Student Autonomy and Agency
in the
Research Process

AOBA-JAPAN INTERNATIONAL SCHOOL

Aoba's Grade 10 Curriculum Initiative

Series 1

AOBA
AOBA-JAPAN INTERNATIONAL SCHOOL

Aoba Japan International School

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Student Agency in the Research Process: Aoba's Grade 10 Curriculum Initiative

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Dedication

We dedicate this achievement to all those associated with Aoba-Japan International School (AJIS) who made this inaugural series of Grade 10 research papers a reality. Your relentless commitment and hard work in collaboration have brought these research papers to fruition, inspiring us all with your passion for learning and commitment to excellence.

We extend our heartfelt thanks to Iwoa Shibata, the Aoba-BBT Board Chair, and Kevin Page, an educational maverick and supporter, for their vision and determination to make a positive difference in our school, Japan, and beyond. Their leadership and confidence enabled AJIS to take a risk and develop a Grade 10 program focused on inquiry and team-based learning. Their tireless efforts have allowed students at Aoba to explore their interests and develop their skills to the fullest.

We also want to acknowledge the teachers who took risks and collaborated to develop the transdisciplinary course. Nathan Hensley, Benjamin Lancaster, and Patrick Morrissey played a vital role in bringing the ideas for the Grade 10 program to fruition and creating a rigorous structure for learning. With an open mindset and a focus on the power of inquiry, the teachers placed trust in the students. Your dedication to our students' growth and development inspires us all. Thank you for creating a supportive and challenging learning environment where students can thrive.

Finally, and most importantly, we thank all the students who embraced the opportunity to take control of their learning. Your enthusiasm, creativity, and hard work have made this series of research papers a resounding success. We look forward to seeing where your curiosity and passion for learning will take you in the future.

Dr Ken Sell, Dr Jake Madden, Nathan Hensley

From the Editors:

In our journey through diverse educational institutions and settings, we have gained a profound understanding of the challenges schools face when it comes to preparing students for the rigors of university, the demands of the workforce and living in today's complex world. Drawing inspiration from Aoba-Japan International School's visionary mission to catalyze educational transformation in Japan and beyond, we embarked on a journey to reshape the Grade 10 curriculum. Our primary goal is to fortify our students' abilities in critical and creative thinking as the fundamental pillar to them becoming lifelong learners leading positive cahnge as they in make their way through university, work and beyond.

Grade 10 is the beginning of an undeniably a 'high stakes' period for our students and their families. AJIS's professional commitment to enable students develop and apply automated critical and creative thinking skills as the bedrock of their intellectual acumen is unwavering. Providing students with a structured learning framework for solving problems, one that readily leads them to extended abstraction and an increase problem solving efficacy when faced with an unfamiliar context. Hence, our structured learning framework focuses on teaching 'how to learn'.

Given, the Grade 10 educational initiative is still in its nascent stages, we humbly acknowledge that we are far from possessing a comprehensive understanding of its value, nor do we lay claim to having all the answers. However, the initial collection of research papers you hold in your hands today demonstrates that our endeavors bear merit. While our preliminary results inspire optimism, we recognize that there is ample fertile ground for rigorous research. Such research is imperative to gain a deeper insight into the effectiveness and impact of this transformative educational iniaitive.

The complexity of educational transformation initiatives necessitates an perpetual process of evaluation and adaptability. In light of this, AJIS is

steadfastly devoted to the vigilant monitoring and assessment of the implementation of this groundbreaking initiative. We are committed to the systematic collection and analysis of data, encompassing student performance, teacher feedback, and an array of other pertinent factors, to ensure that our initiative remains true to its intended goal and outcomes.

AJIS recognizes the potential inherent in this transformative educational initiative. By establishing structured conditions to empower students, the Grade 10 programme is designed to enhance their capabilities to navigate the crucial 'high stakes' phase of their educational journey. With the above in mind, AJIS invites you to explore the chapters of this inaugural series, which exemplify the transformative potential of our educational initiative.

The research papers presented in this first series have been written by teams of three Grade 10 students.

As you delve into these papers, we trust you will find them engaging, enlightening, and inspiring. We are keenly aware of the power of collaboration and knowledge sharing in the pursuit of educational transformation. This initiative not only has the potential to enhance the educational experiences of our students but also to contribute meaningfully to the broader field of education. Thus, we commit to sharing our

discoveries and insights generously with other educational institutions and dedicated researchers.

In the spirit of collective effort, we aim to expedite progress in transforming education and the student experience. While achieving macro educational transformation ultimately requires systemic change, at the local level, we have significant opportunities to establish notable examples of what is possible. With this in mind, we extend an open invitation to you and the wider educational community to join us in further research and exploration of how this initiative might contribute to transformative change in schools and universities. Together, we can unlock new horizons in education and cultivate the next generation of critical thinkers and innovative global leaders.

Dr Ken Sell, Dr Jake Madden, Nathan Hensley

School Context

In October 2013, Business Breakthrough (BBT) acquired Aoba International School (AJIS). BBT is an innovative company supporting business transformation through its award-winning online university. The acquisition of AJIS supported BBT's goal of realising a lifelong learning system to make a positive societal difference. This book represents one artifact of AJIS's innovative approach to supporting BBT's lifelong goal.

In Tokyo, Japan, AJIS and its community of schools educate more than 1500 students from over 30 nationalities in classrooms from Kindergarten to Grade 12. On a macro strategic level, AJIS's reputation for engaging in educational transformation has led to collaboration with Japan's national government and the International Baccalaureate Organisation (IBO) to support the government's education policy to increase international education in Japan. Among other things, this involves AJIS and the IBO partnering to increase student accessibility worldwide to provide high-quality international education online.

In the 2021/22 school year, AJIS designed the Grade 10 programme to improve student support as they transition from middle school into the 'high stakes' senior school environment. At the centre of this programme is the Trans-disciplinary Unit (TDU) course. Consuming up to 40% of the teaching and learning time the TDU plays a significant and critical role in the programme's endeavour to achieve its goals.

The TDU course is built upon the achievements in the primary and middle years sectors of AJIS. Grounded in the delivery of the International Baccalaureate curriculum (IB), primary and middle school teachers embrace an inquiry-based approach to teaching and learning. The foundation of this approach emphasizes fostering student agency in the learning process.

As AJIS students leave middle school, the TDU provides continuity between the learning process and expectations previously experienced by them. In preparation for Grades 11 and 12, the TDU deliberately sharpens the students' focus on 'how to learn' rather than 'what to learn'.

During the first year of the TDU course, four phenomena influenced the teachers as they began to adjust their teaching practices to achieve the course goals. A high degree of leadership commitment, perseverance, and prescription was applied in the embryonic stages of course development. Curriculum design and implementation were iterative and inclusive processes involving collaboration between leadership, teachers, and students. Students actively encouraged the teachers to trust them with more agency and autonomy, and teacher recruitment focused on finding teachers with specific dispositions and skills.

The course development and implementation stage consumed a significant proportion of the senior school principal's time, especially in the initial phases. Characterized by commitment and perseverance, the leader maintained a process of daily coaching and mentoring of the teachers, instilling confidence in them to embrace contemporary, research-informed teaching methods and create conditions for student empowerment. Simultaneously, the principal's actions incrementally increased teacher professional autonomy.

Curriculum innovation is common practice at AJIS. In this context, the design and implementation of the Global Leadership Diploma (GLD) in Grades 11 and 12 set precedents for the iterative and inclusive design and implementation of the TDU course. The TDU adopted many of the GLD's guiding principles that aim to achieve the school's goal of providing lifelong learning continuity and connectedness as students move from one developmental stage to the next. While the GLD represents an extensive curriculum innovation in the senior school sector, offering students a

choice between two high-quality high school diploma programs (IB Diploma & GLD), the TDU is a mandatory course within the Grade 10 curriculum.

Students displayed confidence and efficacy in positively influencing their teachers when confronted with the challenge of shifting from a 'what to learn' teaching approach to a 'how to learn' teaching approach. Their support manifested in comforting and convincing teachers that they could be trusted to take control of their learning. Both individual students and student teams persuaded teachers that it was safe to trust them.

Selective recruitment of teachers from within AJIS sectors supported the development of a positive culture within the teaching group. Teachers were chosen for their open-mindedness, willingness to learn, focus on student needs, and collegiality. The recruitment strategy included seeking teachers with a high level of pedagogical content knowledge and professional expertise, even if they had little to no teaching experience in senior school. Their mindset and professional disposition had a constructive influence on students and colleagues as they modeled, firstly, how to design a flexible and responsive 'how to learn' course, and then applied it.

The AJIS context and culture enabled the design and implementation of the innovative Grade 10 TDU course to become a reality in a very short period of time. The first publication of research papers authored by student teams is a significant artifact that is worthy of further investigation and development. AJIS humbly invites you to join in their journey of educational innovation.

Grade 10 Transdisciplinary Unit

Introduction

The unique global expansion of digitisation is causing a rapid shift in traditional economic and social trends and structures. Taking into account these disruptive societal changes, AJIS decided to adopt a more adaptive, flexible, and responsive approach to teaching and learning. It is the school's responsibility to provide students and teachers with experiences to enhance distinctive empowering capabilities that enable them to lead positive change in this dynamic and evolving global context.

The Grade 10 Transdisciplinary Unit (TDU) course creates the conditions for student empowerment to occur. Expectations are that students will take ownership of their learning and develop critical skills that will benefit them during their years in Grades 11 and 12 (senior school) and life beyond school.

The TDU promotes flexibility and responsiveness, enabling students to identify learning in their passions and interests. Prioritizing 'how to learn' pedagogy within a structured transdisciplinary problem-solving learning framework is the key to developing the skills and dispositions for success as students transition from middle school to the high-stakes senior school environment.

Underpinned by the principles of self-determination, the TDU encourages autonomy and agency to strengthen student efficacy, confidence, and skills to lead positive change. The Aoba Inquiry Cycle and Structured Team Learning create a learning environment that aligns closely with the philosophies and practices of the International Baccalaureate curriculum

framework and AJIS's Global Leadership Diploma (GLD). It is inquiry-based, encouraging open exploration of connections between multiple disciplines. Following is a brief explanation of the TDU's course context, concepts, and its learning framework process.

Course Context and Concepts: Flexibility and Responsiveness:

Within the broader whole school context, the TDU course plays a pivotal role providing a well-grounded bridging process as part of the students learning journey between the middle and senior sectors of the school.

Aoba-Japan International School's Senior School program has been designed around two major concepts; flexibility and responsiveness. The flexibility of the Senior School program is based on its structural elements (choices for students), while its responsiveness is created through the relationships the course fosters (support in making those choices). The TDU component of the Grade 10 program is an example of this relationship between flexibility and responsiveness.

The TDU course is an important part of the Grade 10 program structure that allows flexibility. It is specifically designed to support students transition into one of two programs offered in Grades 11 and 12; the International Baccalaureate (IB) Diploma Programme (DP) or AJIS's original Global Leadership Diploma Programme (GLD). These programmatic choices allow students to pursue their passions while investigating new areas of interest as they continue to explore their emerging identities.

The TDU course provides students with opportunities to explore their individual strengths and interests in the educational context of developing academic acumen and prowess. Through the exploration aims not only to develop the skills needed for success in AJIS's diploma programs but also to foster an understanding of their own identity. Combining the acquisition of academic skills and communication processes with a deeper

understanding of one's identity aids students in making informed decisions regarding their later program selection.

The Process:

The Grade 10 Transdisciplinary Unit (TDU) is a student-led, open inquiry process that allows students to explore the connections between multiple disciplines to solve problems and generate new ideas. The TDU learning framework consist of two main elements. Aoba Inquiry Cycle and Structured Team Learning approach formulate the learning environment that is closely aligned with the philosophies and practices of the IB curriculum and Aoba's Global Leadership Diploma.

During the TDU, student teams select an area of interest and use a living planner to work through the inquiry process leading to the presentation of findings in an academic paper. The living planner enables students to develop their research strategies independently and provides a structured approach journaling their learnings that inform the research paper.

TDU teachers, representing a variety of subject disciplines, dedicate 80 minutes per day to support student teams. The role of the teacher is to assist each team as they progress through the learning process. Their support takes various forms in response to the students' needs.

Primarily, the teachers provide advice about how to learn. They guide teams through the descriptive, analytical, and explanatory imperatives within the TDU learning framework. This academic support is complemented with pastoral care support focused on the social and emotional aspects of learning in teams.

1. Cults And Religions And Social Morality

Sakura Iwabuchi, Sakura Qian, Yumiko Baba

Supervisor: Patrick Morrissey

Abstract

This inquiry examines the commonly held belief that 'cults are dangerous' while 'religions are righteous.' Past incidents have contributed to this reputation, but it is important to develop a more nuanced and accurate understanding of these groups. Although it was not possible to conduct an interview for firsthand knowledge, we contacted three professors with expertise in social movements. Through a comparative study of their emails and our research, we found that the assumptions people hold about cults and religions have subtle flaws. Our study highlights the importance of addressing these fallacious beliefs to achieve a more balanced view of these groups.

Introduction

Beliefs serve a vital role in shaping the worldview of social groups and different individuals affiliated with them. Cults and religions exemplify such organizations, and albeit they are similar in concept, the former is generally perceived as problematic due to the negative consequences they can pose on one's mental and emotional health (Manza, 2016). Hence, it is crucial to look into the controversies related to cults and identify the best ways to address the sources of trouble.

The context of this inquiry is focused on beliefs and how they keep different sectors of society in order. In the book, Sapiens: A Brief History of Humankind, historian Yuval Noah Harari states, "large numbers of

strangers can cooperate successfully by believing in common myths" (Harari, 2011, p. 30). Indeed, myths and beliefs have an immense power that can bring people together to form communal relations, namely religious groups. However, some other social groups such as cults can do quite the opposite of what is expected to be seen within a group of people with shared beliefs. Recent and past events have revealed that cults give rise to extreme situations and commit heinous acts involving social injustice. Furthermore, they are notorious for indoctrinating vulnerable people, such that new recruits would be left with no time to reconsider their decisions (TEDEducation, 2017). These cultic actions form a complication regarding trust and mental health within the general public, leaving people unaware of their susceptibility to such groups. Through extensive research on the effects of cults on society, reasonings could be devised regarding current issues and possible dilemmas that may arise revolving around this social group.

Research Aims, Objectives and Question

The purpose of this inquiry is to distinguish the different aspects of cults and religions, as well as the examination of their impact on the rationale of people with discrete backgrounds. With mental health issues increasing in this continuously changing world, an insight into major incidents revolving around cults and religions allows for the observation of how they affect individuals in the present day.

How do cults and religions affect social morality?

Beliefs have been inextricably intertwined with humans and their society since time immemorial. Not only do they account for a large fraction of the development of each individual's actions, behaviors, and attitudes, but they also form an intangible foundation of what could eventually become social groups. Such groups include cults and religions, and while many point out their relatedness and similarities, a notable difference lies in whether the members are given rational choices that tolerate their opinions or not

(Lehrer, 1978). Thus, the impact of beliefs on morality becomes an important facet of this inquiry to investigate.

Literature Review

How Have Cults And Religions Affected Society Throughout History?

Religion and cult influences are often involved in the psychological development of different individuals. According to John G. Clark Jr., a Professor of Psychiatry at Harvard University who studied 500 current and former cult members for over a decade, people that left malign cults exhibited characteristics such as "depression, …, indifference to physical appearance, passivity and memory impairment" (Collins, 1982). These observations reinforce the unjustified statement that cultic groups provide adverse impacts to their followers. Religions, on the other hand, have constantly been scientifically proven to offer mental health benefits to the adherents. However, it is critical to note that the differences in beliefs due to the existence of such social groups are inevitable, and these may escalate to moral disputes and detrimental consequences.

Why Are Cults And Religions Created?

The formation of cults and religions could be justified from the various motives of individuals within a society. Charles Darwin explained the cognitive processes of religion as neither being natural or psychological, but rather involving various elements "consisting of love, complete submission to an exalted and mysterious superior, a strong sense of dependence" (Darwin, 1871) and others, supporting the idea that religion has provided the sense of belonging that humans have needed since long ago. Conversely, cults often have aims provoked by different aspirations and beliefs. Peoples Temple, for instance, was first inspired by the "ideal of a just society that could overcome the evils of racism and poverty" (Melton, 2023). Therefore, the observation of the origins of cults and religions allows for a further investigation into human morals and desires.

What Are Cults And Religions And How Can We Distinguish Them?

Unlike the term 'religion' of which the US government defines as a "belief in a relation to God involving duties superior to those arising from any human relation" (Clement, 1989), the word 'cult' cannot be described with a single sentence due to the contradictory idea that all religions begin as cults, but at the same time can be offshoots of mainstream religions. Nevertheless, certain blatant characteristics are present in a cult, such as its leader being inordinately charismatic and narcissistic, maintenance of a strict hierarchical structure, promotion of behaviors that deviate from moral norms, extreme indoctrination of members, and exhibition of little tolerance for any aberrant beliefs. However, it is worth noting that not all cults fall under the negative category, and as Dr. Cath, a Professor of Psychiatry at the Tufts University School of Medicine, states, "whether or not a cult is destructive is determined by the morality of the cult leader and the nature of the leader's charismatic dream" (Collins, 1982).

Why Do People Join Certain Religious Organizations?

The mindset of the people who join a cult is very similar to the ones who join a religious group. When one finds it difficult to overcome problems, they tend to look for consolation and exhibit strong attachments to religious deities (Perham, 2018). Cultic groups take advantage of such kinds of mental and emotional state. The leaders of the group usually target vulnerable people and those who seek solace to fulfill the voids they have. On the other hand, religious leaders create a community where people can worship and truly communicate about their faith, instead of convincing the members to isolate themselves from society and lead them towards a gloomy path.

