have no capacity for human empathy or connection. No one wants to talk about it, and the less you talk about it, the more you have it. What underpinned this shame, this "I'm not good enough," -- which, we all know that feeling: "I'm not blank enough. I'm not thin enough, rich enough, beautiful enough, smart enough, promoted enough." The thing that underpinned this was excruciating vulnerability. This idea of, in order for connection to happen, we have to allow ourselves to be seen, really seen. And you know how I feel about vulnerability. I hate vulnerability. And so I thought, this is my chance to beat it back with my measuring stick. I'm going in, I'm going to figure this stuff out, I'm going to spend a year, I'm going to totally deconstruct shame, I'm going to understand how vulnerability works, and I'm going to outsmart it. So I was ready, and I was really excited. As you know, it's not going to turn out well. (Laughter) You know this. So, I could tell you a lot about shame, but I'd have to borrow everyone else's time. But here's what I can tell you that it boils down to -- and this may be one of the most important things that I've ever learned in the decade of doing this research. My one year turned into six years: Thousands of stories, hundreds of long interviews, focus groups. At one point, people were sending me journal pages and sending me their stories -- thousands of pieces of data in six years. And I kind of got a handle on it. I kind of understood, this is what shame is, this is how it works. I wrote a book, I published a theory, but something was not okay -- and what it was is that, if I roughly took the people I interviewed and divided them into people who really have a sense of worthiness -- that's what this comes down to, a sense of worthiness -- they have a strong sense of love and belonging --

and folks who struggle for it, and folks who are always wondering if they're good enough. There was only one variable that separated really struggle for it. And that was, a strong sense of love and belonging believe they're worthy of love and belonging. That's it. They believe they're worthy. And to me, the hard part of the one thing that keeps us out of connection is our fear that we're not worthy of connection, was something that, personally and professionally, I felt like I needed to understand better. So what I did is I took all of the interviews where I saw worthiness, where I saw people living that way, and just looked at those. What do these people have in common? I have a slight office supply addiction, but that's another talk. So I had a manila folder, and I had a Sharpie, and I was like, what am I going to call this research? And the first words that came to my mind were "whole-hearted." These are whole-hearted people, living from this deep sense of worthiness. So I wrote at the top of the manila folder, and I started looking at the data. In fact, I did it first in a four-day,

very intensive data analysis, where I went back, pulled the interviews, the stories, pulled the incidents. What's the theme? What's the pattern? My husband left town with the kids because I always go into this Jackson Pollock crazy thing, where I'm just writing and in my researcher mode. And so here's what I found. What they had in common was a sense of courage. And I want to separate courage and bravery for you for a minute. Courage, the original definition of courage, when it first came into the English language --it's from the Latin word "cor," meaning "heart" -- and the original definition was to tell the story of who you are with your whole heart. And so these folks had, very simply, the courage to be imperfect. They had the compassion to be kind to themselves first and then to others, because, as it turns out, we can't practice compassion with other people if we can't treat ourselves kindly. And the last was they had connection, and -- this was the hard part -- as a result of authenticity, they were willing to let go of who they thought they should be in order to be who they were, which you have to absolutely do that for connection. The other thing that they had in common was this: They fully embraced vulnerability. They believed that what made them vulnerable made them beautiful. They didn't talk about vulnerability being comfortable, nor did they really talk about it being excruciating -- as I had heard it earlier in the shame interviewing. They just talked about it being necessary. They talked about the willingness to say, "I love you" first ... the willingness to do something where there are no guarantees ...the willingness to breathe through waiting for the doctor to call after your mammogram. They're willing to invest in a relationship that may or may not work out. They thought this was fundamental. I personally thought it was betrayal. I could not believe I had pledged allegiance to research, where our job -- you know, the definition of research is to control and predict, to study phenomena for the explicit reason to control and predict. And now my mission to control and predict had turned up the answer that the way to live is with vulnerability and to stop controlling and predicting. This led to a little breakdown -- (Laughter) -- which actually looked more like this. (Laughter) And it did. I call it a breakdown; my therapist calls it a spiritual awakening (Laughter) A spiritual awakening sounds better than breakdown, but I assure you, it was a breakdown. And I had to put my data away and go find a therapist. Let me tell you something: you know who you are when you call your friends and say, "I think I need to see somebody; Do you have any recommendations?" Because about five of my friends were like, "Wooo, I wouldn't want to be your therapist." (Laughter) I was like, "What does that mean?" And they're like, "I'm just saying, you know. Don't bring your measuring stick." (Laughter) I was like, "Okay." So I found a therapist. My first meeting with her, Diana -- I brought in my list of the way the whole-hearted live, and I sat down. And she said, "How are you?" And I said, "I'm great. I'm okay." She said, "What's going on?" And this is a therapist who sees therapists, because we have to go to those, because their B.S. meters are good. (Laughter) And so I said, "Here's the thing, I'm struggling." And she said, "What's the struggle?" And I said, "Well, I have a vulnerability issue. I know that vulnerability is the core of shame and fear and our struggle for worthiness, but it appears that it's also the birthplace of joy, of creativity, of belonging, of love. And I think I have a problem, and I need some help." And I said, "But here's the thing: no family stuff, no childhood shit." (Laughter) "I just need some strategies." (Laughter) (Applause) Thank you. So she goes like this. (Laughter) And then I said, "It's bad, right?" And she said, "It's neither good nor bad." (Laughter) "It just is what it is." And I said, "Oh my God, this is going to suck." (Laughter) And it did, and it didn't, and it took about a year. And you know how there are people that, when they realize that vulnerability and tenderness are important, that they surrender and walk into it. A: that's not me, and B: I don't even hang out with people like that. (Laughter) For me, it was a yearlong street fight. It was a slugfest. Vulnerability pushed, I pushed back. I lost the fight, but probably won my life back. And so then I went back into the research and spent the next couple of years, really trying to understand what they, the whole-hearted, what

choices they were making, and what we are doing with vulnerability. Why do we struggle with it so much? Am I alone in struggling with vulnerability? No. So this is what I learned. We numb vulnerability -- when we're waiting for the call. It was funny, I sent something out on Twitter and on Facebook that says, "How would you define vulnerability? What makes you feel vulnerable?" And within an hour and a half, I had 150 responses. Because I wanted to know what's out there, Having to ask my husband for help because I'm sick, and we're newly married; initiating sex with my husband; initiating sex with my wife; being turned down; asking someone out; waiting for the doctor to call back; getting laid off; laying off people. This is the world we live in. We live in a vulnerable world. And one of the ways we deal with it is we numb vulnerability, And I think there's evidence -- and it's not the only reason this evidence exists, but I think it's a huge cause -- We are the most in-debt .. obese ... addicted and medicated adult cohort in U.S. history. The problem is -- and I learned this from the research -- that you cannot selectively numb emotion. You can't say, here's the bad stuff. Here's vulnerability, here's grief, here's shame, here's fear, here's disappointment. I don't want to feel these. I'm going to have a couple of beers and a banana nut muffin. (Laughter, I don't want to feel these. And I know that's knowing laughter. I hack into your lives for a living. God. (Laughter) You can't numb those hard feelings without numbing the other affects, our emotions. You cannot selectively numb. So when we numb those, we numb joy, we numb gratitude, we numb happiness. And then, we are miserable, and we are looking for purpose and meaning, and then we feel vulnerable, so then we have a couple of beers and a banana nut muffin And it becomes this dangerous cycle. One of the things that I think we need to think about is why and how we numb. And it doesn't just have to be addiction. The other thing we do is we make everything that's uncertain certain. Religion has gone from a belief in faith and mystery to certainty. "I'm right, you're wrong. Shut up." That's Just certain. The more afraid we are, the more vulnerable we are, the more afraid we are. This is what politics looks like today. There's no discourse anymore. There's no conversation. There's just blame. You know how blame is described in the research? A way to discharge pain and discomfort. We perfect; If there's anyone who wants their life to look like this, it would be me, but it doesn't work. Because what we do is we take fat from our butts and put it in our cheeks. (Laughter) Which just, I hope in 100 years, people will look back and go, "Wow." (Laughter) And we perfect, most dangerously, our children Let me tell you what we think about children. They're hardwired for struggle when they get here. And when you hold those perfect little babies in your hand, our job is not to say, "Look at her, she's perfect. My job is just to keep her perfect - - make sure she makes the tennis team by fifth grade and Yale by seventh." That's not our job. Our job is to look and say, "You know what? You're imperfect, and you're wired for struggle, but you are worthy of love and belonging." That's our Show me a generation of kids raised like that, and we'll end the problems, I think, that we see today ,We pretend that what we do doesn't have an effect on people We do that in our personal lives. We do that corporate - -whether it's a bailout, an oil spill ...a recall. We pretend like what we're doing doesn't have a huge impact on other people. I would say to companies, this is not our first rodeo, people. We just need you to be authentic and real and say ... "We're sorry. We'll fix it." But there's another way, and I'll leave you with this; This is what I have found: To let ourselves be seen, deeply seen, vulnerably seen ... to love with our whole hearts, even though there's no guarantee -- and that's really hard, and I can tell you as a parent, that's excruciatingly difficult -- to practice gratitude and joy in those moments of terror, when we're wondering, "Can I love you this much? Can I believe in this this passionately? Can I be this fierce about this?" just to be able to stop and, instead of catastrophizing what might happen, to say, "I'm just so grateful, because to feel this vulnerable means I'm alive. And the last, which I think is probably the most important, is to believe that we're enough. Because when we work from a place, I believe, that says, "I'm enough" ...then we stop screaming and start listening, we're kinder and

gentler to the people around us, and we're kinder and gentler to ourselves. That's all I have. Thank you.

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How to speak so that people listen

The human voice It's the instrument we all play. It's the most powerful sound in the world, probably. It's the only one that can start a war or say "I love you." And yet many people have the experience that when they speak, people don't listen to them. And why is that? How can we speak powerfully to make change in the world? What I'd like to suggest, there are a number of habits that we need to move away from. I've assembled for your pleasure here seven deadly sins of speaking. I'm not pretending this is an exhaustive list, but these seven, I think, are pretty large habits that we can all fall into First, gossip. Speaking ill of somebody who's not present. Not a nice habit, and we know perfectly well the person gossiping, five minutes later, will be gossiping about us. Second, judging. We know people who are like this in conversation, and it's very hard to listen to somebody if you know that you're being judged and found wanting at the same time. Third, negativity. You can fall into this. My mother, in the last years of her life, became very negative, and it's hard to listen. I remember one day, I said to her, "It's October 1 today," and she said, "I know, isn't it dreadful?" (Laughter) It's hard to listen when somebody's that negative. (Laughter) And another form of negativity, complaining. Well, this is the national art of the U.K. It's our national sport. We complain about the weather, sport, about politics, about everything, but actually, complaining is viral misery. It's not spreading sunshine and lightness in the world. Excuses. We've all met this guy. Maybe we've all been this guy. Some people have a blamethrower. They just pass it on to everybody else and don't take responsibility for their actions, and again, hard to listen to somebody who is being like that Penultimate, the sixth of the seven, embroidery, exaggeration. It demeans our language, actually, sometimes. For example, if I see something that really is awesome, what do I call it? (Laughter) And then, of course, this exaggeration becomes lying, and we don't want to listen to people we know are lying to us. And finally, dogmatism. The confusion of facts with opinions When those two things get conflated, you're listening into the wind. You know, somebody is bombarding you with their opinions as if they were true. It's difficult to listen to that. So here they are, seven deadly sins of speaking ; These are things I think we need to avoid. But is there a positive way to think about this? Yes, there is. I'd like to suggest that there are four really powerful cornerstones, foundations, that we can stand on if we want our speech, to be powerful and to make change in the world. Fortunately, these things spell a word. The word is "hail," and it has a great definition as well. I'm not talking about the stuff that falls from the sky and hits you on the head. I'm talking about this definition, to greet or acclaim enthusiastically, which is how I think our words will be received if we stand on these four things. So what do they stand for See if you can guess. The H, honesty, of course, being true in what you say, being straight and clear. The A is authenticity, just being yourself. A friend of mine described it as standing in your own truth, which I think is a lovely way to put it.