What Are Different Sectors Of Society Doing To Prevent Harmful Cultic Actions?

Different sectors within a society are responsible for the harmful actions that often arise from cults. For instance, it is common for educational institutions in Japan, including Osaka University, to provide emails for

reporting cult solicitation (Osaka University, 2009). Organizations such as the The Japan Society for Cult Prevention and Recovery, which was developed on account of the sarin gas attack caused by Aum Shinrikyo in 1995, also study cults, with the aim to eliminate them (JSCPR, 2015). This demonstrates that action is being taken to prevent cult-related issues from occurring. Moreover, the further implementation of restricting new religious movements (NRMs) from performing practices or sharing their ideologies may additionally ensure the safety of the people.

Lines of Inquiry

1: How Do Cultic And Religious Practices Form And How Do They Impact People?

Actions that drive organized behavior — cultic and religious practices — affect the lives of many people. Oftentimes, practices are formed from the belief that engaging in certain activities would remove the sins of an individual. Muslims of the Islamic religion with food restrictions believe that "fasting purifies the physical body from toxins, helps discipline the soul and purifies it from the blameworthy" (Heggen, 2022). Additionally, newly wedded members of the NRM, the Unification Church, also participate in rituals such as the Indemnity Stick Ceremony where couples beat each other using a stick. These instances describe the activities that must be followed by members of some social groups. On the other hand, a Hindu sect called the Aghori believes that God lives inside everyone, therefore meaning that nothing could defile them (Aslan, 2017). The rituals the group takes part in include eating rotten corpses and covering themselves in ashes of the dead. Hence, different beliefs and the purpose of religions and cults, lead to the emergence of a variety of practices.

2: How Do Different Sectors Of Society View Cults And Religions?

The views on cults and religions can differ amongst individuals, and this was manifested in the results of the provocation activity conducted to a group of students and teachers on the 22nd November, 2022. Throughout the activity, most participants exhibited feelings of antipathy and held a

negative attitude towards cults, where data have shown that 72.2 percent of students considered the group as "bad" as their members are always "acting weird" and frequently "brainwashed." Whereas, there is still a minority of people believing that cultic groups can have good purposes. As many as 27.8 percent of the participants had either a positive impression on cults or responded that their answer would depend on the behavior and actions of their members. Similarly, according to Professor Eileen Barker who studies cults, when the number of cults — also referred to as NRMs — and the extent of authority that the groups wield increases, an opposing organization called Anti-Cultist Movements (ACMs) begin to emerge (Barker, 2010). Therefore, the social problems that are thought to arise from NRMs and the opposing views of ACMs can lead to unavoidable conflicts.

3: How Can Religions Bring Negative Effects On Social Morality?

It is a widespread idea that cults have negative effects and religions the opposite on social morality — a principle that governs each individual's perception of right and wrong on a societal scale. However, the fact that both groups can have repercussions that are completely opposite of such convictions should be addressed. According to goodtherapy.org, while a religion can be a source of comfort and solace, it can also be detrimental to one's well-being when it operates under a doctrine that conflicts with its outlined tenet (Good Therapy Editor, 2019). This deviance may result in people casting doubts on their faith, eventually leading to cognitive dissonance and religious trauma syndrome (RTS), as well as disrupting their self-awareness and worldview. Some people may also feel obliged to suffer from a malady due to their perception that illness is a punishment for sins and wrongdoings (Holt, 2013). While there is only a limited number of studies conducted regarding the mediational role in health-related outcomes of such beliefs, negative assumptions can be made as to the consequences that those who accept such ideas may face. Hence, if these

are the cases, it is possible to conclude that righteousness may not be an aspect that gives a clear distinction between cults and religions.

Research Methods

Our team contacted three professors — Professor Eileen Barker, Dr. George D. Chryssides, and Dr. Janja Lalich — who have expertise in the field of 'cults and religions' to answer our second line of inquiry: how do different sectors of society view cults and religions? The list of questions we sent them centered on the experts' thoughts and ideas about the distinctions and connection between the two social groups, as well as how they may affect an individuals' worldview. The Professors couldn't directly answer the questions but provided us with alternative resources that helped guide us through our research process.

Analysis

Through coming in contact with experts on cults and religious movements, the inadequacy of the information obtained online became apparent. One of the professors was Dr. George D. Chryssides, an Honorary Research Fellow in the Department of Theology and Religious Studies at St. York University, UK. In essence, his email described his thoughts and opinions on the use of the word, 'cults.' He indicated that scientists, including himself, "tend to avoid [this term] in the study of religion" as it has a pejorative connotation and instead, use the phrase 'NRMs'. His comments lead to the conclusion that even if differences in the impression towards cults and religions exist amongst various sectors of society, it is nevertheless crucial to question the use of basic terms and concepts as they may be offensive to certain communities.

An academic at the London School of Economics, Professor Eileen Barker's main research interests are cults, sects, and NRMs. The Cult as a Social Problem, a research paper advised by Professor Barker, explored the concept of religious discrimination with affiliations to social morality. Although countries like the US have laws that forbid discrimination

between religions, Professor Barker reveals that there are "many states that do discriminate between religions, sometimes giving special privileges, sometimes imposing restrictions on minority or unpopular religions" (Barker, 2010). Her statement forms the understanding that religious organizations could face inequity due to the distinct moral beliefs that an individual or a social group may have.

Dr. Janja Lalich is a sociologist and an avid contributor specializing in cults and extremist groups. In the field of cultic studies, she writes books and provides help for victims who have endured or are suffering from prolonged cultic problems. Moreover, as a former member of the cult Democratic Workers Party (DWP), Dr. Lalich shares her experiences and opinions of cults on her webpage (Lalich, 2003). When Lalich first joined DWP, she only thought of the community as a "study group" with people hoping for a Marxist-Leninist takeover of the American political system. However, over time she realized that their leader had been controlling them and was seeing this act as "a positive way to change people." Furthermore, according to the Theory of Brainwashing that Lalich mentioned on her webpage, instead of the phrase "misunderstood concept," she preferred using the term, "bounded choice," which refers to how the choices made by the cult followers might seem extreme to outsiders but is a rational decision from the members' point of view.

Findings

The findings of this inquiry reveal the effects that cults and religions have on social morality. Various practices that social groups engage in are formed based on their beliefs, which could be viewed as either positive or negative from different sectors of society such as governments, ACMs, and many others. This led to the understanding of what individuals consider to be right or wrong, in relation to their beliefs.

Conclusion

The contents explored in this inquiry led to the re-evaluation of the overarching impression that different communities have on cults and religions. Some may harbor ill feelings to those movements, while others may believe that people are overly judgemental of their existence. However, regardless of these differences of opinion, it is an immutable fact that various beliefs and the purpose of cults and religions impact the lives of people through their practices and rituals. For instance, one's morality is greatly influenced by this facet both positively and negatively to the extent that they cannot distinguish between "morally" right and wrong actions once excessively devoted to them. Despite that, it is also important to note that the differences concerning the fundamental aspects of the two movements, such as their doctrine and teachings, are still full of ambiguity and are therefore challenging to come to a solid conclusion.

Future Study

The findings of this inquiry reveal the effects that a cult and religion could have on an individual, in terms of what they believe is right or wrong. The further investigation into the psychological effects that these social groups have on their followers as well as an in-depth analysis into the perspectives of people who are both indirectly and directly related to the groups will allow for a wider examination into this investigation.

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Appendix A: Interview Questions

1. How would you define cults?
2. How do cults and religions affect the way people act, live, and think?
3. Can religions be harmful? If so, how?
4. What are some practices that distinguish a cult from a religion?
5. Do you think religions and cults are related? If so, how?

2. English Education Reforms In Japanese Junior High Schools

Rie Torio, Rinon Koide, Yumiko Baba

Supervisor: Nathan Hensley

Abstract

This inquiry examines the similarities and differences between the Education objectives devised and implemented by the Ministry of Education, Culture, Sports, Science, and Technology (MEXT) and the English curriculum that the public junior high schools in Japan are focusing on. Through a qualitative interview, three junior high school teachers in southern Japan prefecture shared their ideas and beliefs on their teaching style, corresponding to the latest education reform and Courses of Study. The findings indicated some correlations and discrepancies between their educational approaches and the issues pertaining to five aspects of English education. The interview manifested a gradual progression in the situation, suggesting that the implementation of education reform is indeed a way to improve the quality of the English curriculum.

Introduction

English education is an absolute necessity in this continuously globalizing world. In order to keep pace with such growing interdependence of different countries, many nations – including Japan – made "English-learning" compulsory through the implementation of education reforms (MEXT, 2017). The adoption of these changes drastically altered

the learning curriculum and policy of Japanese public schools. Thus, it is imperative to delve into the current conditions of English education in Japan and identify relevant complications that may emerge in the near future.

The context of this inquiry is English education in Japanese public middle schools and its effects on the student's learning progress. Over the past few years, Japan has made several comprehensive education reforms to modernize its education system. While such approaches are taken to improve the overall language-education quality in schools, questions arise as to whether or not those changes are producing any positive effects on the country's present public learning systems.

The Education First English Proficiency Index (EF EPI) recently revealed Japan's alarming downfall in the adults' English proficiency ranking — 55 out of 99 countries in 2020, and 78 out of 112 countries in the following year (EF, 2021). These statistics suggest an obvious yet inconspicuous flaw in Japan's education system — a fault that still has not been appropriately addressed in this new era of globalization. Through a myriad of rigorous analyses and evaluations of English acquisition curriculum in Japanese middle schools, we can take a holistic view of the current issues and the concerns that may emerge in the years ahead.

Research Aims, Objectives and Question

This inquiry aims to analyze the education reform made to Japanese public middle schools and examine its influence on English education. By being aware of the current written curriculum for middle schools and understanding the correlation between it and objectives arranged by MEXT, we can pave the way for the establishment of more practical learning and teaching styles. While MEXT strongly encourages schools to implement these reforms as they are believed to improve compulsory education, the effects on the learning outcomes of students are still unclear. Hence, the correlation between the education reforms and English

curriculum in Japanese public middle schools becomes an important aspect of English education to examine. Thus the research question is: *How do education reforms and the written curriculum affect English education in Japanese junior high schools?*

Literature Review

According to Kotobank (2022), education reform is defined as "[a modification] that responds to various national and societal demands and requirements, with a focus on the education system, particularly the school system." Japan has been implementing the reforms roughly every 10 years; the most recent that was enacted in 2020 specifically touched on the increase of students' involvement in English classes. While this reform was targeted for all grade levels from elementary to high school, the focus of this inquiry is middle school as it is a halfway point in the Japanese education system..

MEXT has been recording changes of the English education in Japanese middle schools — along with elementary and high schools — since 2013 through the English Education Implementation Survey. The analysed results of these questionnaires can indicate whether the education reform is producing desired effects or not. The results for the survey conducted in 2021 showed incremental progress in the English level of students and teachers, but suggested they still didn't reach MEXT's target values (MEXT, 2021). Further improvements could be expected in the subsequent years as 2021 is the first year since the above mentioned education reform was enacted.

Researchers have been looking into the causes behind the stagnant improvement of Japanese students' English proficiency for the past several years. Norihiko Inoue, the regional sales and marketing director at Education First Japan, states that Japanese students are actually very good at grammar and vocabulary, but they can't communicate very well because they're afraid of mistakes (Margolis, 2020). In a way, Norihiko is alluding to

two of the countless reasons why Japanese students lack English skills: their perfectionist mindset and the limited vocalization in English classes. Other reasons could encompass learning environments, textbooks, and the low English proficiency of the Japanese Teacher of English (JTE) (Barker, 2018).

The concept of form in English Education refers to the Courses of Study and education reforms in Japanese public schools. The Courses of Study ensure that students receive the same level of education regardless of where they are in the country, and education reforms comprise goals that are given to improve the student's English skills. The most recent reform was intended to modernize the overall learning curriculum taught in Japanese schools, and its overall objective was to "develop students' competencies that inform the communication such as understanding, expressing and communicating simple information and thoughts etc. through language activities of listening, reading, speaking and writing in a foreign language" (MEXT, 2017).

Generally, four perspectives influence English education in Japan: students, parents, teachers, and governments. Each of these perspectives has different viewpoints on the focus of learning, thus it becomes problematic when it comes to forming the most effective English curriculum. An example of an expectation gap between the perspectives regarding English education in Japan can be seen in a questionnaire conducted by the National Education Association (NEA) and Japanese company ALC Education. While MEXT hopes that English classes in Japanese schools will encourage students to practice communicating in English, more than half of the surveyed parents of junior high school students responded that they see their children working on their workbook and reading English silently at home, suggesting a difference in the learning approach between students and MEXT (NEA & ALC, 2020).

The majority of responsibility for English education in Japanese schools is divided among four governments: MEXT (Federal), Prefectural and

Municipal Governments, and the Board of Education (NCEE, 2021). While those political leaders form the building blocks of the written curriculum, the minor responsibilities are distributed amongst the local authorities — teachers and students — as well as written information sources and visual aids such as textbooks, handouts, educational technology, and academic tests. Some say that Japanese middle school students having low English proficiency is a consequence of governments not taking enough accountability in improving the current English curriculum. However, taking in consideration that the responsibility is scattered throughout the education system, is that actually the case?

Research Method and Questions

Our team interviewed three English teachers in an Elementary and Junior High School who were each in charge of grades 7, 8, and 9. This interview was conducted partially in Japanese, hence we transcribed and translated into English to make the subsequent processes possible. Our questions centered on their thoughts and ideas about the current English curriculum and how they run their classes. The qualitative analysis that follows aims to delineate the similarities and differences between the education system in the junior high school and MEXT's objectives. Using these comparisons, we also attempted to answer:

1. How much impact does education reform have on English education in Japanese schools?
2. How does the current English education and the Course of Study contradict or correlate with each other?
3. How does the education reform affect different positions in the education system and who is responsible for the changes?

The statements from the three teachers — Teacher A: Mr. Akiyama, Teacher S: Mr. Sonezaki, and teacher K: Ms. Koma — could be roughly divided into five aspects of English education: effects of education reform,

learning environment, students' levels, teaching style, and the focus of their class.

Findings

Effects of Education Reform

The teachers' responses suggested that the education focus of Japanese public middle schools including Teriha Junior High School is corresponding to the changes made through MEXT's education reforms. Teacher S recounted as the following:

> *"When I was a junior high school student, the English classes only focused on grammar, and we had almost no activities pertaining to communication skills. Native speakers came only once every year, and those sessions ended up being very chaotic and unhelpful. Compared to the past, we now have 1 session with native speakers (NS) every week, and I feel like the communicative parts have increased." (Personal communication, October 12, 2022)*

His statement alludes to how the education reforms are indeed, being implemented in Japanese schools, and that Japan's English education is aligned with MEXT's aim to "cultivate qualities and abilities to communicate [in a foreign language] (MEXT, 2017)." In figure 1, the trend of junior high school students' use of English in language activities is increasing until 2019, and the gap between it and MEXT's target value is getting narrower each year. The decline from 2019 to 2021 is presumably a consequence of the increase in online classes from COVID-19 outbreak. Schools were temporarily closed until 2021 when the government announced an approval to reopen them, hence students and teachers are still adjusting to the new education style.
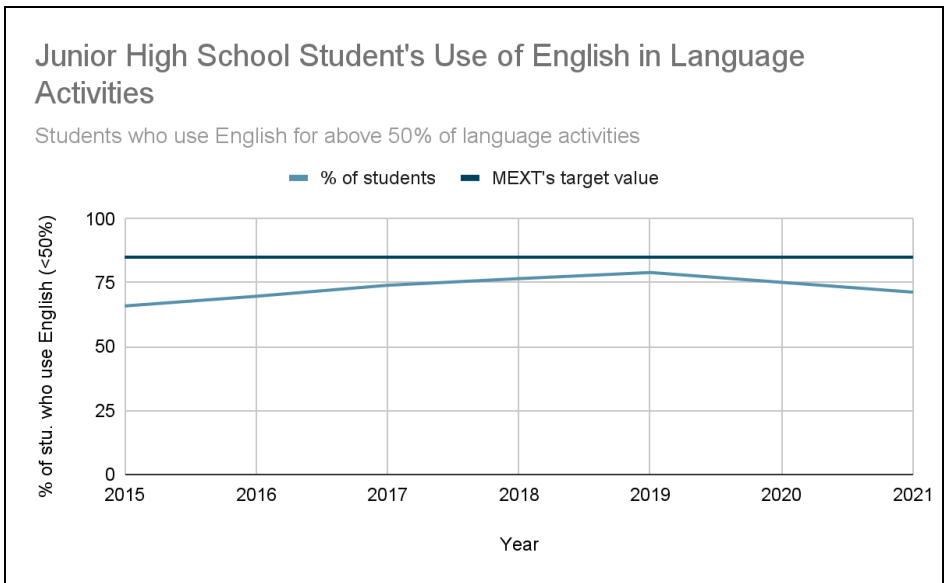
Figure 1: Junior High School Student's Use of English in Language (MEXT, 2021, 2020, 2019, 2018)

Another point that the teachers mentioned is the effect of university entrance exam reform which is planned to be implemented in 2025. As a result of this reform, a new area of study called "information studies" has been introduced, and modifications have been made to the exam duration and subject matter of Japanese, geography, mathematics, and science. A minor but significant modification will be implemented in Foreign Languages; the categories of which the problems will be questioned will increase. Teacher S stated as the following:

> *"If the university entrance exam system changes, high school class style is the very first thing that would be affected. Indeed, if the high school class style changes, the skills required to pass high school entrance exams would also change, so the skills required in junior high schools would subsequently change. In accordance with the current Japanese education system, schools are teaching students the skills that they need in order to move up the grades, so the effects would manifest itself in the junior high school education style after the*

Teacher S implies that the learning content and skills taught in different levels of education are interconnected, hence education reforms enacted in higher education would gradually change the lower education system. The significance of education reforms could be perceived from his statement, as a single change in the education system could pose a domino effect in different curricula.

Learning Environment

The learning environment is a crucial factor for students to learn a foreign language effectively. Teacher A asserted that Japanese students and the society generally have low proficiency in English as they don't have to use English in their daily life, and that English classes are the only time that students need (or practice) English. His remark reflects Figure 2, which displays the amount of exposure to English Grade 8 students around the nation have everyday besides preparing for and reviewing school lessons.

What's most conspicuous is how almost 80% of the surveyed grade 8 students spend only less than 1 hour every day using English (78.6% on weekdays, 79.9% on weekends). This data suggests that not only is English unessential for students, but also that students might not know how or where they could use English in their daily lives. It is discernible that students not having enough exposure to English is one potential cause for their low English proficiency level.

A potential solution for English teachers is to consider assigning homework that involves watching an English cartoon, movie, or any other type of film, followed by preparing a brief presentation or summary as a potential solution. This approach would provide students with exposure to

English beyond the classroom, giving them a topic to share during class and encouraging a student-led style in English classes.
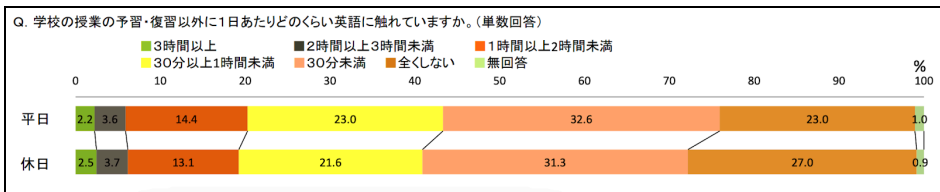
Figure 2: Grade 8 students exposure to English around the nation (MEXT, 2014)

- Students' Levels

Teachers' statements indicated that there is a correlation between the learning in classrooms and the students' English levels. Teacher S said that one of the difficulties he faced when teaching English classes is how the students' English levels vary significantly within a class. Likewise, Teacher A expressed affirmation to the interview question about whether or not he teaches the same content to all the students that have different levels of English skills.

Figure 3 represents the test scores of Grade 9 students for the four skill areas: listening, reading, speaking, and writing. The left column of each graph is the CEFR levels, in which A1 is equivalent to grade 3, 4, and 5 in Eiken tests, and A2 is Grade Pre-2. A1 is divided into low-rank and high-rank. The two columns on the right are the scores in 2017.

A general pattern in the graphs is that the majority of the Grade 9 test takers are in "low-rank A1" excluding speaking skills, while some are in "high-rank A1" and A2. The English skills of Grade 9 students are dispersed, implying that the learning progress and outcome of students would differ according to their English level and learning contents in their English classes.

【生徒全体のスコア分布（公立）】

＜聞くこと＞32問（約18分）

聞くこと CEFR	得点	平成28年度 人数	割合	平成29年度 人数	割合
A2	170	27,896	2.9%	29,520	3.1%
A1上位	160	10,217		11,649	
	150	15,507		18,167	
	140	22,757	21.9%	26,266	26.0%
	130	33,699		41,454	
	120	51,863		61,767	
	110	79,316		89,054	
A1下位	100	118,197		120,380	
	90	143,962		139,712	
	80	157,584		155,317	
	70	146,297		114,829	
	60	90,589	75.3%	82,245	70.9%
	50	45,164		45,968	
	40	24,117		22,457	
	30	8,910		9,270	
	20	3,342		3,220	
	10	2,451		1,841	
	0	3,243		2,285	
平均		93.8		96.3	
調査対象		975,109		955,399	

＜読むこと＞28問（約32分）

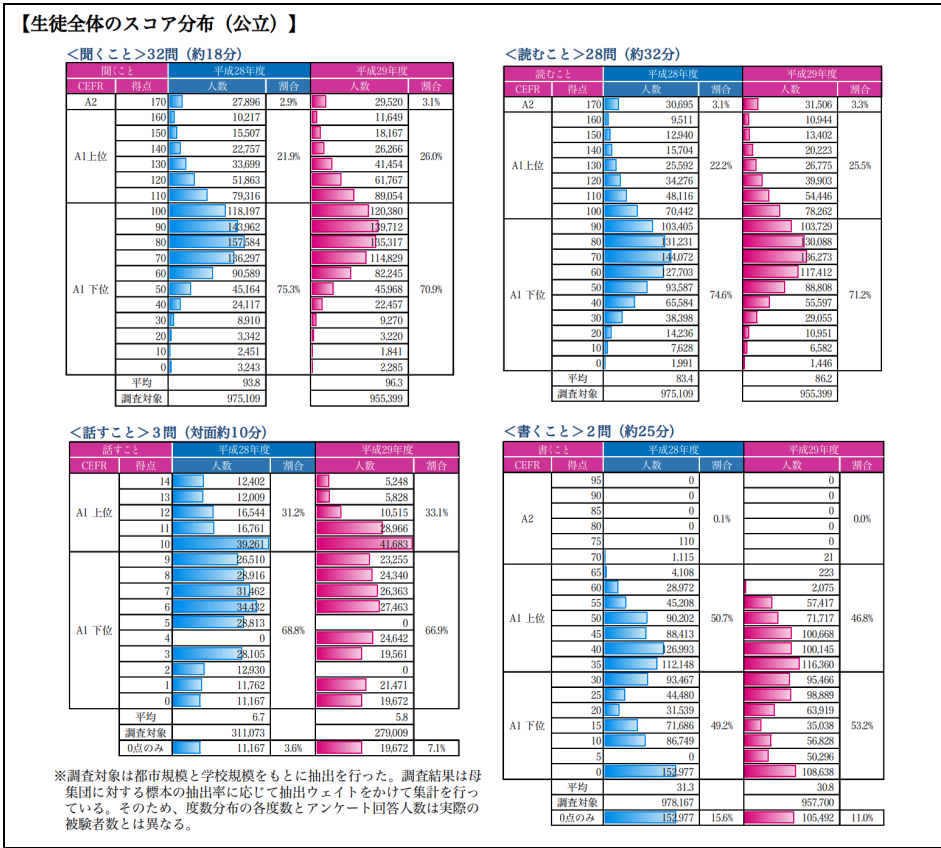| 読むこと CEFR	得点	平成28年度 人数	割合	平成29年度 人数	割合
A2	170	30,695	3.1%	31,506	3.3%
A1上位	160	9,511		10,944	
	150	12,940		13,402	
	140	15,704	22.2%	20,223	25.5%
	130	25,592		26,775	
	120	34,276		39,903	
	110	48,116		54,446	
A1下位	100	70,442		78,262	
	90	103,405		103,729	
	80	131,231		130,088	
	70	144,072		136,273	
	60	127,703	74.6%	117,412	71.2%
	50	93,587		88,808	
	40	65,544		55,597	
	30	38,398		29,055	
	20	14,236		10,951	
	10	7,628		6,582	
	0	1,991		1,446	
平均		83.4		86.2	
調査対象		975,109		955,399	

＜話すこと＞3問（対面約10分）

話すこと CEFR	得点	平成28年度 人数	割合	平成29年度 人数	割合
A1上位	14	12,402		5,248	
	13	12,009		5,828	
	12	16,544	31.2%	10,515	33.1%
	11	16,761		28,966	
	10	39,261		41,683	
A1下位	9	26,510		23,255	
	8	28,916		24,340	
	7	31,462		26,363	
	6	34,432		27,463	
	5	28,813	68.8%	0	66.9%
	4	0		24,642	
	3	28,105		19,561	
	2	12,930		0	
	1	11,762		21,471	
	0	11,167		19,672	
平均		6.7		5.8	
調査対象		311,073		279,009	
0点のみ		11,167	3.6%	19,672	7.1%

＜書くこと＞2問（約25分）

書くこと CEFR	得点	平成28年度 人数	割合	平成29年度 人数	割合
A2	95	0		0	
	90	0		0	
	85	0	0.1%	0	0.0%
	80	0		0	
	75	110		0	
	70	1,115		21	
A1上位	65	4,108		223	
	60	28,932		2,075	
	55	45,208		57,417	
	50	90,202	50.7%	71,717	46.8%
	45	88,413		100,668	
	40	26,993		100,145	
	35	112,148		116,360	
A1下位	30	93,467		95,466	
	25	44,480		98,889	
	20	31,539		63,919	
	15	71,686	49.2%	35,038	53.2%
	10	86,749		56,828	
	5	0		50,296	
	0	152,977		108,638	
平均		31.3		30.8	
調査対象		978,167		957,700	
0点のみ		152,977	15.6%	105,492	11.0%

※調査対象は都市規模と学校規模をもとに抽出を行った。調査結果は母集団に対する標本の抽出率に応じて抽出ウェイトをかけて集計を行っている。そのため、度数分布の各度数とアンケート回答人数は実際の被験者数とは異なる。

Figure 3: Grade 9 test scores in listening, reading, speaking and writing (MEXT, 2017)

- Teachers' Levels

English teachers in Japanese public schools are expected to have Eiken Grade Pre-1 level or CEFR B2 and above. Teachers at this level "show a relatively high degree of grammatical control [and] does not make errors which cause misunderstanding," as well as "can produce stretches of language with a fairly even tempo (COE, 2022)."

What was salient in the interview were the inordinate amount of grammatical mistakes that the teachers made, the fact that they didn't correct their mistakes, and how those flaws produced misunderstandings and misinterpretations in their statements. Example 1 shows Teacher S's

response to the question: "what are you aware of when you're teaching your classes?" He frequently used interjection to fill in pauses and hesitations, asked other teachers to help him translate his thoughts, and rarely used advanced vocabulary. It is likely — though not certain — that the teachers don't have Eiken Pre-1 English level. Likewise, as they are teaching their students using incorrect English, it is highly assumable that their students would acquire erroneous English as well.

The teachers may be believing that the native speakers (NS) are helping the students learn the correct use of language. However, they should realize that the vast majority of the students' outcomes are dependent on them as only one session is taught by the NS every week. When the proportion of the classes run by the Japanese Teachers of English (JTE) and NS is factored in, it becomes apparent that the students' learning style and the knowledge they acquire are leaning towards JTE's teaching style.

> KS: We often check students' face. Cuz, um, their face um, cares us about their interest or their, uh, understanding, so uh, if the-
> (KS:表情って...)
> KS: They're smiling, and uh, attending the class positively, uh, maybe, it works. I think my class works well, and if their face is, uh, looks not so good, um, maybe I need to feel, uh, I feel need to change the style. Maybe, So it, depends on the case but maybe, I always um, care of their face.

Example 1: Teacher S response

- Teaching Style

Teachers mentioned five aspects of their teaching style: dependency on textbooks, error correction, working style, use of Japanese, and use of ICT.

1. Dependency on textbooks

It is a norm for Japanese schools to center their classes on textbooks, and the Junior High School in this study is no exception. The teachers stated that they rely on the textbook when checking the students' understanding

level, running the class, and referring to its examples when conducting language activities. These aspects account for almost all the teaching.

David Barker, a professor at Gifu University, indicates that most EFL teachers see textbooks as a material that facilitates the learner's learning process (Barker, 2018). Barker's statement implies that the teachers are relying excessively on textbooks, and that this teaching style has a low capability to address each student's needs. This information can be backed up with a research study conducted by Michael Hollenback. He reveals that in Japan, the ministry-approved textbooks must be utilized in all public school classrooms, and that although teachers have leeway to utilize alternative teaching methodologies and incorporate supplemental materials in their class, textbooks generally provide the basis for lesson content and methodology (Hollenback, 2016).

Compared to countries such as the US where textbooks are used as a facilitative material, schools in Japan have to follow what's being provided as MEXT wants to ensure that children nationwide receive standardized teaching regardless of where they live. These facts suggest that while Japanese schools may not be the sole cause of the textbook-centered curriculum, MEXT plays a significant role in its formulation.

2. Error correction

People have different views on correcting spoken English. Teacher S said that he generally wouldn't correct the students' grammatical mistakes as he believes that it is more important to familiarize them with the new language. While his idea is understandable, Mori Hirohide, a professor in Tokyo Woman's Christian University, stated, "it is very important for English teachers to create 'triggers' for correcting mistakes by correcting the students' English to the extent that it is not unnatural (IBS, 2022)." What he means by "correcting in an unnatural way" is to use error correction methods such as "recast (See example 2)" and "U-shaped

learning curve (See example 3)" to allow students to notice their mistakes rather than being told.

Recast is one way for teachers to correct a student's grammatical mistake. The teacher imitates the student's statement with inaccurate language use in correct English.

Example:
Student: Where the bathroom?
Teacher: You want to know where the bathroom is?

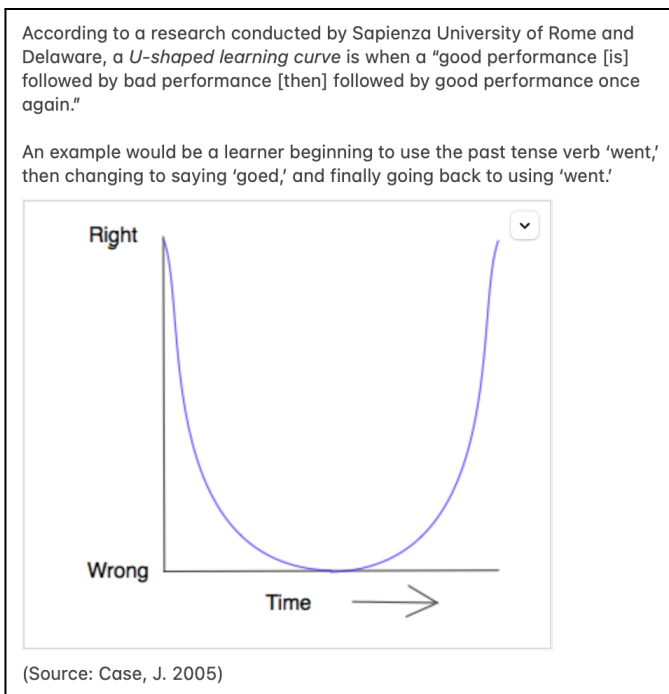Example 2: Recast method of English Correction (Case, 2005; Case & Carlucci, 2012)

According to a research conducted by Sapienza University of Rome and Delaware, a *U-shaped learning curve* is when a "good performance [is] followed by bad performance [then] followed by good performance once again."

An example would be a learner beginning to use the past tense verb 'went,' then changing to saying 'goed,' and finally going back to using 'went.'

Right

Wrong

Time

(Source: Case, J. 2005)

Figure 3: U-shaped learning curve (Case, 2005; Case & Carlucci, 2012)

3. Working style

The teachers said, "when we think communication is important to use grammar, we make them groups, but when they feel they need writing skills, they have individual activities." This suggests that they are following one of MEXT's objectives proposed in the Courses of Study, which is to "come up with learning styles (or activities) such as pair-work, group work, etc. (MEXT, 2017). The teachers are making sure that the working styles are effective to the language activities conducted in the classroom.

4. Use of Japanese

Due to language barriers, the teachers couldn't give a clear response as to how much Japanese they use in their English classes (See Example 4). When the teachers were discussing amongst themselves, they stated that they mostly used Japanese in their English classes, but they responded that they spend most of the class time speaking English. However, Example 5 shows that teachers mostly use Japanese when teaching grammar and vocabulary, which strengthens the speculation that teachers are using more Japanese rather than English during their classes. This contradicts MEXT's goal to increase the number of teachers that use English for above 50% of their speech (Figure 4).

~YB: How much Japanese do you use in your English classes?
(MA translates to Japanese)
(MA: How much do you use Japanese?)
(MA: About half of the class…)
(KS: About 80%...)
(KS: It depends on the class though…)
KS: It depends on class, so sometimes, uh, I use about 80% of English, or uh, sometimes I use 100% in English. But in some cases, less than 40%. Its depends on the English lessons we focus. (pg5)"
→ lies

Example 4: English use in the classroom

YB: Do you teach grammar in Japanese, or do you teach grammar in English?
YB: And maybe also vocabulary.
(Teachers discuss among themselves)
MA: Maybe in my case, I teach grammar and vocabulary in Japanese, and the native speakers always teach them in English as a review.

Example 5: Speculation that more Japanese is spoken than English in the classroom
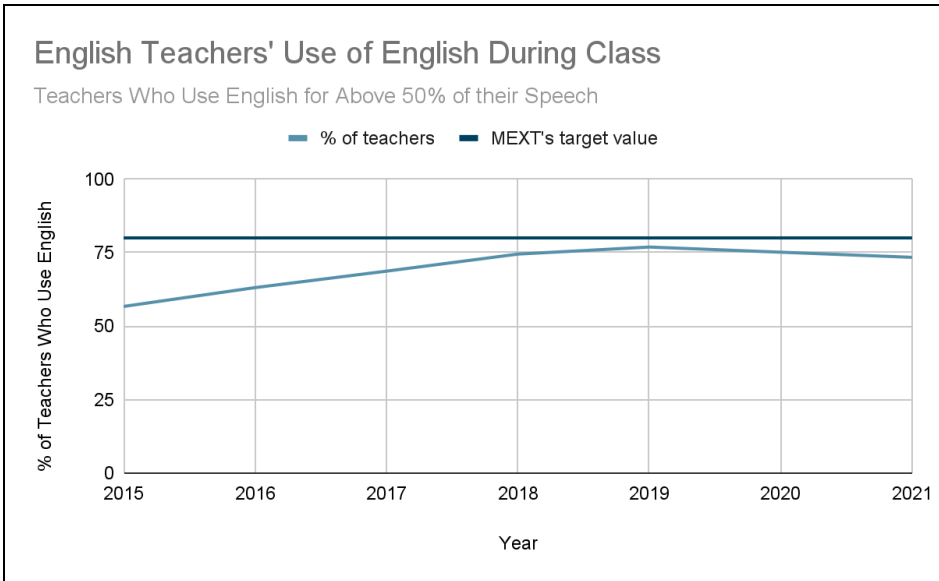

Figure 4: English use in classrooms MEXT targets (MEXT, 2021, 2020, 2019, 2018)

5. Use of ICT

The interview indicated that the teachers are following MEXT's objective to "secure time and enhance activities using ICT for operation and practice" (MEXT, 2017). Teacher S stated that at his Junior High School digitized textbooks to increase learning opportunities and the accessibility to learning materials for students. They also use ICT for presentation and to record students' face and voice, but one improvement the teachers pointed out was how they were not utilizing ICT to communicate with foreign students, which could give students more opportunities to use English. Teacher S's statements reflect Figure 5, which explains the

percentage of three levels of education that use ICT in certain ways. The content encircled in green shows "content and class delivery," those in blue are "language activity and practice," and those in red are "interactional and remote learning." It is observable that a high percentage of junior high schools are conducting the content in the green box but less than half conduct those in the red and blue boxes; this pattern appears in Teacher S's statement as well, suggesting that that is a point that MEXT should put effort into fixing.