The I is integrity, being your word, actually doing what you say, and being somebody people can trust. And the L is love. I don't mean romantic love, but I do mean wishing people well, for two reasons. First of all, I think absolute honesty may not be what we want. I mean, my goodness, you look ugly this morning. Perhaps that's not necessary. But also, if you're really wishing somebody well, it's very hard to judge them at the same time. I'm not even sure you can do those two things simultaneously. So hail, Also, now that's what you say, it's also the way that you say it. You have an amazing toolbox. This instrument is incredible, and yet this

is a toolbox that very few people have ever opened. I'd like to have a little rummage in there with you now and just pull a few tools out that you might like to take away and play with, which will increase the power of your speaking. Register, for example. Now, falsetto register may not be very useful most of the time, but there's a register in between. I'm not going to get very technical about this for any of you who are voice coaches. You can locate your voice, however. So if I talk up here in my nose, you can hear the difference. If I go down here in my throat, which is where most of us speak from most of the time. But if you want weight, you need to go down here to the chest. You hear the difference? We vote for politicians with lower voices, it's true,

because we associate depth with power and with authority. That's register. Then we have timbre. It's the way your voice feels. Again, the research shows that we prefer voices which are rich, smooth, warm, like hot chocolate. Well if that's not you, that's not the end of the world, because you can train. Go and get a voice coach. And there are amazing things you can do with breathing, with posture, and with exercises to improve the timbre of your voice. Then prosody. I love prosody. This is the sing-song, the meta-language, that we use in order to impart meaning. It's root one for meaning in conversation. People who speak all on one note are really quite hard to listen to if they don't have any prosody at all. That's where the word "monotonic" comes from, or monotonous, monotone. Also, we have repetitive prosody now coming in, where every sentence ends as if it were a question, when it's actually not a question, it's a statement? And if you repeat that one, it's actually restricting your ability to communicate through prosody, which I think is a shame, so let's try and break that habit. Pace. I can get very excited by saying something really quickly, or I can slow right down to emphasize, and at the end of that, of course, is our old friend silence. There's nothing wrong with a bit of silence in a talk, is there? We don't have to fill it with ums and ahs. It can be very powerful. Of course, pitch often goes along with pace, to indicate arousal, but you can do it just with pitch. Where did you leave my keys? (Higher pitch) Where did you leave my keys? So, slightly different meaning in those two deliveries. And finally, volume. (Loud) I can get really excited by using volume. Sorry about that, if I startled anybody. Or, I can have you really pay attention by getting very quiet. Some people broadcast the whole time. Try not to do that. That's called sodcasting, (Laughter) Imposing your sound on people around you carelessly and inconsiderately. Not nice. Of course, where this all comes into play most of all is when you've got something really important to do. It might be standing on a stage like this and giving a talk to people. It might be proposing marriage, asking for a raise, a wedding speech. Whatever it is, if it's really important, you owe it to yourself to look at this toolbox and the engine that it's going to work on, and no engine works well without being warmed up. Warm up your voice. Actually, let me show you how to do that. Would you all like to stand up for a moment? I'm going to show you the six vocal warm-up exercises that I do before every talk I ever do. Any time you're going to talk to anybody important, do these. First, arms up, deep breath in, and sigh out, ahhhhh, like that. One more time. Ahhhh, very good. Now we're going to warm up our lips, and we're going to go Ba, Ba, Ba, Ba, Ba, Ba, Ba, Ba. Very good. And now, brrrrrrrr just like when you were a kid. Brrrr. Now your lips should be coming alive. We're going to do the tongue next, with exaggerated la, la, la, la, la, la, la, la. Beautiful. You're getting really good at this. And then, roll an R. Rrrrrr. That's like champagne for the tongue. Finally, and if I can only do one, the pros call this the siren. It's really good. It starts with "we" and goes to "aw." The "we" is high, the "aw" is low. So you go, weeeaaawww, weeeaaawww. Fantastic. Give yourselves a round of applause. Take a seat, thank you. (Applause) Next time you speak, do those in advance. Now let me just put this in context to close. This is a serious point here. This is where we are now, right? We speak not very well, to people who simply aren't listening, in an environment that's all about noise and bad acoustics. I have talked about that on this stage in different phases.

What would the world be like if we were speaking powerfully to people who were listening consciously in environments which were actually fit for purpose? Or to make that a bit larger, what would the world be like if we were creating sound consciously and consuming sound consciously and designing all our environments consciously for sound? That would be a world that does sound beautiful, and one where understanding would be the norm, and that is an idea worth spreading. Thank you.
<https://www.youtube.com/watch?v=eIho2S0ZahI&pp=ygUQanVsaWFuZSB0cmVhc3VyZQ%3D%3D>