	小学校	中学校	高等学校
ICT機器の活用を行った学校の割合	99.1% (99.0%)	96.6% (95.8%)	91.7% (88.6%)
教師がデジタル教材等を活用した授業	99.0% (98.3%)	92.4% (89.2%)	88.9% (80.9%)
児童生徒がパソコン等を用いて発表や話すことにおけるやり取りをする活動	41.4% (30.8%)	44.0% (30.4%)	47.4% (34.7%)
児童生徒が発話や発音などを録音・録画する活動	21.8% (12.4%)	36.6% (26.9%)	34.2% (22.8%)
児童生徒がキーボード入力等で書く活動	20.3% (13.1%)	23.7% (15.3%)	29.8% (20.6%)
児童生徒が電子メールやSNSを用いたやり取りをする活動	1.5% (0.9%)	3.7% (2.3%)	9.0% (5.2%)
児童生徒が遠隔地の児童生徒等と英語で話をして交流する活動	3.0% (1.9%)	3.2% (2.4%)	5.9% (4.2%)
遠隔地の教師やALT等とティーム・ティーチングを行う授業	2.8% (3.4%)	4.0% (5.6%)	6.3% (6.5%)
児童生徒が遠隔地の英語に堪能な人と個別に会話を行う活動	2.0% (1.4%)	2.8% (2.2%)	5.8% (3.3%)

【交流・遠隔授業】【言語活動・練習】【コンテンツ・授業運営】

※（　）内は、昨年度の値。

Figure 5: Percentage of three levels of education that use ICT (MEXT, 2021)

Focus of the Class

Despite MEXT's hope that public schools would prioritize the development of communication skills in their English classes, the interviewee's responses indicate that this objective is far from being realized. This situation is due to the existence of Assistant Language Teachers (ALTs), which the teachers referred to as Native Speakers (NS), and the pressure of exams.

ALTs / NS

English teachers working in the Junior High School rely significantly on NS (See Example 6). As they believe that the NS teaches writing and speaking skills (communicative skills) better than non native speakers do, the teachers mainly focus on reading and listening (receptive skills) during regular classes. However, this suggests an unbalance between the students' level in communicative and receptive skills. Students have less exposure to oral and aural English as they only have one class with the NS every week, which causes a slower improvement in receptive skills than the other.

> YB: Next, do you focus your classes more on receptive skills such as listening and reading, or more on communicative skills such as writing and speaking?
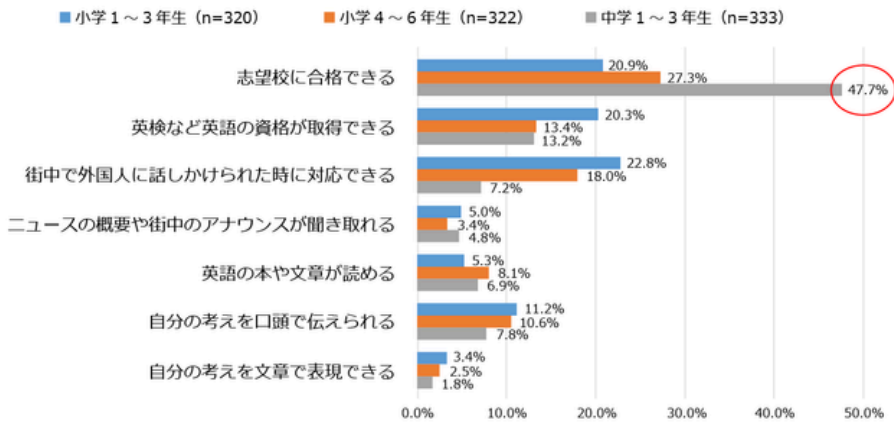> MA: In my case, I focus on writing, uh no no, reading and listening, because you know, in Fukuoka city, um, there are NS class in a week, so native speaker usually teach English once a week. So they usually taught, they usually teach, like uh, speaking skills and writing skills, so I think it's better to teach reading and listening, but of course, I teach speaking, and writing.

Example 6: Classroom time on receptive or communicative skills

Exams

MEXT notes that "the emphasis [in English classes] is still on how much knowledge of grammar, vocabulary, etc. has been acquired," and this situation is due to how the English section of Japanese exams only focus on reading and listening skills (Japantimes, 2019). While the teachers discussed that most students in their class focus on exams, a report published by NEA and Alc Education suggested that parents are also contributing to the imbalance in students' English skills. Figure 6 displays what the parents expect of their children's English level at the age of fifteen. Almost half of the parent-respondents of junior high school students responded that they hope their children will pass the school of their first choice. Schools would want to respond to such students' and their parents' desire, hence the English classes become centered on the cultivation of receptive skills.

図4 15歳時点での英語に関する望ましい状況
（優先順位1位）

■小学1～3年生（n=320）　■小学4～6年生（n=322）　■中学1～3年生（n=333）

	小学1～3年生	小学4～6年生	中学1～3年生
志望校に合格できる	20.9%	27.3%	47.7%
英検など英語の資格が取得できる	20.3%	13.4%	13.2%
街中で外国人に話しかけられた時に対応できる	22.8%	18.0%	7.2%
ニュースの概要や街中のアナウンスが聞き取れる	5.0%	3.4%	4.8%
英語の本や文章が読める	5.3%	8.1%	6.9%
自分の考えを口頭で伝えられる	11.2%	10.6%	7.8%
自分の考えを文章で表現できる	3.4%	2.5%	1.8%

中学生の保護者は「志望校に合格できる」が最多。小学生ではばらつきがあるものの、「志望校合格」「資格取得」も多く、裏を返せばそれ以外に明確な目標を設定していない様子も伺える

Figure 6: Parent expectation of their children's English level at the age of fifteen (NEA & ALC, 2020)

Limitations

The study attempted to describe the relationship between the education style of one public junior high school in Japan and MEXT's suggested education plans that applies to all Japanese schools. This primary source strengthened and added detail to the data and statistics available online, as well as resolved the ambiguity that was left unaddressed in secondary resources. Nonetheless, the number of samples used to construct the analysis was insufficient, and the capability to obtain accurate data was therefore limited. In addition, it was perceptible that the interviewees couldn't express much of their thoughts due to English barriers.

Conclusion

By analyzing the interview transcript and comparing the results with statistics found online, it was discovered that the English classes at the Junior High School both align and conflict with various expectations set by MEXT and the country. Although one junior high school doesn't represent junior high schools nationwide, it was still a useful source of information to help grasp a general understanding of how far English education has come in terms of its correspondence with globalization and the cultivation of "Global Human Resources."

MEXT implements education reform approximately every 10 years, which significantly impacts the Courses of Study, the teaching styles of teachers, the learning styles of students, and the expectations of parents for their children. While some reforms are substantially reflected in the current English education, others are left untouched, or are incorporated but only have trivial effects on the learning progress and outcomes of students. With the help of society, government, and individuals, MEXT will continue to modify the Courses of Study to correspond to the globalizing world. Implementation of further reforms is inevitable as the society will continue to expand and internationalize, which in turn drastically changes the expectations of students starting from universities, high schools, junior high schools, elementary schools, and to kindergartens.

Future Study

Future research could focus on collecting a larger sample for the interview that is adequate to establish theories revolving around the positives and negatives of English education in junior high schools. Interviewing MEXT is a possible way to drive further research as they could provide more valid and recent resources than what could be found online. Conducting a comparative study on the education style of Japan and other countries could be another approach as well.

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3. On the Ethics and Implications of Banning Books

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Abstract

This investigation delves into the topic of book censorship and the diverse views people hold based on their moral principles. While some may argue that books should not be banned outright, the issue takes on a new perspective when it comes to sensitive or age-inappropriate content in certain books. Through previous statistical data giving information on who, what, where, and why books are banned as well as interviews with school authorities on the topic of censoring books in libraries, the findings from this study indicate that books should not be banned by power. However, books could be banned for inappropriateness based on the audience of the book, depending on the community.

Introduction

Books have a rich history, with each one telling its own unique story and serving as a powerful source of knowledge. However, some books contain controversial topics that have sparked debate in society, leading to the question of whether they should or should not be banned. By exploring this contentious issue, we can gain a deeper understanding of what motivates humans to seek out certain types of books.

The context of this inquiry is the censorship of books and the ways that the concept touches on ethics, power, education, and many aspects that are highly researchable. Throughout history, books have been banned in a variety of contexts for a range of reasons. Banned books contain realistic and timeless topics that allow people, especially youth, to become aware of

the real world. In 2018, the top challenged books included LGBTQ+ content, profanity, and other topics deemed inappropriate for young children, according to statistics (Libguides, 2022). Furthermore, there are beliefs that offensive content such as racism, invalidity of human rights, and others could be banned as it may be hurtful and insulting. Based on how society is changing to become more inclusive and diverse, a closer look into the perspectives of the censorship of books raises the question of whether books should be banned or not.

Research Aims, Objectives and Question

Our objective is to understand book censorship by reading articles, research papers, and conducting interviews. As we acquire knowledge on the concept of banned books, this project aims to gain a deep understanding into the background of banned books as well as the various perspectives on the issue.

Main Research Question

What are the implications of banning books?

Examining the impact of literature on society across various periods of time provides valuable insight into what topics were deemed acceptable or unacceptable to read. Moreover, by analysing the consequences of book censorship, we can explore the ongoing debate surrounding the banning of books.

Literature Review

Literature can be prohibited in many different ways in all kinds of places. According to Reader's Digest (Yuko, 2022), "the first recorded instances of this censorship practice in Colonial America centred on objections to religious and political texts deemed too dangerous for the general public". Nowadays, along with the support of concerned parents, educational

institutions could choose to ban books in order to protect their students from the harsh contents that are thought to be meant for older readers.

Responsibility in the censorship of books holds the question of exactly who holds the power and control to censor books. In the U.S.A, books are most often challenged by parents with a percentage of 42% in 2016, while correspondingly, most censorship occurs in schools or school libraries at 50% in 2016 (Libguides, 2022). However, there are also perspectives that parents have the right to control what their own children read, but not the right or duty to restrict what others consume.

The cause of banned books comes from various motives and rationale. Books are banned in schools for being "obscene or otherwise harmful to children" (Zurcher, 2022) and include controversial topics in society such as sensitive issues and undesired influence. Recent issues leading to banning books include racial issues, political bias, age inappropriate contents, and more. However, the prohibition of literature does not happen without an individual challenging the book. As the First Amendment Encyclopedia states, "Often, complaints arose from individual parents or school board members" (Webb, 2009), revealing the usual suspects who challenge a book.

There are multiple perspectives when it comes to the censorship of books. The realistic and timeless topics explored in banned books may often include profanity and sensitive content that may be upsetting to some. However, as Stephen Chbosky stated, "Banning books gives us silence when we need speech. It closes our ears when we need to listen. It makes us blind when we need sight" (Galante, 2015). This allows for the consideration of the various views that people could have on this topic.

As society has continued to change and evolve in terms of their morals and ethics, it can be said that there has been a shift in the way censorship is now perceived compared to the past. Although LGBTQ+ was thought to be a sin before and is still illegal in many countries, a report analyzing data from 175 countries prove that the average acceptance level of LGBTQ+ people

has increased globally since 1980 (Flores, 2022). This can be connected to how recently, more books about LGBTQ+, especially in young adult fiction, are being published and read. Not only that, but the views on issues such as racism and sexism have also changed, with more people aiming to live in a diverse and accepting community.

Lines of Inquiry

What are the differing perspectives for banning books?

The countless banning of books every now and then gives rise to differing opinions and perspectives. One side says that there is no problem in banning books with reasons such as, "Children should not be exposed to sex, violence, drug use, or other inappropriate topics in school or public libraries." (Britannica, 2022). This indicates the pros of banning books as children could avoid sensitive topics that are not appropriate for their age. Nevertheless, there are also the perspectives of those who think books should not be censored. One reason for this is that there is more to the book than the profanity it contains. An example are books such as The Catcher in the Rye, which contain many swear words, but the language makes the book more realistic. It can be implied that parents have to realize that they cannot protect their children from words they will hear and learn eventually. "Yes, books are dangerous. They should be dangerous - they contain ideas" (Labuskes, 2023). This quote from Pete Hautman, the author of Godless, signifies that books are meant to be dangerous as they contain 'ideas'. It declares how books are meant to provide and give voices to issues and state truths that may be harsh to learn, but what allow people to grow. This supports the idea that censoring books just shows the people's ignorance of the severeness of reality.

In what ways have societal changes influenced censorship?

Changes could be seen in the way different communities have censored books in religious, political, and social concepts. An example of a big shift in how a book was perceived then, compared to now is in 1859 when

Charles Darwin's "On The Origin of Species" created great controversy. "Darwin was accused of dethroning God," as one critic put it, by challenging the literal interpretation of the book of Genesis (Karolides 277). Darwin's books were widely banned because of this, however in the early 20th century, American highschools began to use science textbooks incorporating Darwinian evolution (Cox, 2009). In 1945, George Orwell had trouble publishing Animal Farm as the book was anti-Stalinist, and publishers didn't want to risk offending the Soviet Union (National Library of Scotland, 2022). Even so, Orwell's novel is considered a classic by many today. Many other works such as The Adventures of Huckleberry Finn by Mark Twain or To Kill A Mockingbird by Harper Lee which were once suppressed, are now famous for being classics. The fact that these once-banned books are now studied in schools and read by many people brings attention to the changing attitudes towards what humans accept as suitable reading material, and the possible implications for their moral values.

What factors are considered when banning books?

When different figures censor books, the factors that they consider can be separated into topics that society tends to avoid and are considered inappropriate for certain age groups, or topics that those with power do not want readers to touch on. The most avoided topics include racial issues and profanity, while power-filtered topics include religious contradictions and political biases. Research by the American Library Association shows that 19% of book challenges occur in school libraries, and 28% occur in school curriculums (ALA, 2017). This would explain that almost half of book challenges consider age appropriateness and educational purposes. Other than that, 45% of book challenges occur in public libraries. Public libraries contain books available to any citizen of that country, meaning that there are topics that people do not want publicly available to all groups of people. Therefore, it can be said that though there are many intentions

behind banning books, the most abundant and common of those are age-appropriateness and sensitivity.

Who has the power to censor books?

There are a number of figures that have the power and responsibility to censor books, depending on the setting and situation. Ms. Aiko, the school librarian at AJIS, stated that at our school, she has the power to select and choose the books that are displayed in the library. Once books are in the library, the principal and administration have the authority to remove them from circulation if they deem it necessary. Ms. Aiko clarified that this also applies if students or families express dissatisfaction with a book and request its removal, meaning families can play a role in book banning. Outside of school institutions, whole countries such as Iran and some others have banned the publication of books like The Satanic Verses by Salman Rushdie. Because the novel was seen as blasphemous by some Muslims due to Rushdie using Islam in a satirical way, the book caused a great controversy. The author had to go into hiding as there were calls for his murder. (Hawthorne, 2021). These show the different groups of people such as the government and countries that have banned books for reasons involving individuals having objections against the books. Therefore, there are usually multiple people involved in the banning of a book, as public decisions for getting rid of books could only be done with the opinions of many, instead of one. From this, the extent that people would go to, to ban a certain book, can also be seen.

Research Method

In order to generate new understanding, two interviews were conducted to understand the perspectives of different occupations involved in the censorship of books at Aoba. The interview provided information on the various views of censorship, which were analysed through the transcript written, giving additional information and ideas to previous research.

Research Analysis

By conducting two interviews with teachers in different positions at Aoba, some similarities were seen in the views and ideas that the individuals had on censored books. One interview was held with Dr. Sell, to get an insight on the Group Head of Schools opinions. He stated, "...I fundamentally disapprove of banning books. However, I do approve of banning material that could be very damaging to people.". Dr. Sell has mentioned the word "damaging" multiple times throughout the interview, focusing on how some contents in books could be thought to affect children negatively. In another interview with Ms. Aiko, the school librarian, gave a similar insight of disapproving the banning of books, "...assuming that it's the censorship from groups of power usually, and it's censorship to suppress those that are marginalized, that usually don't have as much power." Based on these responses, it can be said that there is an understanding that overall, there is a shared disapproval of censoring books. However, both individuals have explained that any content that is harmful, or could give a negative influence to people, especially youth, should be censored or restricted. Ms. Aiko gave one example of a banned book by Dr. Seuss, explaining "the depictions are racist depictions and they're hurting marginalized groups. It's actually hurtful and harmful for young kids to read and see those depictions". From this, the issue of whether a book should be banned or not lies on whether the work of literature contains actual content that is offensive and hurtful, or is omitting topics that should be read and understood by more people.

Findings

The findings of this inquiry revealed the differing perspectives, form, and effects of banning books. Books are banned for numerous reasons that often include sensitive topics that upset certain readers. However, by observing different perspectives it can be concluded that not everyone believes that banning books is the answer. People have the right to choose what they read, and not everybody shares the same perspectives.

Conclusion

The contents explored in this inquiry brought about an understanding of the reason why some pieces of literature are censored. The banning of books has many layers to it, as there are various societies and communities of people who have certain morals, affecting the way they think about the many topics explored in books. Profanity, explicit content, and themes involving race or sexuality are some examples of the reason behind the banning of books. Regardless of that, there are people who find that restricted books acknowledge issues that should be talked about more, but are oftentimes overlooked in society.

Future Study

The findings of this investigation have led to questions of whether censoring books is the solution to avoid certain contents in books deemed to be controversial or insensitive. Furthermore, the opinions of other educational institutions as well as communities who have certain beliefs could lead to a more extensive knowledge of this topic.

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4. Japan's Response To Providing An Inclusive Environment For The Vision Impaired.

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Supervisor: Patrick Morrissey

Abstract

This study examines how Japanese society responds to vision impairment in order to provide an inclusive environment for people to live in. Nowadays in Japan, the means for approaching people who are visually impaired have changed into various forms, and policies have evolved with goals toward adaptation of people's necessities. Despite this, recent statistics and poll summary has shown that Japanese society is relatively indifferent to the changes that were made for people including the visually impaired. Moreover, a recent report published by the Ministry of Land, Infrastructure, Transport, and Tourism (MLIT) indicates that colors utilized for public signs may have been inconvenient for people with color impairment. The findings of this research would be beneficial in enhancing the means we approach people's needs by incorporating the opinions and experiences of the visually impaired in consideration of aspects that should be improved.

Introduction

Vision impairment happens when several parts of the eye or brain that function to process images are negatively affected. Their lifestyle changes

extremely from the vision that able-bodied people always see. Therefore, it is important to deeply understand the facts and the real situation of people with vision impairment and its impact on society.

The context of this inquiry is vision impairment as a concept, and how it is approached by society, as well as people dealing with vision impairment daily in the Japanese community. Vision impairment is something that impacts one's lifestyle and occasionally their social status in the community, as public facilities, government, and people around them can approach this topic from diverse perspectives, aspects of their access to everyday life, and the means they use (Ehrlich et al., 2021). Compared to normal vision (people with no vision impairment), mild vision impairment increases mortality by 29%. Furthermore, the risk increases to 89% for people dealing with serious vision impairment which is a serious problem. Although this topic is also addressed in the Sustainable Development Goals to achieve Goal 10: reduced inequalities, it is crucial to understand and approach this topic, to create an advanced/convenient environment for people with vision impairment, such as improving local facilities for instance.

Research Aims, Objectives and Question

This inquiry aims to analyze the lifestyle of people with vision impairment and examine how societies are involved in it. Developing an understanding of vision impairment would support discovering the way for people with impairment of the sense of sight to live in an inclusive environment. Thus the research question we attempt to answer is:

How does Japanese society respond to vision impairment to provide an inclusive environment for people to live in?

Literature Review

According to Visibility, vision impairment is defined as "a limitation of one or more functions of the eye, or visual system" (NDS, n.d.) Examples of vision impairment types are color blindness, amblyopia, myopia, aniridia,

and so on. The percentage of people who have vision impairment is approximately 1 in 300 people, and color blindness is around 1 in 20 in the population of men, and 1 in 500 in the population of women in Japan. Vision impairment impacts people's lifestyles in many ways and the Ministry of Foreign Affairs of Japan has made a convention on the Rights of Persons with Disabilities.

The Ministry of Health, Labour, and Welfare (MHLW) in Japan has been recording the changes in the laws in the Japanese government toward the alternative person/disabilities since 2013. It has been revised in 3 years since 2018 and one of the reforms was the increase in the employment rate system for persons with disabilities. The records of the questionnaire from the public employment security office (Hello Work) have shown that in the last 2 ~ 3 years, the employment rate of the physically disabled has been declining (MHLW, 2022). Further improvements can be expected through the revision in 2024 that includes support for the disabilities counting vision impairment.

The abstract concept of causation in our inquiry is about discovering the phenomena and policies that are causing our environment to be less inclusive for people who are visually impaired. This includes social barriers that are created in numerous aspects of our society, such as physical barriers, political barriers, cultural barriers, and barriers in our consciousness. The MLIT has discovered that some of the signals and colors utilized in local facilities may be inconvenient for people with color impairments (MLIT, 2012). This is one example of causation to focus on, and it would help understand the current status of how society is responding to the needs of people who are visually impaired and generating solutions for them.

When people have an opportunity to fully participate with open-mindedness toward each other, that is called an "inclusive" and "secure" environment. The concept of barrier-free is considered to be particularly relevant to the idea of an inclusive environment. Compared to

other countries, Japan is advanced with barrier-free facilities in public places. For example, referring to the data from MLIT, 94.3% of the train stations have braille for vision impairments (NHK, 2020). However, Japan is still at a point of development with a barrier-free mindset, where people are not being helpful to the people who are needing support. Since other countries are not advanced with barrier-free facilities, the people around are there for support which is why they are successful with the barrier-free mindset. Currently, the government is putting effort into the Disability Discrimination Act (DDA) for raising people's awareness of not only vision impairment but other disabilities.

The idea of perspective in our inquiry includes the point of view of visually impaired people, local facilities, and society. As an example of a perspective from Japanese society, an overview of the poll associated with impairments, the Cabinet Office (CAO) surveyed 3000 people in Japan over the age of 18 with impairments in 2017. Regarding one of the response summaries from the questions, which asked if they know about any of the Japanese laws that are aimed at providing an inclusive environment for people with impairments, an average of 77.55% of them(the total statistics with respective generations) responded "I do not know about the laws at all," indicating that the Japanese society is relatively indifferent to changes that are made associated with impairments (CAO, 2017). Support from society is an essential part of providing an inclusive environment, and this information would help generate a method for a significant influence in Japanese society.

Responsibility for vision impairment in Japanese society has been divided among two sides; the government and the society. Among the research, there was a tendency for the two to have a connection with each other. Such as the community raises their voice for their request which eventually leads to the government accomplishing their applications. An example of requesting is that in the agenda of Hello Work, which is a recruitment website, it was lumped together with visual impairment, and this was

achieved after many years of requests by JFVI (Japan Federation of the Visually Impaired) to publish the information by area of disability.

Lines of Inquiry

How have the environment and laws evolved for people who are visually impaired?

The environment and laws have been evolving for the visually impaired, but are not yet fully disseminated in the community. We sent an email to JFVI and questioned a person named Mr. Kudo to hear about the various changes, changes that affected people, and the needed changes to occur. JFVI (Japan Federation of Visually Impaired) is one of the biggest communities that have been constantly raising their voices toward the related organizations (MHLW, government, etc). One of the examples given was that when the results of employment at Hello Work are tabulated and published during the fiscal year, the fact that they are lumped together with the visually impaired was achieved after JFVI's longstanding request to publish the results by the disability site (MHLW, 2022). In addition, in the Survey of Employment Status of Persons with Disabilities, which is a statistic required by law, the status by disability site had not been tabulated until last year, but it was tabulated for the first time this year (MHLW, 2022).
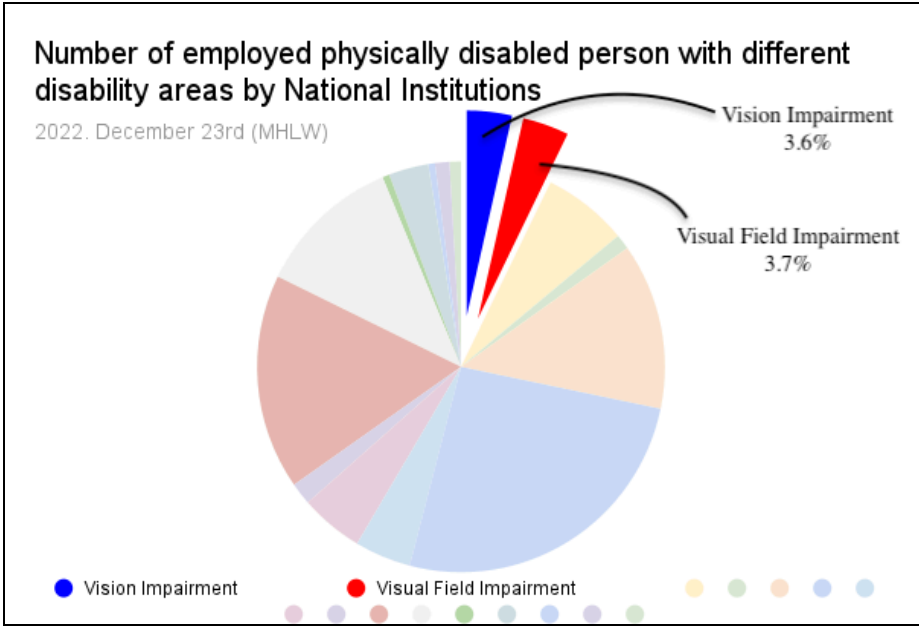
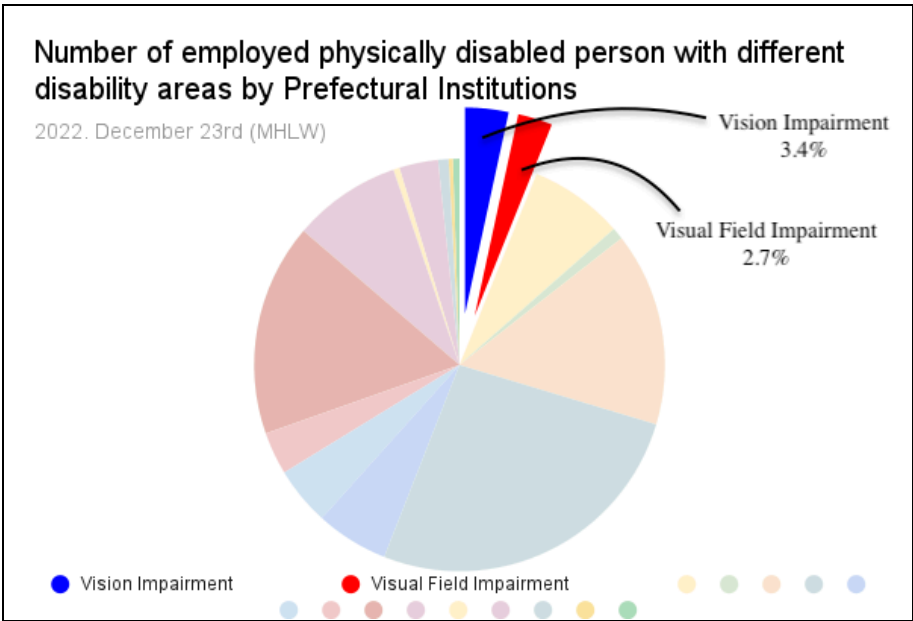Figure 1: Disabilities by Nationality (MHLW, 2022)

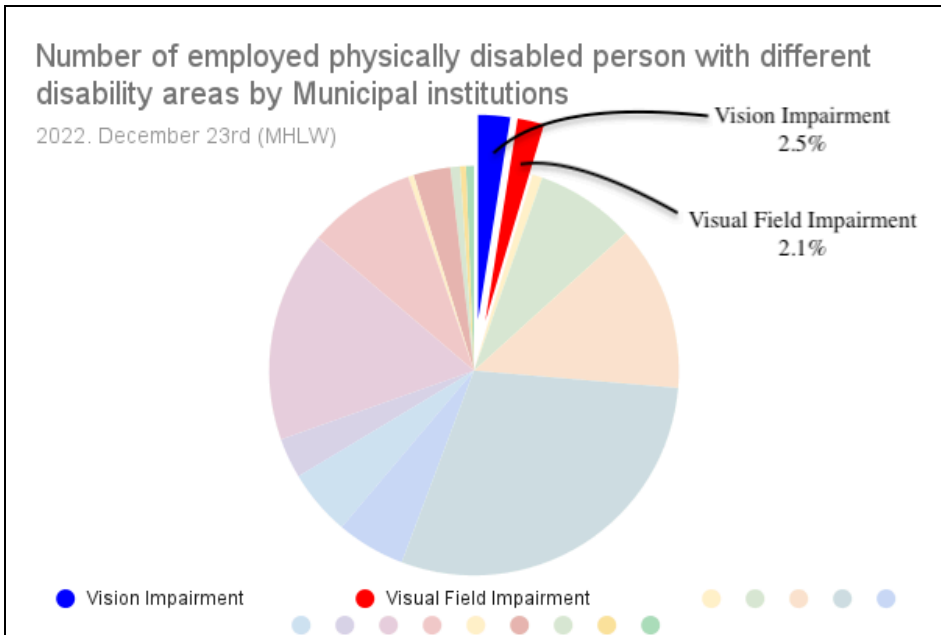Figure 2: Disabilities by Perfectural Institutions(MHLW, 2022)

Figure 3: Disabilities by Municipal Institutions (MHLW, 2022)

This has led to detailed announcements of how many vision impaired (and visual field impaired) are employed and other information. However, while there is currently a menu of various employment measures for people with disabilities, many people do not actually benefit from these measures, and new comprehensive support measures and improvements, as well as support measures specifically for the visually impaired, are needed. Not just in employment but nowadays, things are changing from analog to digital which makes people with vision impairment struggle so evolution in the community is needed every moment for everyone to live in a comfortable inclusive environment.

What causes less inclusiveness and how does Japanese society perceive the evolving environment for inclusivity?

The main 4 types of barriers that are considered the causes of less inclusiveness are physical barriers, such as lack of braille blocks, braille, etc. The second barrier is the political barrier which is a barrier disallowing

people with impairments to do certain activities or even take the qualification exams. The third barrier is the cultural barrier, including a lack of consideration of people with vision impairments when in an emergency or methods utilized in local facilities for communication. The final barrier is the consciousness barrier, a barrier in our consciousness, the way citizens perceive them daily spontaneously. To decrease these barriers, the government has created several laws in Japan, aimed at an inclusive society and providing a comfortable environment for everyone to live in. However, as previously stated (see p. 62), a recent poll conducted by the Japanese government indicated that Japanese society is relatively indifferent to legislative changes made toward an inclusive society (CAO, 2017).

How do different eyesight conditions affect their lifestyles?

Visual impairment is fundamentally divided into four condition types, and their lifestyles are greatly affected by these symptoms. The first example is a daily hindrance. For example, if they have color blindness, they may have difficulty seeing signs in public institutions and other places compared to others. Blindness is also closely linked to their occupational lifestyle: according to a survey by the JFVI, the employment rate for the visually impaired was 44.9%, 27.7% lower than that of the normal population in the same year (National Academies Press (US), 2002). In terms of employment, the visually impaired are grouped into one category regardless of their condition, so their commuting conditions and office environment have an impact on their personal well-being. Thus, symptoms of visual impairment affect people's daily well-being and future income due to their careers and restricted abilities. In order to mitigate these effects, it is important not to single out the visually impaired, but to deal with each person individually, which will have a positive impact on the creation of an inclusive community.

Research Methods

To generate new understandings and dig deeper, our team decided to contact the JFVI to receive opinions from people with visual impairment.

We asked several questions connected to our lines of inquiry, which would help us articulate the information we have gathered previously, as well as gain new perspectives among our inquiry.

In order to generate understanding, we referred to data collected in the past 10 years by government polls. We referenced the data through a new understanding of the effects of visual impairment from a range of viewpoints, including daily life and job rates, which was obtained through additional research using government websites. Furthermore, based on the information gained through research, we made several questions and spoke with the Japan Federation of Visually Impaired in order to evaluate the problem from several perspectives and target problems that could not be fully addressed on their own. These are the questions we have asked the organization.

1. *What are the situations that the vision-impaired people experience difficulties on a daily basis? (Employment, personal life, etc.)*

According to the H30 Employment Status Inspection Date, the disabled were lumped together as visually impaired, but what kind of measures are actually taken in the workplace for each type of disability?

2. *How do visually impaired people use smartphones and computers?*
3. *What are some of the problems that people with color blindness (and also color weakness) have experienced in their personal lives?*
4. *What measures would you be happy to see increased/improved?*
5. *In order to interact with visually impaired people in the future, where do you think is the most effective place to start? (Interview).*

Analysis

What measures would you be happy to see increased/improved?