10 Ways to have a great conversation

All right, I want to see a show of hands: ,how many of you have unfriended someone on Facebook , because they said something offensive about politics or religion, childcare, food, (Laughter) And how many of you know at least one person that you avoid , because you just don't want to talk to them? , (Laughter) You know, it used to be that in order to have a polite conversation, we just had to follow the advice of Henry Higgins in "My Fair Lady": Stick to the weather and your health. But these days, with climate change and anti-vaxxing, those subjects -- (Laughter) are not safe either. So this world that we live in, this world in which every conversation has the potential to devolve into an argument, where our politicians can't speak to one another and where even the most trivial of issues have someone fighting both passionately for it and against it, it's not normal. Pew Research did a study of 10,000 American adults, and they found that at this moment, we are more polarized, we are more divided, than we ever have been in history. We're less likely to compromise, which means we're not listening to each other. And we make decisions about where to live, who to marry and even who our friends are going to be, based on what we already believe. Again, that means we're not listening to each other. A conversation requires a balance between talking and listening, and somewhere along the way, we lost that balance. Now, part of that is due to technology. The smartphones that you all either have in your hands or close enough that you could grab them really quickly. According to Pew Research, about a third of American teenagers send more than a hundred texts a day. And many of them, almost most of them, are more likely to text their friends than they are to talk to them face to face. There's this great piece in The Atlantic. It was written by a high school teacher named Paul Barnwell. And he gave his kids a communication project. He wanted to teach them how to speak on a specific subject without using notes. And he said this: "I came to realize..." (Laughter)"I came to realize that conversational competence, might be the single most overlooked skill we fail to teach. Kids spend hours each day engaging with ideas and each other through screens, but rarely do they have an opportunity to hone their interpersonal communications skills. It might sound like a funny question, but we have to ask ourselves: Is there any 21st-century skill more important than being able to sustain coherent, confident conversation?" Now, I make my living talking to people: Nobel Prize winners, truck drivers, billionaires, kindergarten teachers, heads of state, plumbers. I talk to people that I like. I talk to people that I don't like. I talk to some people that I disagree with deeply on a personal level. But I still have a great conversation with them. So I'd like to spend the next 10 minutes or so teaching you how to talk and how to listen. Many of you have already heard a lot of advice on this, things like look the person in the eye, think of interesting topics to discuss in advance, look, nod and smile to show that you're paying attention, repeat back what you just heard or summarize it. So I want you to forget all of that. It is crap. (Laughter) There is no reason to learn how to show you're paying attention if you are in fact paying attention. (Laughter) (Applause) Now, I actually use the exact same skills as a professional interviewer that I do in regular life. So, I'm going to

teach you how to interview people, and that's actually going to help you learn how to be better conversationalists. Learn to have a conversation without wasting your time, without getting bored, and, please God, without offending anybody. We've all had really great conversations. We've had them before. We know what it's like. The kind of conversation where you walk away feeling engaged and inspired, or where you feel like you've made a real connection or you've been perfectly understood.

There is no reason why most of your interactions can't be like that. So I have 10 basic rules. I'm going to walk you through all of them, but honestly, if you just choose one of them and master it, you'll already enjoy better conversations. Number one: Don't multitask. And I don't mean just set down your cell phone or your tablet or your car keys or whatever is in your hand. I mean, be present. Be in that moment. Don't think about your argument you had with your boss. Don't think about what you're going to have for dinner. If you want to get out of the conversation, get out of the conversation, but don't be half in it and half out of it. Number two: Don't pontificate. If you want to state your opinion without any opportunity for response or argument or pushback or growth, write a blog. (Laughter) Now, there's a really good reason why I don't allow pundits on my show: Because they're really boring. If they're conservative, they're going to hate Obama and food stamps and abortion. If they're liberal, they're going to hate big banks and oil corporations and Dick Cheney. Totally predictable. And you don't want to be like that. You need to enter every conversation assuming that you have something to learn. The famed therapist M. Scott Peck said that true listening requires a setting aside of oneself. And sometimes that means setting aside your personal opinion.

He said that sensing this acceptance, the speaker will become less and less vulnerable and more and more likely to open up the inner recesses of his or her mind to the listener. Again, assume that you have something to learn. Bill Nye: "Everyone you will ever meet knows something that you don't." I put it this way: Everybody is an expert in something. Number three: Use open-ended questions. In this case, take a cue from journalists. Start your questions with who, what, when, where, why or how. If you put in a complicated question, you're going to get a simple answer out. If I ask you, "Were you terrified?" you're going to respond to the most powerful word in that sentence, which is "terrified," and the answer is "Yes, I was" or "No, I wasn't." "Were you angry?" "Yes, I was very angry." Let them describe it. They're the ones that know. Try asking them things like, "What was that like?" "How did that feel?" Because then they might have to stop for a moment and think about it, and you're going to get a much more interesting response. Number four: Go with the flow. That means thoughts will come into your mind and you need to let them go out of your mind. We've heard interviews often in which a guest is talking for several minutes and then the host comes back in and asks a question which seems like it comes out of nowhere, or it's already been answered. That means the host probably stopped listening two minutes ago because he thought of this really clever question, and he was just bound and determined to say that. And we do the exact same thing. We're sitting there having a conversation with someone, and then we remember that time that we met Hugh Jackman in a coffee shop. (Laughter) And we stop listening.

Stories and ideas are going to come to you. You need to let them come and let them go. Number five: If you don't know, say that you don't know. Now, people on the radio, especially on NPR, are much more aware that they're going on the record, and so they're more careful about what they claim to be an expert in and what they claim to know for sure. Do that. Err on the side of caution. Talk should not be cheap. Number six: Don't equate your experience with theirs. If they're talking about having lost a family member, don't start talking about the time you lost a family member. If they're talking about the trouble they're having at work, don't tell them about how much you hate your job. It's not the same. It is never the same. All experiences are individual. And, more importantly, it is not about you. You don't need to take that moment to prove how amazing you are or how much you've suffered.

Somebody asked Stephen Hawking once what his IQ was, and he said, "I have no idea. People who brag about their IQs are losers." (Laughter) Conversations are not a promotional opportunity. Number seven: Try not to repeat yourself. It's condescending, and it's really boring, and we tend to do it a lot. Especially in work conversations or in conversations with our kids, we have a point to make, so we just keep rephrasing it over and over. Don't do that. Number eight: Stay out of the weeds. Frankly, people don't care about the years, the names, the dates, all those details that you're struggling to come up with in your mind. They don't care. What they care about is you. They care about what you're like, what you have in common. So forget the details. Leave them out. Number nine: This is not the last one, but it is the most important one. Listen. I cannot tell you how many really important people have said that listening is perhaps the most, the number one most important skill that you could develop. Buddha said, and I'm paraphrasing, "If your mouth is open, you're not learning." And Calvin Coolidge said, "No man ever listened his way out of a job." (Laughter) Why do we not listen to each other? Number one, we'd rather talk. When I'm talking, I'm in control. I don't have to hear anything I'm not interested in. I'm the center of attention. I can bolster my own identity. But there's another reason: We get distracted. The average person talks at about 225 word per minute, but we can listen at up to 500 words per minute. So our minds are filling in those other 275 words. And look, I know, it takes effort and energy to actually pay attention to someone, but if you can't do that, you're not in a conversation. You're just two people shouting out barely related sentences in the same place. (Laughter) You have to listen to one another. Stephen Covey said it very beautifully. He said, "Most of us don't listen with the intent to understand. We listen with the intent to reply." One more rule, number 10, and it's this one: Be brief. Be interested in other people. You know, I grew up with a very famous grandfather, and there was kind of a ritual in my home. People would come over to talk to my grandparents, and after they would leave, my mother would come over to us, and she'd say, "Do you know who that was? She was the runner-up to Miss America. He was the mayor of Sacramento. She won a Pulitzer Prize. He's a Russian ballet dancer." And I kind of grew up assuming everyone has some hidden, amazing thing about them. And honestly, I think it's what makes me better host. I keep my mouth shut as often as I possibly can. I keep my mind open. And I'm always prepared to be amazed, and I'm never disappointed. You do the same thing. Go out, talk to people, listen to people, and, most importantly, be prepared to be amazed. Thanks. <https://youtu.be/R1vskiVDwl4?t=46>