From the interviewer, the response was that in recent years, some people have not been able to keep up with the shift from analog to digital. For example, ATMs of financial institutions, procedures from mobile phones,

touch panels, self-service cash registers, and others. These few years, due to covid-19, the world has been constantly changing, making it hard for the vision-impaired to have their own lives. The graph below shows the issues faced by the vision impaired during covid-19.
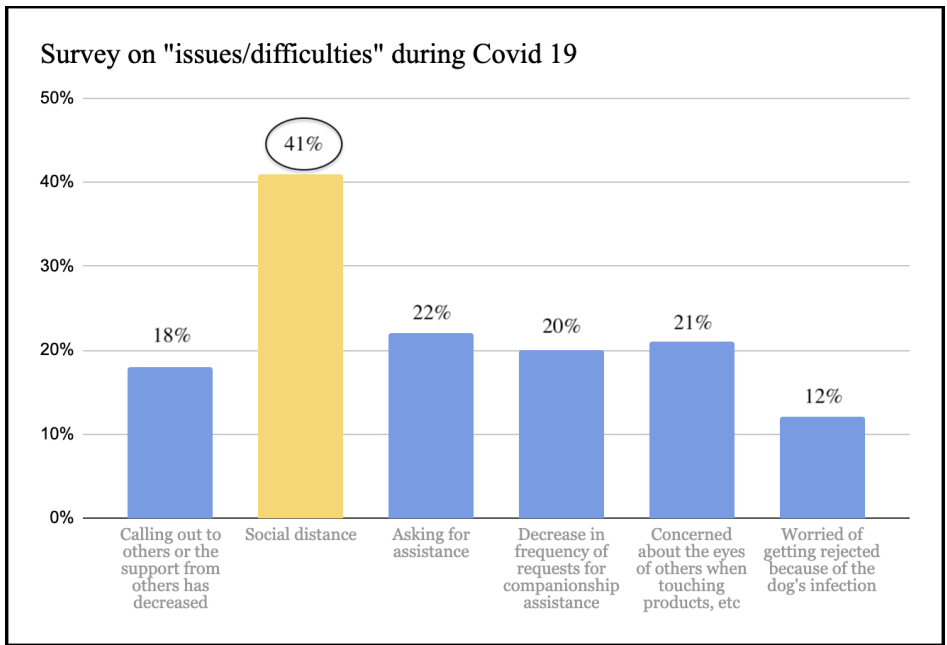

Figure 4: Issues/Difficulties During Covid-19 (PR Wire / JGDA, 2021)

Figure 4 represents the answers of the survey of the difficulties and worries that vision impairs faced during the Covid-19. One of the biggest struggles that people faced was about social distance. Several commented that they were unsure of the distance in line at the supermarket checkout, or that they had difficulty spacing the couches in the hospital waiting room. Covid-19 has made it challenging to talk to people and getting support from others has declined.
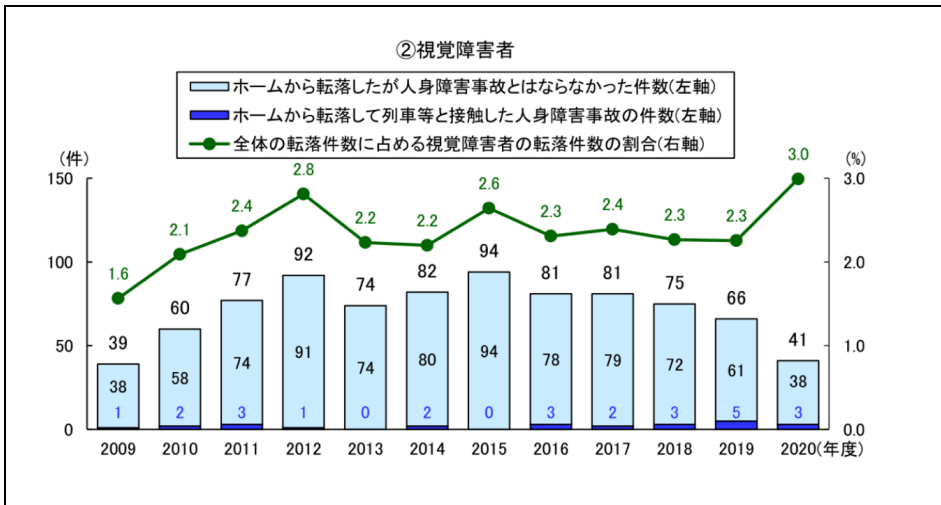
Figure 5: Falls by the Visually Impaired at Rail Stations (DLRI, 2022)

Figure 5 indicates the number of falls at stations for the visually impaired over several years. The light blue represents the number of cases in which a person fell from the platform but the accident did not result in personal injury, the darker blue represents the number of personal injury accidents in which the person fell from the platform and collided with a train and other, and the green line represents the ratio of the number of visually impaired people who fell to the platform to the total number of people who fell to the platform.

From observing the graph, it denotes that the number of falls from station platforms, the number of falls by visually impaired persons has been decreasing since 2015 (94 cases). However, the ratio of the number of falls by the visually impaired to the total number of falls has remained between 2 and 3% in recent years. Considering that the percentage of the visually impaired in the total Japanese population is about 0.25%, it is easy to see how high the percentage of visually impaired people who fall from platforms is. As for the decrease in the number of cases in 2020, it is believed that the decrease in the number of rail passengers due to the

spread of the new coronavirus has led to a significant decrease in the number of falls as well.

By using the two analyses from figures 1 and 2, it could be connected to the interviewer's answer; "When making decisions, formulating policies, or developing products, we would like people to always keep in mind that there are vulnerable people in the world who are facing various difficulties. To this end, I believe that we need a system that allows the parties concerned to actively participate in such projects." and showed how JFVI have been and are currently working toward the difficulties that they have been facing and have kindly told about the current situation of the world.

Findings

Through analysis of the interview transcripts and comparing the data from online, people who have vision impairment are working on improving their lifestyle as much as possible and the reality is much harsher than what people can find on the internet. Furthermore, facilities like the General Consultation Office of the Japan Federation of the Blind and Visually Impaired, they requested an uncounted number of things for each situation. However, most of them have not changed.

Conclusion

There have been numerous revisions for the visually impaired over the past several years as organizations like JFVI raise their demands to the MHLW and other relevant agencies. On the other hand, there are reforms that have not been widely adopted, and in some cases, the progress of such reforms has led to the phenomenon of decreasing assistance from those around them, and nothing has improved yet. Through analysis of the interview mail transcripts and comparison with data on the internet, it is clear that the reality was much harsher than the research information. However, JFVI and other organizations keep continuing to propose various reforms to relevant agencies, and at the same time, are applying themselves closely to

hope that people will start new approaches and considerations for conversing with others.

Future Study

Future research could focus on more specific different kinds of vision impairments. Interviewing several people who have specific vision impairment could provide actual experience and more up-to-date information than what could be found on the internet. Visiting a facility that connects to vision could be another approach as well.

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5. The Popularity And Impacts Of Japanese Anime

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Abstract

This inquiry aims to examine the current popularity and uniqueness of Japanese anime, as well as its evolution from traditional cel animation to its current form. The study also aims to determine the factors that contribute to an anime's quality and popularity, and how anime influences Japanese society. The inquiry reviews the processes involved in creating an anime, factors that make an anime popular, and how the recognition and place of anime have changed. The inquiry finds that the uniqueness and popularity of anime are determined by various factors, such as plot, quality of artwork, and engaging characters. The inquiry also discovers that anime has a significant influence on Japanese society, such as impacting Japanese music, merchandise, and other representational forms. Additionally, anime can also have negative impacts, such as promoting unrealistic standards and ideals. Ultimately, this inquiry seeks to gain further insights into how anime impacts and influences different generations of viewers, and understand the attributes that determine the quality of animation.

Introduction

While animation currently has a colossal reputation throughout the world, Japanese animation, called "anime" in respect to its independence, has an insurmountable place in society. Therefore, understanding its evolution into its current form would be crucial to determine how influential they can be, and what qualities connect to their popularity.

The context of this inquiry is anime in Japan and its evolution over time as we look into its influences in Japanese society. Animation is a form of art that has been created for over a century, but Japanese anime is known for its uniqueness with their original distinct style, concepts, narrative, and other matters, growing it to become an influential phenomena. This led to its influences to spread through Japanese society, with both positive and negative effects. Positive effects may include its impact in Japanese music, merchandise, and other representational forms, while negative influences may include unrealistic standards and ideals. Furthermore, the popularity of certain influential anime can be the key to recognize which traits are deemed more crucial. By looking into this, we can gain further insight on how anime can impact and influence different generations of viewers and understand the attributes that determine the quality of animation.

Research Aims, Objectives and Question

In this inquiry, we aim to find out the current form of anime and how it developed its style and uniqueness. By learning its evolution and how it changed to become different from western animation, we can understand its potential of becoming influential, and identify what determines an anime's quality or popularity.

Big Question

What establishes anime's current popularity and how do they influence Japanese society?

Anime is an individual form of entertainment original to Japan and currently has an extensive influence on its society. By studying the evolution of anime that lead to its current popularity and uniqueness from Western animation, it is possible to comprehend the factors that determine its quality, and the different influences that it beholds on society. To do so, the apprehension of how anime is made, how its place is considered and its specific difference between Western animation is required.

Literature Review

How is anime made?

One of the first things that differentiates anime from others is the form of which it is produced. Japanese anime is characterized by its traditional cel animation looks, shaped from the unchanged way of its production. They are made by hand-drawing approximately 24 frames per second onto transparent celluloid sheets, and flipping them for coloring. With more than 16 different jobs needed to create a single anime, around more than 200 people are involved in an anime project of over 200 million yen (JILPT, 2020).

While more products shift their manufacturing process with advancing technology, Japanese anime has firmly kept their original methods that keep the unique and distinctive style. The process of creating an anime includes a multitude of workflows, starting with planning the project. This stage of planning includes tasks such as deciding the story, and transforming the story into a suitable script until a greenlight is given to begin pre-production (Anime Whiz, 2021). These countless processes on each stage continue extensively till ultimately airing it on streaming platforms. These strenuous processes prove their hard work on keeping the style audiences love.

What are the factors to enable an anime to become popular?

An anime's popularity is determined by several factors, and one of the most important is its plot. A compelling storyline is essential for any kind of narrative, including anime. A good plot should have meaningful conflict that remains consistent throughout the story. Additionally, having high quality artwork with interesting or likeable characters that the audience can easily relate to is also important in sustaining the audience's interest.

Anime can range in popularity from being relatively unknown to earning tens of billions of yen. This inquiry seeks to identify the factors that contribute to these differences. After evaluating a number of representative

works, it has been found that two key factors can help an anime achieve phenomenal success: a diverse cast of appealing characters, and a distinctive appeal that is unique to the anime medium. Unlike novels, anime require a diverse range of characters for viewers to have a choice of favorites and for merchandise purposes. Additionally, high-quality battle scenes and engaging voice acting, unique to the anime medium, are necessary for the work to stand out. Without these elements, the anime's appeal is lost, and viewers may turn to manga or novels instead.

How has the consideration and place of anime changed?

The recognition of anime has been growing rapidly in the past years, both in Japan and globally. According to Netflix, 100 million households around the world watched at least one anime title in the first nine months of 2020, a 50% increase from 2019 (Netflix, 2022). However, Shiro Yoshioka, a lecturer of Japanese studies stated that in the west, there is still a mindset that anime is for children, while anime is considered for all ages in Japan (Kelly, 2022).

Anime, for decades, has been considered in the west to be something that was childish and aimed for young kids, even though this phenomenon has decreased, it still exists nowadays (Padington and Youngs, 2022). Anime is something that has been looked at from differing perspectives, which usually depends on countries and places, since the geographical distance creates cultural differences, and people from different nations get exposed to dissimilar things. However, in the last year, Jujutsu Kaisen 0 (2021 anime film) has surprisingly become a box office hit in the UK and the US. This proved that the Japanese culture of anime is ongoing impacting other countries.

What influences do anime have in Japanese society?

The rising popularity of anime has become a great vitality for numerous industries in Japan. According to Tokyo Treat, the impact of anime has arisen in subcultures that include computer gaming and cosplaying, which

are both celebrated globally (Kosasih, 2019). Anime's influence extends beyond its entertainment value, as evidenced by its impact on popular culture. For instance, anime songs frequently top music charts, while merchandise sales drive the economy and collaborations with major brands are commonplace. Additionally, anime has inspired new fashion styles and continues to shape current trends, further cementing its place in the public consciousness.

Anime has expanded their influential and unique world to simple things such as merchandise, and all the way to worldwide music trends. This has been made possible from their rise in popularity, as the anime industry net worth has doubled in the course of 16 years from 2002 (Nitta, 2022). One of the most well known influences from anime is the cosplay culture, where people dress up in costume and engage as the character from anime. These influences changed its place from subculture to one of the most mainstream forms of entertainment in Japan.

Research Methods:

To gain a deeper understanding, we initially contacted prominent Japanese anime studios to inquire about their impact and popularity. However, as we did not receive sufficient responses, we proceeded to analyze popular anime and determine the factors that contributed to their success. We watched several episodes of anime with different fan bases, and formulated hypotheses based on our observations.

Analysis

After evaluating several successful anime works, we identified two main factors that contribute to their popularity: a reason for the work to be in anime form, and a variety of distinctive characters. These factors, independent of external influences, are consistently present in the most popular anime.

Firstly, at least one attraction exclusive to anime needs to be perceptible. These could be voices that make characters more lively, realistic

backgrounds, or smooth moving battle scenes. Without them, there would be no difference with manga and sustained support would not be achieved. Next, all acclaimed anime have more than 3 characters that are attractive and easily distinguished. With more characters with different voices, personalities, and visuals, more preferences can be met. Anime is easier to lose viewers between episodes but perform better when viewers have a favorite character to follow. Moreover, having a fanbase of many characters makes anime easier to be merchandised, increasing customer satisfaction. Changes in first impressions, and small spaces left in the story so that the audience can expand their own imagination are also important, but it can be concluded that these two characteristics are the most required for anime to grow in popularity.

Findings

Throughout this inquiry, we were able to acquire knowledge on the factors, forms and perspectives of anime. Anime has currently become a worldwide phenomenon, leading to the rise of subcultures and impacts on industries and individuals. Their success emerged from their unique and mesmerizing visuals, and etc that makes it distinctive from conventional animation.

Conclusion

The contents explored in this inquiry generated new understanding on what led to the current popularity of anime and their influence on Japanese society. There are various reasons for their success, most notably their remarkable and unique style, and the various different storylines where ranges of audiences find captivating. Other reasons include high quality movement and visuals, eye-catching and likable characters, and influential music. This popularity gives rise to new forms of entertainment in Japan, such as the cosplay culture, merchandise, and music trends. Anime may eventually become one of the most mainstream forms of entertainment today.

Future Study

The findings of this study has led to several questions of whether anime will become a far more accepted and understood form of entertainment globally in the future. Additionally, the understanding of the strengths of anime can further extend our knowledge on theorizing the certain genres of anime that may become the most popular in advance.

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6. Formation And Changes Of The Universe.

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Abstract

This inquiry focuses on the importance of astronomy in discovering the world beyond Earth's atmosphere. Astronomy plays a crucial role in understanding the origin of the universe, human evolution, and the expansion of the universe. The inquiry aims to explore the contributions of astronomy in history, identify different theories, and predict future events or discover habitable planets. The big question that this inquiry seeks to answer is how the universe formed and how it keeps changing. The literature review discusses the big bang theory, the expansion of the universe, dark energy, the formation of celestial objects and phenomena, and possible consequences of the universe's end. The inquiry's lines of inquiry focus on the big bang theory, the formation of the universe, and the evolution of celestial objects and phenomena.

Introduction

Astronomy plays an important role when it comes to discovering about the world and beyond the Earth's atmosphere. By studying the cosmos beyond our planet, we will be able to understand the origin, human evolution, universe expansion, and everything important to create a better and sustainable future.

The context of this inquiry is astronomy, especially study on cosmogenesis also known as astrobiology and different branches of astrogeology. Astronomy is a huge and complex subject, however as it involves a lot in

our current universe's existence, we can't define anything in this existing world without the help of astronomy. Astronomy displayed countless impacts in the past including developing calendars, seasons, time, navigating oceans, and has driven important contributions to the current science and knowledge of humanities. Much of the work undertaken by historical figures like Galileo and Newton were inspired a lot by astronomical observation. (Fabian, 2010) Furthermore, physics is significant in defining conditions that are impossible to recreate on Earth and it has a strong relationship with astronomy. (Why Study Astronomy?, n.d.). Through a closer examination we can find the origin of the universe and appreciate our existence.

Research Aims, Objectives and Question

The aim of this inquiry is to examine different contributions made by astronomy. By developing a deeper understanding in the history of astronomy and the causation of the universe, we can identify different theories and predict future events or discover habitable planets.

Big Question

How did the universe form and how does it keep changing?

The universe can be defined as all of space and everything in it. It is an essential key that led to the creation of different matter and is the basis of the cosmos. Scientists have tried to explain the beginning of the universe and have come to the conclusion that the most likely theory is the big bang theory (Origins: CERN: Ideas: The Big Bang | Exploratorium, n.d.). Although we don't know for certain if this is what happened the theory seems the most plausible with the knowledge we have now.

After the first phenomena, the universe has evolved by forming and changing its scale, affecting matter in different ways. Those countless numbers of phenomena not only have positive effects in the universe but

can contribute to life-threatening dangers. As all things have an end to it, the universe is no exception.

Literature Review

The concept of change in astronomy is presented through expansion of the universe. This phenomenon called the "Cosmic Acceleration" is still unknown but "Dark energy", a mysterious anti-gravity matter, is presented to be holding all the galaxy together (Briggs, 2020). This phenomenon affects the matter in the universe by cooling down and decreasing the energy it holds. Every particle has a certain speed it moves which won't change. However because the relative speed of expansion is accelerating, it can drop the velocity of matter, resulting in the loss of energy and speed (Siegel, 2018).

All materials were created about 13.7 billion years ago from a singularity caused by a huge explosion, known as the Big Bang. It first began with hot tiny particles, however the extreme density created an explosion with an unimaginable force. This idea was developed during 1927, when an astronomer named Georges Lemaître came up with an idea that is formed from a single point (NASA, 2021). Edwin Hubble noticed that galaxies beyond our own were moving away from us, which led to the understanding of cosmic expansion. Today, the Big Bang is considered the most relevant theory for the formation of the universe.

Different combinations of particles, such as protons, neutrons, and electrons, are the cause of the formation of phenomena in the Universe. 380,000 years after the Big bang, light started to move, and then stars, planets, and other celestial objects and phenomena began forming. The three energetic phenomena, nova, supernova, and hypernova, commonly undergo cataclysmic eruptions after stealing gas from a nearby star. (Subaru Telescope, n.d.) Although these occur on a different scale, it has specific consequences such as creating black holes. Therefore as history evolves, phenomena will evolve too.