How great leaders inspire action

How do you explain when things don't go as we assume? Or better, how do you explain when others are able to achieve things that seem to defy all of the assumptions? For example: Why is Apple so innovative? Year after year, after year, they're more innovative than all their competition. And yet, they're just a computer company. They're just like everyone else. They have the same access to the same talent, the same agencies, the same consultants, the same media. Then why is it that they seem to have something different? Why is it that Martin Luther King led the Civil Rights Movement? He wasn't the only man who suffered in pre-civil rights America, and he certainly wasn't the only great orator of the day. Why him? And why is it that the Wright brothers were able to figure out controlled, powered man flight when there were certainly other teams who were better qualified, better funded -and they didn't achieve powered man flight, and the Wright brothers beat them to it. There's something else at play here. About three and a half years ago, I made a discovery. And this discovery profoundly changed my view on how I thought the world worked, and it even profoundly changed the way in which I operate in it. As it turns out, there's a pattern. As it turns out, all the great inspiring leaders and organizations in the world, whether it's Apple or Martin Luther

King or the Wright brothers, they all think, act and communicate the exact same way. And it's the complete opposite to everyone else. All I did was codify it, and it's probably the world's simplest idea. I call it the golden circle. Why? How? What? This little idea explains, why some organizations and some leaders are able to inspire where others aren't. Let me define the terms really quickly. Every single person, every single organization on the planet knows what they do, 100 percent.

Some know how they do it, whether you call it your differentiated value proposition or your proprietary process or your USP. But very, very few people or organizations know why they do what they do. And by "why" I don't mean "to make a profit." That's a result. It's always a result. By "why," I mean: What's your purpose? What's your cause? What's your belief? Why does your organization exist? Why do you get out of bed in the morning? And why should anyone care? As a result, the way we think, we act, the way we communicate is from the outside in, it's obvious. We go from the clearest thing to the fuzziest thing. But the inspired leaders and the inspired organizations -- regardless of their size, regardless of their industry -- all think, act and communicate from the inside out. Let me give you an example. I use Apple because they're easy to understand and everybody gets it. If Apple were like everyone else, a marketing message from them might sound like this: "We make great computers. They're beautifully designed, simple to use and user friendly. Want to buy one?" "Meh." That's how most of us communicate. That's how most marketing and sales are done, that's how we communicate interpersonally. We say what we do, we say how we're different or better and we expect some sort of a behavior, a purchase, a vote, something like that. Here's our new law firm: We have the best lawyers with the biggest clients, we always perform for our clients. Here's our new car: It gets great But it's uninspiring. Here's how Apple actually communicates. "Everything we do, we believe in challenging the status quo. We believe in thinking differently. The way we challenge the status quo is by making our products beautifully designed, simple to use and user friendly. We just happen to make great computers. Want to buy one?" Totally different, right? You're ready to buy a computer from me. I just reversed the order of the information. What it proves to us is that people don't buy what you do; people buy why you do it. This explains why every single person in this room is perfectly comfortable buying a computer from Apple. But we're also perfectly comfortable buying an MP3 player from Apple, or a phone from Apple, or a DVR from Apple. As I said before, Apple's just a computer company. Nothing distinguishes them structurally from any of their competitors. Their competitors are equally qualified to make all of these products. In fact, they tried a few years ago, Gateway came out with flat-screen TVs. They're eminently qualified to make flat-screen TVs. They've been making flat-screen monitors for years. Nobody bought one. Dell came out with MP3 players and PDAs, and they make great quality products, and they can make perfectly well-designed products -- and nobody bought one. In fact, talking about it now, we can't even imagine buying an MP3 player from Dell. Why would you buy one from a computer company? But we do it every day. People don't buy what you do; they buy why you do it. The goal is not to do business with everybody who needs what you have. The goal is to do business with people who believe what you believe.

Here's the best part: None of what I'm telling you is my opinion. It's all grounded in the tenets of biology. Not psychology, biology. If you look at a cross-section of the human brain, from the top down, the human brain is actually broken into three major components that correlate perfectly with the golden circle. Our newest brain, our Homo sapien brain, our neocortex, corresponds with the "what" level. The neocortex is responsible for all of our rational and analytical thought and language. The middle two sections make up our limbic brains, and our limbic brains are responsible for all of our feelings, like trust and loyalty. It's also responsible for all human behavior, all decision-making, and it has no capacity for language. In other words, when we communicate from the outside in, yes, people can

understand vast amounts of complicated information like features and benefits and facts and figures. It just doesn't drive behavior. When we can communicate from the inside out, we're talking directly to the part of the brain, that controls behavior, and then we allow people to rationalize it with the tangible things we say and do. This is where gut decisions come from. Sometimes you can give somebody all the facts and figures, and they say, "I know what all the facts and details say, but it just doesn't feel right." Why would we use that verb, it doesn't "feel" right? Because the part of the brain that controls decision-making doesn't control language, the best we can muster up is, "I don't know. It just doesn't feel right." Or sometimes you say you're leading with your heart or soul. I hate to break it to you, those aren't other body parts, controlling your behavior. It's all happening here in your limbic brain, the part of the brain that controls decision-making and not language. But if you don't know why you do what you do, and people respond to why you do what you do, then how will you ever get people to vote for you, or buy something from you, or, more importantly, be loyal and want to be a part of what it is that you do, The goal is not just to sell to people who need what you have; the goal is to sell to people who believe what you believe. The goal is not just to hire people who need a job; it's to hire people who believe what you believe. I always say that, you know, if you hire people just because they can do a job, they'll work for your money, but if they believe what you believe, they'll work for you with blood and sweat and tears. Nowhere else is there a better example than with the Wright brothers. Most people don't know about Samuel Pierpont Langley. And back in the early 20th century, the pursuit of powered man flight was like the dot com of the day. Everybody was trying it. And Samuel Pierpont Langley had, what we assume, to be the recipe for success. Even now, you ask people, "Why did your product or why did your company fail?" and people always give you the same permutation, of the same three things: under-capitalized, the wrong people, bad market conditions. It's always the same three things, so let's explore that. Samuel Pierpont Langley, was given 50,000 dollars by the War Department to figure out this flying machine. Money was no problem. He held a seat at Harvard and worked at the Smithsonian and was extremely well-connected; he knew all the big minds of the day. He hired the best minds money could find and the market conditions were fantastic. The New York Times followed him around everywhere, and everyone was rooting for Langley. Then how come we've never heard of Samuel Pierpont Langley? A few hundred miles away in Dayton, Ohio, Orville and Wilbur Wright, they had none of what we consider to be the recipe for success. They had no money; they paid for their dream with the proceeds from their bicycle shop, Not a single person on the Wright brothers' team had a college education, not even Orville or Wilbur. And The New York Times followed them around nowhere. The difference was, Orville and Wilbur were driven by a cause, by a purpose, by a belief. They believed that if they could figure out this flying machine, it'll change the course of the world. Samuel Pierpont Langley was different. He wanted to be rich, and he wanted to be famous. He was in pursuit of the result. He was in pursuit of the riches. And lo and behold, look what happened. The people who believed in the Wright brothers' dream worked with them with blood and sweat and tears. The others just worked for the paycheck.

They tell stories of how every time the Wright brothers went out, they would have to take five sets of parts, because that's how many times they would crash before supper. And, eventually, on December 17th, 1903, the Wright brothers took flight, and no one was there to even experience it. We found out about it a few days later. And further proof that Langley was motivated by the wrong thing: the day the Wright brothers took flight, he quit. He could have said, "That's an amazing discovery, guys and I will improve upon your technology," but he didn't. He wasn't first, he didn't get rich, he didn't get famous, so he quit. People don't buy what you do; they buy why you do it. If you talk about what you believe, you will attract those

who believe what you believe. But why is it important to attract those who believe what you believe?

Something called the law of diffusion of innovation, if you don't know the law, you know the terminology. The first 2.5% of our population are our innovators. The next 13.5% of our population are our early adopters. The next 34% are your early majority, your late majority and your laggards. The only reason these people buy touch-tone phones is because you can't buy rotary phones anymore. (Laughter) We all sit at various places at various times on this scale, but what the law of diffusion of innovation tells us is that if you want mass-market success or mass-market acceptance of an idea, you cannot have it until you achieve this tipping point between 15 and 18 percent market penetration, and then the system tips. I love asking businesses, "What's your conversion on new business? They love to tell you, "It's about 10 percent," proudly. Well, you can trip over 10% of the customers. We all have about 10% who just "get it." That's how we describe them, right? That's like that gut feeling, "Oh, they just get it." The problem is: How do you find the ones that get it before doing business versus the ones who don't get it? So it's this here, this little gap that you have to close, as Jeffrey Moore calls it, "Crossing the Chasm" - because, you see, the early majority will not try something until someone else has tried it first. And these guys, the innovators and the early adopters, they're comfortable making those gut decisions. They're more comfortable making those intuitive decisions that are driven by what they believe about the world and not just what product is available. These are the people who stood in line for six hours to buy an iPhone when they first came out, when you could have bought one off the shelf the next week. These are the people who spent 40,000 dollars on flat-screen TVs when they first came out, even though the technology was substandard. And, by the way, they didn't do it because the technology was so great; they did it for themselves. It's because they wanted to be first. People don't buy what you do; they buy why you do it and what you do simply proves what you believe. In fact, people will do the things that prove what they believe. The reason that person bought the iPhone in the first six hours, stood in line for six hours, was because of what they believed about the world, and how they wanted everybody to see them: they were first. People don't buy what you do; they buy why you do it. So let me give you a famous example, a famous failure and a famous success of the law of diffusion of innovation. First, the famous failure. It's a commercial example. As we said before, the recipe for success is money and the right people and the right market conditions. You should have success then. Look at TiVo. From the time TiVo came out about eight or nine years ago to this current day, they are the single highest-quality product on the market, hands down, there is no dispute. They were extremely well-funded. Market conditions were fantastic. I mean, we use TiVo as verb. I TiVo stuff on my piece-of-junk Time Warner DVR all the time. (Laughter) But TiVo's a commercial failure. They've never made money. And when they went IPO, their stock was at about 30 or 40 dollars and then plummeted, and it's never traded above 10. In fact, I don't think it's even traded above six, except for a couple of little spikes. Because you see, when TiVo launched their product, they told us all what they had. They said, "We have a product that pauses live TV, skips commercials, rewinds live TV and memorizes your viewing habits without you even asking." And the cynical majority said, "We don't believe you. We don't need it. We don't like it. You're scaring us." What if they had said, "If you're the kind of person who likes to have total control over every aspect of your life, boy, do we have a product for you. It pauses live TV, skips commercials, memorizes your viewing habits, etc., etc. People don't buy what you do; they buy why you do it, and what you do simply serves as the proof of what you believe. Now let me give you a successful example of the law of diffusion of innovation. In the summer of 1963, 250,000 people showed up on the mall in Washington to hear Dr. King speak.