Humans have created different theories based on the research they conducted. One of the basic theories is the big bang which states the beginning of the universe. However there is always an end to any living thing which provides different possibilities for ending. Some of the possible events are the Big Crunch, Heat Death, Big Rip, Vacuum decay, and Big Bounce. (Irving, 2022) This hypothesis indicates the different possible consequences of the universe in billions of years. Astronomers are conducting research ongoingly to find evidence and an explanation to the following hypothesis.

Dark matter known as an invisible matter is responsible for the evolution of the universe (Tillman, 2022). Although none of the individuals on this living planet have seen dark energy, it is believed to take up 80% of the whole universe and has a great influence on the expansion. This determines the acceleration and deceleration of the expansion and if the expansion stops due to the dark matter, the universe can shrink slowly and the human might face death from the coldness. (Socratic, n.d.-b)

Lines of Inquiry

How did the big bang, form the basis of the universe?

The universe all began 14 billion years ago from a single hot, tiny particle mixed with lights and energy. The tiny particle gathered all the specks of energy and soon exploded with an unimaginable force caused by the intense density (NASA, 2022). The explosion increased up to 100 trillion degrees however, as the area expanded itself, it cooled down the matter. Among the explosions were atoms and particles grouped up to form the first star to a galaxy. As new stars are born and old stars die, asteroids, planets, and blackholes are produced. Humans can only predict the possible consequences, however the emitting light from the furthest clouds of gas has helped predict the temperature of the original universe which supports the big bang theory (Origins: CERN: Ideas: The Big Bang | Exploratorium, n.d.).

What are the 3 energetic phenomena in the universe?

Nova, Supernova, and Hypernova are the 3 energetic phenomena that exist in the universe. These are types of white-dwarf stars that went through cataclysmic eruption from a nuclear fusion but on a different scale. They shine a million times brighter than a normal star. After an explosion, a supernova turns into a neutron star or collapses into a black hole and hypernovae produce destructive gamma ray bursts (Youtube, 2012; Mann, 2020). At the core of a neutron star the most dangerous elements in the universe exist called "strange quark". It has bizarre nuclear properties with a perfect density, perfect stability, and thus completely indestructible. If the Earth interacts with this element, it could be the death of humanity. Nevertheless, it hasn't been observed yet (Youtube, 2012).

How does the expansion of the universe affect matter?

Dark energy which is an anti gravitational force is the cause of an expansion and its acceleration. When the big bang first happened, gravity was the major force applied in the universe, and due to its small structure the expansion rate was slowed. However in the next 3 ~ 7 billion years, the area increased and dark energy took over the gravity, accelerating its rate. There are 3 types of expansion, open, flat, and closed. As the universe accelerates, it cools down and loses energy. This is because the wavelength stretches as it expands causing it to become "red-shifted"[1], meaning the energy will drop. If the expansion stops, it is believed that it would collapse back into a singularity like how it used to be back when the big bang happened (Delving into Dark Energy, n.d.).

What are the possible ends of the universe?

Currently, there are 5 possible ends to the universe which are big crunch, heat death, big rip, vacuum decay, and big bounce. These all state different consequences to the universe. For instance, big crunch theory suggests that there is a limit to an expansion and then it will contrast back. Heat death

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[1] red-shifted: drop of energy

suggests how the universe will run out of energy to sustain motion or life (Villanueva, 2020). Big rip indicates how the universe will gradually disappear into darkness, vacuum decay is a collapse of vacuum, and finally big bounce is a theory where the universe contrasts and pops up again and expands to become the same size. In addition, if the big bounce theory is true, astronomers believe that the universe has already gone through the cycle of this multiple times already. (Pimbblet, 2015)

Research Methods

To gain new insights and delve deeper into our biggest questions, we conducted an interview with a professional astronomer at Tohoku University. One of the questions we posed was about the possibility of life on other planets, which we will explore in more detail. This interview proved to be valuable, as it allowed us to gain insights from a professional perspective.

Analysis

Our big question "How did the universe form and how does it keep changing?" incorporated studies from multiple fields which includes depth understanding and professional knowledge. In order to deepen our knowledge, we conducted an interview session with a professor of the field of astrophysics at the Tohoku University.

We asked him about his field of study, gamma ray burst, relativistic jet, neutron star and his opinion towards life on different planets which is our extended question for this unit. Although he mentioned how astronomers and scientists should avoid expressing their feelings and opinions on science, he explained the possibility of extraterrestrial life. According to the professor, the International Space Station (ISS) proved the possibility of humanity living on other planets within the territory of what is called the habitable zone. Among them exist 3 moons which are Europa, Enceladus, and Titan. These moons all have factors for organisms to live. For instance

it must include, rocky surface, water, atmospheric pressure, and more. The professor also gave us further information about the universe.

In this sense, with ongoing research and advanced technology, the future of astronomy seems not so far. As the definition of habitable environment has expanded, scientists and astronomers could explore many different pieces of evidence to support extraterrestrial life.

Findings

The findings of this inquiry reveal how new approaches are made to detect future possibilities of astronomy. As only 5% of the universe is discovered now, scientists are fighting the complexities and struggles to launch advanced technologies that would discover the remaining 95%. While the hopes are on the technologies up in the sky, they are always finding ways for improvements. (Barberio, 2023)

Conclusion

This inquiry has generated an understanding on astronomy and how expansion of the universe affects different aspects of matter, phenomena, and the future. A dense singularity caused a catastrophic explosion, forming the basic elementary particles to a complicated phenomenon and foundation to the entire universe. As the cosmic acceleration increases, the distance between different objects increases and as it enhances, the energy particles decrease and drop down the velocity. However, because the universe is highly influenced by an anti-gravitational energy called the dark matter which takes up 80% of the whole universe, if there is enough mass to eventually stop the expansion, the universe would collapse back into a singularity. In fact, the recent study shows the dark energy is weakening and the possibilities are increasing each day.

Future Study

Only 5% of the whole universe is discovered and we've only looked into parts of the discoveries. Therefore in order to fully articulate, it would be

necessary to research more on different factors and understand each section of astronomy to fill in the gap.

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7. Identifying And Preventing A Future Bubble Economy.

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Abstract

The inquiry examines the causation and social responses to the bubble economy. Although there are a lot of judgments as to the way that the government and central banks caused or handled the bubble crisis, our inquiry shows the explanation and enlightenment of the historical bubble crisis. Our analysis of economic statistics, patterns, policies, and social responses to the economic bubble shows ways in which banks, markets, and other social sectors responded during and after the bubble economy. Therefore, the government's policies and people's perspectives reflect the causation and social responses toward the bubble economy in the past, which laid the background for revelation.

Introduction

As the global economy has developed, there are a couple of signs of possible dangerous economic crises in the present or the near future. Those possible signs could cause a bubble economy or recession. The United Nations' 17th goal is decent work and economic growth focused on creating a sustainable economy. Bubble economy and recession are both devastating to the economy, so the 17th goal will also prevent this (United Nations, n.d.). Therefore, it is important to understand the formation of a bubble economy and to form an understanding of the phenomena before the bubble economy, possible ways to stop it, and how we can prevent it in the future.

Learning Context and Problem

This inquiry explores the concept of decent work and economic growth and its relevance to the bubble economy and recession in past, present, and future societies (United Nations, n.d.). The bubble economy is a rapid escalation of the market value of products and assets. This fast rise in price is followed by a rapid decrease in value, which causes the bubble to burst. The bubble is created when the trading value of the asset exceeds its actual or market value, and the demand for this asset is high (Kenton, 2022). The result of the bubbled economy will cause investors' whole net worth, bankruptcy, and business to fail, possibly causing a wide area of debt and deflation. This results in a high period of unemployment and low production, and this is a sign of recession (Liberto, n.d.). Recession is the decrease in Gross domestic product and consumption for 2 quarters. Recession causes low production and can cause high unemployment rates (Talin, 2022). Consequently, by closely analyzing the phenomena happening before a bubble economy, the market value over assets, and consumer thoughts, we can avoid a possible bubble economy now and in the future.

Research Aims, Objectives and Question

The aim of this research focuses on the bubble economy formed, and this is important to explore as a bubble economy can cause economic crises, bankruptcy, and homelessness. Therefore, the goal of this project is to find out what phenomena happened before a bubble economy, how societies were affected by bubble economies in the past, and most importantly, how we can prevent bubble economies from happening in the future.

Big Question

How can we identify and prevent a future bubble economy?

A bubble economy occurs when the trading value of an asset exceeds its actual or market value, creating a bubble, and when demand for this asset is high (Paulson, n.d.). The result of the bubbled economy will cause investors' whole net worth, bankruptcy, and business to fail, possibly

causing a wide area of debt and deflation. This results in a high period of unemployment and low production, and this is a sign of recession (Liberto, n.d.). The effects of the bubble economy is devastating to the economy because it lowers productivity and causes bankruptcy; moreover, with higher possibility of recession after the bubble, it will cause the country to be in recession for a long time (The Bubble Burst and Recession: 1990s-, n.d.). The big question mainly focuses on identifying the patterns of the bubble economy, its phenomenon, past examples of solutions, and how we can prevent it in the future.

Literature Review (Engaging with Ideas and Information)

Change

The concept of change for the bubble economy is between what changed before and after it occurred. Japan's bubble economy in the 1980s is a good example of it. The Japanese asset price bubble was an economic bubble in the 1980s in which real estate and stock market prices were greatly inflated. A range of things can happen when an asset bubble finally bursts, as it always does, eventually. Sometimes the effect can be small, causing losses to only a few, or short-lived. At other times, it can trigger a stock market crash, and a general economic recession, or even depression.

Causation

The concept of causation for a bubble economy is what causes a bubble economy and what are the phenomena before a bubble economy. The cause of bubble economy is the market value is greater than its actual value and too much monetary liquidity in the financial system. Too much monetary liquidity causes the bank to lend more money which can easily affect asset price inflation (Paulson, n.d.). A bubble economy causes high periods of unemployment and low production and could have led to recession (Liberto, n.d.).

Form

The concept of form for bubble economy is what is bubble economy and why it is bad. Bubble economy is created when the trading value of the asset exceeds its actual or market value, and the demand for this asset is high (Kenton, 2022). It can attract a huge amount of investors to buy this product, increasing the demand. When the demand is high, the price of the asset will increase, creating an increasing cycle. The result of the bubbled economy will cause investors' whole net worth, bankruptcy, and business to fail, possibly causing a wide area of debt and deflation (Liberto, n.d.). This results in a high period of unemployment and low production. Therefore, a bubble economy can bring great profits, but it can have a really high negative impact on societies.

Perspectives

The concept of perspectives is in general when financial bubbles burst, investors panic and begin selling off their assets. With more sellers than buyers, sales prices fall. The market as a whole will usually see price decreases as the panic spreads to other sectors. The main idea behind the creation of economic bubbles is a weak financial policy and excessive monetary liquidity in the financial system. When interest rates are going down, investors tend to avoid putting their capital into savings accounts.

Responsibility

The concept of responsibility is what is responsible for the bubble economy and how did the Bank of Japan (BOJ) resolve the crisis. Japan experienced a recession as GDP growth declined from 3.8 percent in 1980 to 1.6 percent in 1990. At the same time, the unemployment rate rapidly increased from 1993 to 2002 . The BOJ reduced the interest rate several times since 1991 to avoid deflation (Lawson, 2022). Meanwhile, the Japanese government implemented several fiscal stimulus packages by undertaking government spending to increase demand and consumption, easing restrictions for companies for more investments, and increasing the money supply (Kenton, 2022).

Lines of Inquiry

What are the precursors of a bubble economy?

An economic bubble occurs any time that the price of a good rises far above the item's real value.

The first view is that the bubble was caused essentially by bank deregulation. Previously, Japanese banks were tightly regulated by the Ministry of Finance. There was little incentive to innovate, but as long as the banks remained in this regime, they were assured of an adequate profit margin and protected against bankruptcy. But this system began to be removed in the early 1980s. Large corporate customers moved away from bank borrowing toward other financings including retained profits, corporate bond issuance, and access to international financial markets. As the Japanese banks lost large corporate customers, they rushed to find new borrowers and projects in small and medium enterprises and land and property investment. But the Japanese banks lacked the ability to correctly evaluate these new borrowers and projects. When the economy was booming in the late 1980s, they over-lent. When the bubble ended, these loans became a huge mountain of bad debt (Lawson, 2022).

The second view, which is more popular, is basically a monetary explanation of the bubble. It simply says that easy money in the late 1980s caused the asset bubble. In 1985 there was a sharp yen appreciation, and the Bank of Japan lowered short-term interest rates and eased money in response. The Bank of Japan's policy reaction function is such that traditionally, Japan's monetary policy responds positively to yen appreciation and domestic recession (Eurostat, 2019). Since price inflation was close to zero at that time, the Bank of Japan could not find a good reason to tighten money and end the asset price increase everyone was enjoying. This was a signaling problem: when asset prices are rising but goods prices are stable, is liquidity excessive or not? The data shows that the growth of broad money speeded up to more than 10% during

1987-1989. This seemed a bit too high for an economy growing at about 4% (Talin, 2022).

The bubble economy that happened in Japan between the late 1980s and around 1990 for example, is attributed to the 'Plaza Accord', although there are various theories. The Plaza Accord was reached on 22 September 1985 at the Plaza Hotel in New York, the United States of America, the United Kingdom, Japan, France, and West Germany, where a meeting of finance ministers and central bank governors from the five industrialized countries met to agree on concerted action to correct the excessive strength of the dollar (Coorey, 2009).

The US aimed to increase export competitiveness and reduce the trade deficit by weakening the dollar. Coordinated intervention by the central banks of various countries led to a gradual depreciation of the dollar (Motoshige, 2010).

After the Plaza Accord, Japan began to experience a recession due to the strong yen, and the Bank of Japan implemented a low-interest rate policy in order to bail out the domestic export industry (Lawson, 2022). The effects of the strong yen and the low-interest rate policy led financial institutions and companies to invest in property and equities in the domestic market.

Has any government in the past deflated a bubble economy or recession?

There have been multiple significant and devastating cases of bubble economies in the past. The requirements for the beginning of a bubble economy are highly accommodative monetary policy and low-interest rates, so during this period, the economy is more active as the government tries to stimulate the economy. "Low-interest rates drive investors further out in the risk spectrum, driving asset prices higher" (Beutel Goodman Investment Counsel, 2021). Since the cause of the bubble economy is low-interest rates, the solution to a bubble economy is to increase interest rates. The formation of the Japanese Bubble economy in the 1980s is when the housing asset was growing dramatically due to economic prosperity and

distribution business. Those businesses buy land to produce their product, and if the land value increases, the companies use it to borrow more money from the bank. The rising land price will push up the corporate value of the company. The action that causes the bubble to burst is monetary policies from the central bank, and it is implemented at the wrong moment (Motoshige, 2010). Orthodox monetary policy suggests "In the absence of fast inflation of ordinary prices, there is no need to pull back on the monetary reins." Even if the stock and housing prices are skyrocketing, CPI and money supply are increasing, there is no need to increase interest rates or any monetary policy if there is no high inflation of necessities. Holding back monetary reins will cause opposite effects (Motoshige, 2010). The Japanese central bank's action in trying to stop the bubble economy was ineffective and caused bad effects on the economy. The burst of the bubble economy led Japan to a period of deflation, slump, and debt. The Australian government in 2008 experienced a big recession. It was a financial crash. The solution they used was cash injection to their citizens as a means to try and stimulate the economy. The government handed out 12.6 billion US dollars to low-income and middle-income earners. Also, 28.6 billion US dollars is spent on schools, infrastructure, roads, housing, and energy efficiency (Coorey, 2009). The Australian government tried to stimulate its economy by giving more opportunities for jobs.

In conclusion, a bubble economy and recession is an important issue for governments and societies. There have been few successful attempts to deflate or prevent bubble economy, but all effects of the government tried can either worsen or lower the bubble economy.

How does a bubble economy affect societies?

The inevitable collapse of asset bubbles can limit the net worth of investors. This can lead to debt deflation and financial panic, which may cause a recession to spread throughout society. As the investors lost their appetite for more investments, the prices of lands and stocks declined (Liberto, n.d.). Let's take the example of the Japanese asset price bubble: a

large number of real estate properties flooded the market, causing land values to drop and the supply of houses to exceed the demand. As a result, the prices of land and housing crashed starting in 1991 (Ravina, 2022). Meanwhile, as the prices of lands and other goods declined, people had no confidence in investing since they couldn't gain more rate of return. Thus people tended to save money, instead of spending or investing, which negatively impacted the country's economic development, causing a serious liquidity trap (Nielsen, 2022). On the other hand, the decline in stocks and land prices also increased the banks' bad debt. In fact, the cumulative disposal of non performing assets rapidly rose since the 1990s. There were 180 financial institutions that went bankrupt from 1992 to 2003 (Vogado, 2020). During the financial crisis, many corporations went bankrupt due to an excessive amount of debt that they owed to their creditors. It's clear that this debt was not worthless, and it had a significant impact on the economy. Furthermore, the real estate market played an important role in economic growth, contributing to 16.9% of the US GDP in 2021 (Han, 2021). Take the example of the Bush administration's economic stimulus policies that were intended to promote home ownership, lending rates were eased which raised the demand for the housing market, the housing prices started to rise. Meanwhile, because the threshold for borrowing has been much lowered, more insolvent people were not able to repay their debt, which pressured the lending and borrowing institutions (Illing, Ono & Schlegl, 2018). Therefore, under extremely low-interest rates and an extraordinary amount of liquidity, housing prices were rising and the lenders' credibility declined.