They sent out no invitations, and there was no website to check the date. How do you do that? Well, Dr. King wasn't the only man in America who was a great orator. He wasn't the only man in America who suffered in a pre-civil rights America. In fact, some of his ideas were bad. But he had a gift. He didn't go around telling people what needed to change in America. He went around and told people what he believed. "I believe, I believe, I believe," he told people. And people who believed what he believed took his cause, and they made it their own, and they told people. And some of those people created structures to get the word out to even more people. And lo and behold, 250,000 people showed up on the right day at the right time to hear him speak. How many of them showed up for him? Zero They showed up for themselves. It's what they believed about America that got them to travel in a bus for eight hours to stand in the sun in Washington in the middle of August. It's what they believed, and it wasn't about black versus white: 25% of the audience was white. Dr. King believed that there are two types of laws in this world: those that are made by a higher authority and those that are made by men. And not until all the laws that are made by men are consistent with the laws made by the higher authority will we live in a just world. It just so happened that the Civil Rights Movement was the perfect thing to help him bring his cause to life. We followed, not for him, but for ourselves. By the way, he gave the "I have a dream" speech, not the "I have a plan" speech. Listen to politicians now, with their comprehensive 12-point plans. They're not inspiring anybody. Because there are leaders and there are those who lead. Leaders hold a position of power or authority, but those who lead inspire us, Whether they're individuals or organizations, we follow those who lead, not because we have to, but because we want to. We follow those who lead, not for them, but for ourselves. And it's those who start with "why" that have the ability to inspire those around them or find others who inspire them. Thank you very much. <https://youtu.be/qp0HIF3SfI4>

The danger of one single story

i'm a storyteller and i would like to tell you a few personal stories about what i like to call the danger of the single story i grew up on a university campus in eastern Nigeria my mother says that i started reading at the age of two although i think four is probably close to the truth, so i was an early reader and what i read were british and american children's books i was also an early writer and when I began to write at about the age of seven stories in pencil with crayon illustrations that my poor mother was obligated to read i wrote exactly the kinds of stories I was reading all my characters were white and blue-eyed they played in the snow they ate apples and they talked a lot about the weather how lovely it was that the sun had come out now this despite the fact that i lived in nigeria had never been outside Nigeria we didn't have snow we ate mangoes and we never talked about the weather because there was no need to my characters also drank a lot of ginger beer because the characters in the british books i read drank ginger beer never mind that i had no idea what ginger beer was and for many years afterwards i would have a desperate desire to taste ginger beer but that is another story what this demonstrates i think is how impressionable and vulnerable we are in the face of a story particularly as children because all I had read were books in which characters were foreign i had become convinced that books by their very nature had to have foreigners in them and had to be about things with which I could not personally identify now things changed when i discovered african books there weren't many of them available and they weren't quite as easy to find as the foreign books but because of writers like chinua achebe and camera lay i went through a mental shift in my perception of literature i realized that people like me girls with skin the color of chocolate whose kinky hair could not form ponytails could also exist in literature i started to write about things I recognized now i loved those american and british books i read they stirred my imagination they opened up new worlds for me but the unintended consequence was that i did not know

that people like me could exist in literature so what the discovery of african writers did for me was this it saved me from having a single story of what books are i come from a conventional middle class nigerian family my father was a professor my mother was an administrator and so we had as was the norm living domestic help who would often come from nearby rural villages so the year I turned eight we got a new house boy his name was fiddy the only thing my mother told us about him was that his family was very poor my mother sent yams and rice and our old clothes to his family and when i didn't finish my dinner my mother would say finish your food don't you know people like fide's family have nothing so i felt enormous pity for fide's family then one saturday we went to his village to visit and his mother showed us a beautifully patterned basket made of dyed raffia that his brother had made i was startled it had not occurred to me that anybody in his family could actually make something all i had heard about them was how poor they were so that it had become impossible for me to see them as anything else but poor their poverty was my single story of them years later i thought about this when I left nigeria to go to university in the united states i was 19.my american roommate was shocked by me she asked where i had learned to speak english so well and was confused when i said that nigeria happened to have english as its official language she asked if she could listen to what she called my tribal music i was consequently very disappointed when i produced my tape of mariah carey she assumed that i did not know how to use a stove what struck me was this she had felt sorry for me even before she saw me her default position toward me as an African was a kind of patronizing well-meaning pity my roommate had a single story of Africa a single story of catastrophe in this single story there was no possibility of Africans being similar to her in any way no possibility of feelings more complex than kitty no possibility of a connection as human equals i must say that before i went to the us i didn't consciously identify as African but in the u.s whenever africa came up people turned to me never mind that I knew nothing about places like Namibia but i did come to embrace this new identity and in many ways i think of myself now as African although i still get quite irritable when africa is referred to as a country the most recent example being my otherwise wonderful flight from lagos two days ago in which um

there was an announcement on the virgin flight about their charity work in

india africa and other countries so after i had spent some years in the us as an African i began to understand my roommate's response to me if i had not grown up in nigeria and if all i knew about africa were from popular images i too would think that africa was a place of beautiful landscapes beautiful animals and incomprehensible people fighting senseless wars dying of poverty and aids unable to speak for themselves and waiting to be saved by a kind white foreigner i would see africans in the same way that i as a child had seen fide's family this single story of africa ultimately comes i think from western literature now here's a quote from the writing of a london merchant called john locke who sailed to west africa in 1561 and kept a fascinating account of his voyage after referring to the black africans as beasts who have no houses he writes they are also people without heads having their mouths and eyes in their breasts now i've laughed every time i've read this and one must admire the imagination of john locke but what is important about his writing is that it represents the beginning of a tradition of telling African stories in the west a tradition of sub-saharan africa as a place of negatives of difference of darkness of people who in the words of the wonderful poet rudyard kipling a half devil half child and so i began to realize that my american roommate must have throughout her life seen and heard different versions of the single story as had a professor who once told me that my novel was not authentically african now i was quite willing to contend that there were a number of things wrong with the novel that it had failed in a number of places but i had not quite imagined that it had failed at achieving something called african authenticity in fact i did not know what african authenticity was the professor told me that my characters were too much like him and educated and middle-class man my characters drove