It's evident that both land and detached housing prices continued to rise during the housing market boom leading up to its peak around 1990 (see Figure 1). However, following the crash of the housing bubble in 1992, prices began a long-term decline due to an increase in both the number and percentage of vacant homes (refer to Figure 2).
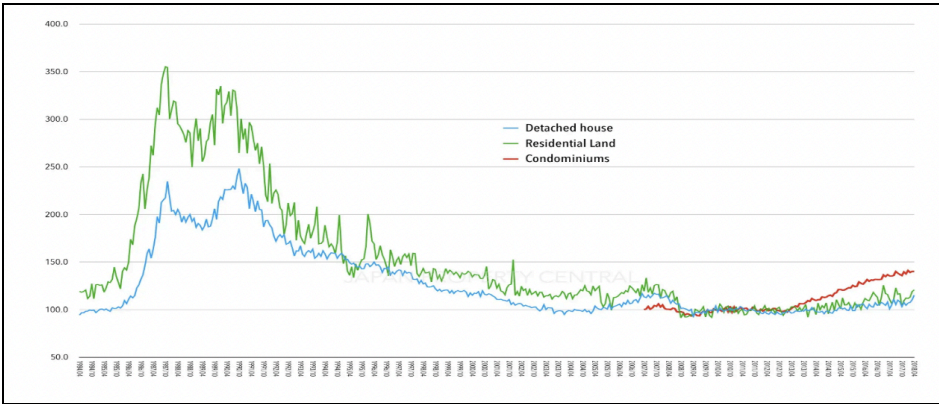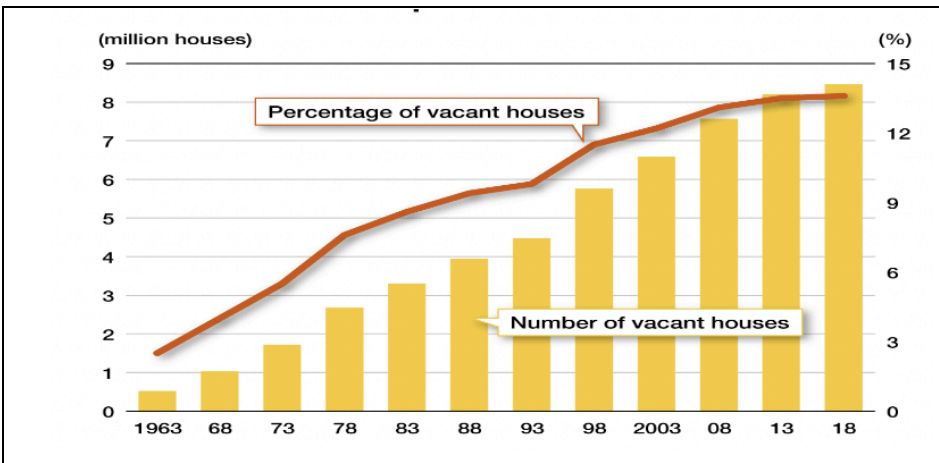
Figure 1: Before the Bubble

Figure 2: After the Bubble

Research Methods

Our team sent an email request to Professor Schlegl at Sophia University, asking for an interview opportunity to learn more about the bubble economy and its connection with government monetary policies. Professor Schlegl agreed to our request, and we conducted the interview on January 14th. During the interview, we discussed an economic paper that Professor Schlegl wrote about asset bubbles, as well as formulas for calculating

bubbles. After the interview, our team will transcribe it to better understand our conversation with Professor Schlegl.

Analysis

Our team wanted to learn more about bubble economy, possible solutions or ways to prevent an asset bubble, government policies related to bubble economy, and why such government policies are often ineffective. So we interviewed an Assistant Professor from Sophia University, Matthais Schlegl.

Before interviewing Professor Schlegl, our team had read and learned about bubble economy and had some questions about bubble economy that we wanted to ask some expert in this field. We found out that Professor Schlegl had worked on many papers related to the bubble economy and asset prices. Also Professor Schlegl is working on a model of economic stagnation and asset bubble price bubbles (Personal Website of Matthias Schlegl, n.d.). Fortunately, Professor Schlegl has accepted our request for an interview, so we have our interview on January 14, 2023 at 13:10 JPT.

During our interview with Professor Schlegl, we asked several questions related to the causes and prevention of asset price bubbles. We inquired whether he believed that low-interest rates were the primary cause of subsequent bubble economies and whether he thought asset bubbles could be prevented. Additionally, we asked if he had any theories for preventing price bubbles and to explain the formulas used in his article, "Credit booms, debt overhang, and secular stagnation."

Throughout the interview, Professor Schlegl provided detailed views and explanations about the relationship between interest rates and asset bubbles, the inflation crisis in Japan, and the fundamental concepts underlying the causes of asset bubbles.

So from the interview we had with Professor Schlegl, we came up with a hypothesis. Since low-interest rates are the main cause of all asset bubbles,

it encourages people to borrow more money from banks. People are going to buy more things and lend more during the consumption boom period. So after the period is over borrowers end up in a lot of debt. Those lenders won't make up for the shortage of consumption, causing a negative effect on the economy.

Therefore, what the government can do to avoid a bubble economy is to try keeping the interest rates high because low-interest rates are what contribute to the borrowing rates and consumption boom.

Findings

Our research has identified that a bubble economy can be caused by low-interest rates and inadequate central bank policies, such as quantitative easing, implemented at the wrong time. Our interview with Professor Schlegl at Sophia University further confirmed that low-interest rates and poor government policies were the main causes of the Japanese bubble economy. We also learned that a long period of recession usually follows the burst of a bubble economy. Therefore, we concluded that a bubble economy is a dangerous phenomenon that can have a significant negative impact on multiple societies and people. By analyzing past events, it's possible to identify a bubble economy by its aftermath, a long period of recession.

Conclusion

Overall, the research concludes that a bubble economy is devastating to the economy and society due to it causes many people to go bankrupt, and the GDP and employment rate to decrease, causing a recession. If a bubble is created, it is hard for people at that time to believe a bubble is forming because not all bubble economies happen with low interest. So people would just tend to believe a prosperous economy is just a natural phenomenon in the economy. Thus it is easy for people to see a rising economy, but hard for them to identify a bubble economy. On the other hand, what the federal government can do to avoid large-scale economic

bubbles is to avoid the huge amount of quantitative easings, such as excessive easy lending policies and long-period historical low-interest rates. By this, the economic liquidity would be reduced since people with low economic credibility can't borrow huge amounts of money from banks to do investments and have pressure to repay their debt. This improved the overall credibility. Thus avoiding asset price bubbles.

Our team's hypothesis is that the bubble economy crisis is unlikely to happen in America in 2023. Currently, America is going through a period of inflation, the interest rates are rising and there is less quantitative easing from the Fed. Meanwhile, the social economic credibility is stable. According to the Federal Reserve, the funding rates from the Fed have risen rapidly since the beginning of 2022 in order to decrease the inflation rate, meaning it's harder for people to lend money. (Figure 3)
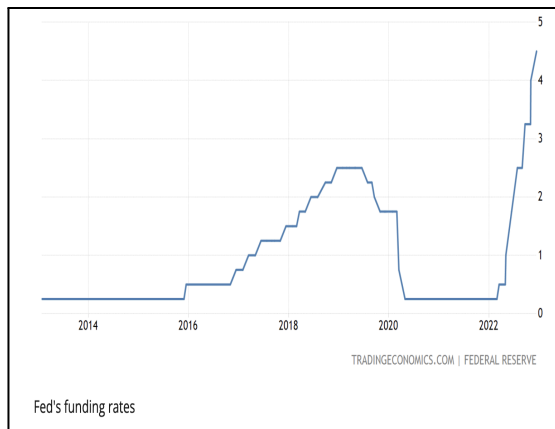

Figure 3: Monetary Tightening and Its Impact on Bubble Formation

Therefore, as the Fed is implementing monetary tightening, it's unlikely to form another bubble because it slows the growth of economic activity. On another hand, the number of non-profit households and offices is reducing, which implies that the number of people with the ability to repay their debt is stable. (Figure 4 & Figure 5)
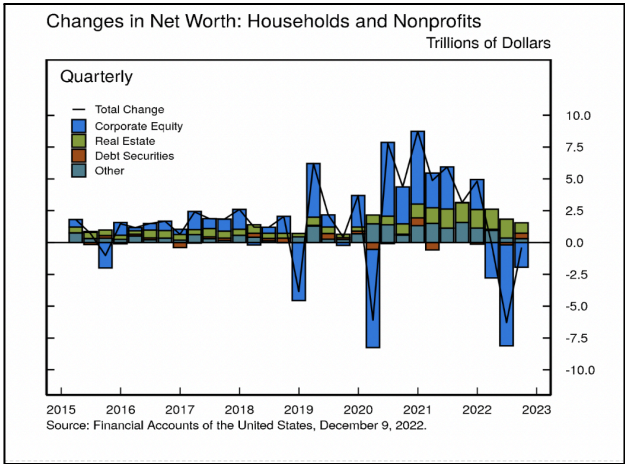
Figure 4: Trends in Non-Profit Households and Debt Repayment Capacity
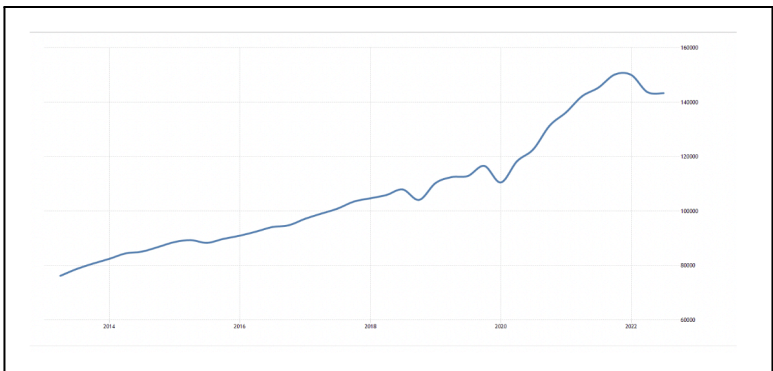

Figure 5: Stability of Debt Repayment Capacity Among Households and Offices

This indicates that the citizens' overall economic credibility remains normal even if the federal debt remains extremely high. Consequently, with high interest rates and the organization and household's credibility, it's unlikely for America to have a large-scale bubble crisis in the near future.

Future Study

Our inquiry research on the bubble economy has significantly enhanced our knowledge and understanding of the world. The next step is to delve deeper into this topic and consider what possible actions we can take to

identify a bubble economy before it forms. Research alone is not enough, and it's essential to conduct multiple experiments to develop an effective approach to detect a bubble economy before it becomes a threat to the economy.

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Concluding Chapter

Empowering Lifelong Learners

This chapter reflects on the profound influence of the Transdisciplinary Unit (TDU) on the Grade 10 students and teachers at Aoba-Japan International School (Aoba). It describes a set of expected and unexpected outcomes. It draws on observations and anecdotal interviews with students and teachers that imply the TDU process has, to varying degrees, transformed their modes of thinking and behavior. While we know the TDU had a positive influence on the students and teachers, its actual consequence is still in the process of being fully understood.

The TDU was designed and delivered in the context of the unique expansion of digitization causing shifts in worldwide economic, social and communication structures that have never been seen or felt before. This ever-changing global context challenges educators to rethink the roles of schools and schooling. The TDU is one aspect of Aoba's response to address the challenges faced by students and teachers in today's complex context.

In developing distinctive empowering capabilities to lead positive change the TDU, guided by transdisciplinary methodology, is adaptive and responsive to today's context. It is not a programme inserted into an overcrowded curriculum, rather it is the cornerstone of learning in Grade 10. As the students transition from the middle to senior years within Aoba, the TDU is a continuation of the teaching and learning framework they experienced in the primary and middle sections of Aoba.

The TDU began with three main foundational pillars underpinning its existence, starting with a future-oriented approach. This approach

recognizes the constantly changing world and the need for students to develop skills, knowledge, and attitudes to succeed in an evolving and complex future. Specifically, the TDU focuses on fostering the students' and teachers' critical thinking and innovation through collaborative learning and adaptation.

Initially, the TDU had a singular objective: to provide students with a head start in preparing for the challenges of learning in Grades 11 and 12, as well as in university. This goal was rooted in the belief that structured critical thinking paves the way for creative thinking. However, there was a strong desire among students to develop the skill of critical thinking that was applicable in various life aspects, including home, school, university, and the workplace.

TDU pedagogy aims to teach students how to learn, promoting consistency in student learning experiences that reinforce collaborative learning and cognitive and meta-cognitive cohesion. This approach requires nurturing curiosity, autonomy, and critical thinking in students. The TDU project initially aimed to better prepare students for the challenges of Grades 11 and 12 while equipping them to navigate the complex, ever-changing landscapes of university and the workplace.

The second pillar strengthening the TDU is the concept of self-determination. Rooted in its principles, the TDU empowers students to be the architect of their own learning journeys, transcending traditional educational boundaries by fostering autonomy and agency. Through exploration of their interests and guided inquiry, TDU nurtures transferable skills that extend beyond the school context. This process, aligned with the 'how to learn' philosophy, empowers students not only to master subject content but also to develop critical analysis, effective communication, and problem-solving skills.

Within the context of Aoba, integrating self-determination theory principles into a structured team learning environment enhances cohesion, communication, and well-being. Emphasizing autonomy, competence, and relatedness, both students and teachers create environments that nurture individual and team motivation. Team autonomy, which allows for student agency, contributes significantly to overall team success.

Structural change is the third pillar required to support a future-oriented, self-determining framework. At AJIS, a dedicated group of teachers took a professional risk by prioritizing teaching students 'how to learn' over dictating 'what to learn'. The TDU incorporated up to 40 percent of the weekly curriculum time, a change that initially faced some resistance from traditional teachers.

Departing from traditional Grade 10 curriculum delivery methods and entrusting students with choices required teachers to take a leap into the unknown. Rethinking their teaching practices and acquiring confidence in their adaptability took 12 months. For the teachers, this change came with challenges and professional satisfaction.

Resistance primarily revolved around concerns related to "what to learn" rather than "how to learn." Altering the power dynamic between teacher and student was challenging in the beginning. However, through concerted teacher professional development and students' prior experience with inquiry team based learning, conditions for success were established.

Ultimately, the success of this TDU approach exceeded initial expectations.

What we found out

Our teachers observed positive growth in student-teacher interactions and increased motivation. Entrusting students with greater control over their learning seemed to boost confidence, teamwork, and efficacy for both teachers and students. Students became comfortable enough to respectfully request the teacher to step back and allow them to independently complete their tasks. As teachers gained more confidence in entrusting all students, their teaching methods evolved, making differentiated interventions a common practice. This fostering of positive and respectful interactions between teachers and students improved relations and contributed to a better understanding of how to gain deep knowledge through a structured cycle of inquiry.

At the core of the TDU lies the Aoba Inquiry Cycle, a dynamic framework guiding students through stages of curiosity, investigation, synthesis, and communication. This cycle encourages students to embrace the intricate links between various disciplines, facilitating comprehensive comprehension of complex topics. Our students acquired a deeper level of knowledge and insight into the subject under examination, which deepened contextual understanding and the formulation of recommendations for potential solutions and future actions.

While the inquiry framework provides a procedural process for learning, aiming to support continuity and coherence of learning in a social context, all students at Aoba learn within a structured team learning environment (STL) whereby the students and teachers operate in teams. Student teams of three and the core teaching team of three had specific roles and responsibilities. It was noticeable that in general this environment supported the students' increased autonomy and agency, built competence, and strengthened their relatedness to learning. In comparison to previous teaching methods they described an increase in student productivity and a

strengthening of their intellectual well-being, confidence, efficacy and their capacity to collaborate.

The TDU does not operate in isolation; it is integrated into AJIS's Senior School program, emphasizing flexibility and responsiveness. Students collaborate with a team of senior teachers, each representing distinct subject domains. This collaborative interaction supported student team efforts to address real-world challenges that often demand interdisciplinary knowledge to develop solutions.

Furthermore, the TDU provides a bridge between the International Baccalaureate Primary and Middle Years Programme as students transition into Grades 11 and 12. Aoba provides students with a choice between two intellectually rigorous programs —International Baccalaureate Diploma Programme (IB DP) or Global Leadership Diploma (GLD). It was noted by students and teachers that the learning environment provided regular opportunities for dialogue between students and teachers identifying their the student's strengths, interests, and ambitions, guiding them towards the program best aligned with their aspirations.

The TDU's impact extends beyond academics. From a self determination point of view the TDU is structured to expect and encourage students to explore their passions and chart their learning journeys. Many comments by teachers throughout the year indicated the TDU's allows students to shape and express their identity. Teachers witnessed how this empowering aspect of the TDU can boost student confidence, enhance self-awareness and strengthen problem solving competence. Given both confidence, self-awareness and problem solving attributes are critical for navigating the future challenges found when entering university and work it is reasonable to assume the TDU is useful for the student.

Invite to join us

The TDU initiative, while born within Aoba, has the potential to support the reshaping of education beyond its horizons. As student-authored research papers showcase the success of the TDU, they call on fellow educators and institutions to join the journey of reform. The transformative power of the TDU, rooted in inclusivity, flexibility, and responsiveness, serves as an example of how education can evolve to nurture critical thinkers and adaptable learners in an ever-changing world.

At Aoba the TDU emerges as one example of a catalyst for change in the realm of education. As this chapter closes, the echoes of student-driven inquiry and the guiding principles of the TDU foster a culture where 'how to learn' takes precedence over 'what to learn'.

In the ongoing journey of educational transformation, the collaborative spirit and dedication of Aoba teachers and school leaders stand as a testament to the belief that together, we can redefine education for the better. The TDU extends an open invitation to fellow educators, researchers, and institutions to join hands in reshaping education to empower the leaders, innovators, and lifelong learners of tomorrow.

Thanks and Appreciation

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