cars they were not starving therefore they were not authentically African but i must quickly add that i too am just as guilty in the question of the single story a few years ago I visited Mexico from the US the political climate in the US at the time was tense and there were debates going on about immigration and as often happens in America immigration became synonymous with Mexicans there were endless stories of Mexicans as people who were fleeing the health care system sneaking across the border being arrested at the border that sort of thing i remember walking around on my first day in Guadalajara watching the people going to work rolling up to tears in the marketplace smoking laughing I remember first feeling slight surprise and then i was overwhelmed with shame I realized that i had been so immersed in the media coverage of Mexicans that they had become one thing in my mind the abject immigrant i had bought into the single story of Mexicans and i could not have been more ashamed of myself so that is how to create a single story show a people as one thing as only one thing over and over again and that is what they become it is impossible to talk about the single story without talking about power there is a word an *ebola* word that i think about whenever i think about the power structures of the world and it is *uncali* it's a noun that loosely translates to to be greater than another like our economic and political world stories too are defined by the principle of *uncali* how they are told who tells them when they are told how many stories are told are really dependent on power power is the ability not just to tell the story of another person but to make it the definitive story of that person the Palestinian poet Murid Baguti writes that if you want to dispossess a people the simplest way to do it is to tell their story and to start with secondly start the story with the arrows of the Native Americans and not with the arrival of the British and you have an entirely different story start the story with the failure of the African states and not with the colonial creation of the African state and you have an entirely different story i recently spoke at a university where a student told me that it was such a shame that Nigerian men were physical abusers like the father character in my novel i told him that i had just read a novel called *American Psycho* and that it was such a shame that young Americans were serial murderers no no no now obviously i said this in a fit of mild irritation but it would never have occurred to me to think that just because i had read a novel in which a character was a serial killer that he was somehow representative of all Americans and now this is not because i'm a better person than that student but because of America's cultural and economic power I had many stories of America i had read *Thailand* *Opdyke* and *Steinbeck* and *Great Skill* i did not have a single story of America when i learned some years ago that writers were expected to have had really unhappy childhoods to be successful i began to think about how i could invent horrible things my parents had done to me but the truth is that i had a very happy childhood full of laughter and love in a very close-knit family but i also had grandfathers who died in refugee camps my cousin Polly died because he could not get adequate health care one of my closest friends Oklahoma died in a plane crash because our fire trucks did not have water i grew up under repressive military governments that devalued education so that sometimes my parents were not paid their salaries and so as a child i saw jam disappear from the breakfast table then margarine disappeared then bread became too expensive then milk became rationed and most of all a kind of normalized political fear invaded our lives all of these stories make me who i am but to insist on only these negative stories is to flatten my experience and to overlook the many other stories that formed me the single story creates stereotypes and the problem untrue but that they are incomplete they make one story become the only story of course Africa is a continent full of catastrophes the immense ones such as the horrific rapes in Congo and depressing ones such as the fact that 5 000 people apply for one job vacancy in Nigeria but there are other stories that are not about catastrophe and it's very important it is just as important to talk about them i've always felt that it is impossible to engage properly with a place or a person without engaging with all of the stories of that place and that person the

consequence of the single story is this it robs people of dignity it makes our recognition of our equal humanity difficult it emphasizes how we are different rather than how we are similar so what if before my mexican trip i had followed the immigration debate from both sides the u.s and the mexican what if my mother had told us that fide's family was poor and had walking what if we had an african television network that broadcast diverse african stories all over the world what the nigerian writer chino achebe calls a balance of stories what if my roommate knew about my nigerian publisher muktar bakari a remarkable man who left his job in a bank to follow his dream and start a publishing house now the conventional wisdom was that nigerians don't read literature he disagreed he felt that people who could read would read if he made literature affordable and available to them shortly after he published my first novel i went to a tv station in lagos to do an interview and a woman who walked there as a messenger came up to me and said i really liked your novel i didn't like the ending now you must write a sequel and this is what will happen and she went on to tell me what to write in the sequel now i was not only charmed i was very moved here was a woman part of the ordinary masters of nigerians who are not supposed to be readers she had not only read the book but she had taken ownership of it and felt justified in telling me what to write in the sequel now what if my roommate knew about my friend for me yonder a fearless woman who hosts a tv show in Lagos and is determined to tell the stories that we prefer to forget what if my roommate knew about the heart procedure that was performed in the lagos hospital last week what if my roommate knew about contemporary nigerian music talented people singing in english and pidgin and igbo and yoruba and Egypt mixing influences from jay-z to fella to bob marley to their grandfathers what if my roommate knew about the female lawyer who recently went to court in nigeria to challenge a ridiculous law that required women to get their husbands consent before renewing their passports what if my roommate knew about Nollywood full of innovative people making films despite great technical odds films so popular that they really are the best example of nigerians consuming what they produce what if my roommate knew about my wonderfully ambitious hair braider who has just started her own business selling hair extensions or about the millions of other Nigerians who start businesses and sometimes fail but continue to nurse ambition every time i am home i'm confronted with the usual sources of irritation for most Nigerians our field infrastructure our field government but also by the incredible resilience of people who thrive despite the government rather than because of it i teach writing workshops in lagos every summer and it is amazing to me how many people apply how many people are eager to write to tell stories my nigerian publisher and i have just started a non-profit called farafinatrust and we have big dreams of building libraries and refurbishing libraries that already exist and providing books for state schools that don't have anything in their libraries and also of organizing lots and lots of workshops and reading and writing for all the people who are eager to tell our many stories stories matter many stories matter stories have been used to dispossess and to malign but stories can also be used to empower and to humanize stories can break the dignity of the people but stories can also repair that broken dignity the american writer alice walker wrote this about her southern relatives who had moved to the north and she introduced them to a book about the southern life that they had left behind they sat around reading the book themselves listening to me read the book and the kind of paradise was regained i would like to end with this thought that when we reject the single story when we realize that there is never a single story about any place we regain a kind of paradise thank you. <https://youtu.be/D9Ihs241zeg>