Connecting the Dots: Understanding the Value of Museums Victoria's Educational Partnerships

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ABSTRACT

A museum must be able to grow and adapt to the evolving needs of its community by examining its stakeholders. This project investigated Museum Victoria's (MV) external partnerships with their Education Team. After surveying the Team and their partners, we identified MV's most valuable relationships. We concluded that the School [F-10] education audience was the leader in the number of partnerships, creating opportunities for MV to diversify their audiences. Furthermore, we discovered that MV's stakeholders value them most for their reputation. We found key areas where MV can improve their partnerships by increasing benefit or redistributing effort. Overall, this is an innovative project that enables MV to determine their stakeholders' value and will be advantageous for future partnerships.

ACKNOWLEDGEMENTS

EXECUTIVE SUMMARY

BACKGROUND

Museums Victoria is the largest public museum organization in Australia, with three main operating museums. With the expanding role of museums in today's society, it is critical for Museums Victoria to understand and meet the needs of their diverse stakeholders. According to Patrick Green, former CEO of Museums Victoria, "the capacity of museums is to adapt their mission to the changing needs of communities they serve," (Greene, 2006).

Prior to this project, Museums Victoria only had a preliminary understanding of their partnering organizations with their Education Team. Furthermore, it was unknown who the stakeholders were, how many there were, and what their needs were. Individual employees knew who they interacted with outside of the Museum, but the Museum's interactions as a whole were not documented. It was also ambiguous if the Museum had the same perception of the relationship as the stakeholders.

METHODOLOGY

Our mission was to aid the Museums Victoria Education Team in further understanding their engagements with partnering organizations and determine the value of their relationships by mapping their stakeholders. This was accomplished with four major objectives:

Objective 1: Identify the partnering organizations involved with the Museums Victoria Education Team and what they value in a partnership.

Objective 2: Classify the value of these partnering organizations to Museums Victoria and vice versa

Objective 3: Visually represent these relationships by mapping stakeholder interactions

Objective 4: Analyze the data from the interviews and stakeholder map and present our findings to Museums Victoria

To achieve these objectives, we first interviewed eleven members of the Education Team. From these interviews, we gathered a list of 156 partnering organizations. With the help of the Museum staff, this was simplified to a list of their current and most relevant partners at that time. One outcome of this objective was a stakeholder list including 33 contacts from 28 different organizations. The second outcome of this objective was defining six core value attributes. These terms were synthesized following our interviews with the Education Team based on their responses and make up the 'value' of their partnerships. The value attributes are *reach, reputation, expertise, resources, innovation,* and *profile*.

Next, we sent a survey out to the Education Team and asked them to classify the focus of each partnership, state its outcomes, specify their target audience, and relay whether the relationship was ongoing. Most importantly, our survey had the Education Team rate how the partnership benefits Museums Victoria in the 6 value attributes mentioned above. A similar survey was sent out to the 33 external contacts in order to understand the value that Museums Victoria provides to their partners.

In order to represent the value of Museums Victoria's partnerships, we created a benefit flow map that tracks the amount and type of benefit that each external partner provides. In our benefit flow map, the nodes represented the different external partnerships of the Education Team. The lines connecting the nodes represented the benefits gained from that partnership. If many value attributes were rated highly, the partnership would appear closer to Museums Victoria on the benefit flow map, meaning that the closest partnerships are the most beneficial. This map was used to identify the most valuable partnerships and the areas for improvement in these relationships.

RESULTS

A. EDUCATION TEAM

In total, we identified 67 partnerships that were relevant to this project and included them in our survey for the Education Team. Our benefit map included 25 organizations because we were unable to gather information for all of the organizations. While this benefit flow map does not represent the entirety of the Education Team's work, it still provided some valuable insights for the partnerships we have data on.

Our results indicated that the most beneficial partnership was The Computer Science Education Research Group (CSERG) at the University of Adelaide. This was surprising because it was not an organization that was commonly identified by the Education Team as being highly beneficial. It was followed closely by more expected organizations like the Department of Education and Training (DET) and their Strategic Partnership Program (SPP). However, only a few members of the Education Team interact with the University of Adelaide CSERG, whereas the majority of the Education Team interacts with the DET. Therefore, in practice some organizations like the DET might end up being more beneficial in reality due to their wider impact within the Education Team.

Breaking down the benefit flow map by the type of benefit allowed us to look more closely at how the Education Team is interacting with these partners. The *reach* benefits tended to range from medium to high in a fairly expected manner. In the *innovation* category, only a few organizations were considered of high benefit. These organizations were generally either funding or research related organizations. *Profile* benefits were mostly high and there were not any noticeable patterns or significant observations here. *Expertise* was another area where there were a few highly beneficial partnerships and many other low benefit partnerships. Universities scored very low in this category despite the fact that they tend to have lots of individuals with specialized knowledge. This may indicate that the Education Team has not taken full advantage of the *expertise* contained in these universities. The benefits from *reputation* were fairly high across the board, with the exceptions of Virtual Learning Victoria, the ACHPER, and the Catholic Education Commission of Victoria. Lastly, the *resources* category was highly variable -- a third of the partnerships gave large benefits

and the rest gave little to no benefits. This shows that the Education Team is highly reliant on a few *resources* for their operations, which means if they were to lose one of these highly beneficial partnerships, it could lead to a major reduction in the amount of programs they can run.

After factoring in the effort of each partnership, we were able to come to conclusions about the value of each partnership. Nearly all of the Education Team's partnerships are considered to be of good value, which means that they provide a large amount of benefit for the amount of effort required. The Victorian Curriculum Assessment Authority and the Ardoch Youth Foundation ended up having the highest value out of all the organizations surveyed. The Melbourne City Experience, Aurecon, Monash University, Hobsons Bay Libraries, Virtual Learning Victoria, and the ACHPER, while still a decent value to Museums Victoria, were rated the least valuable compared to the other organizations.

Moving into analysis of the Education Team's audiences, our data shows that the School [F-10] education audience is the leader in terms of amount of programs, developments, and partnerships. This audience has a total of 20 partnerships whereas the second highest audience has only 7 partnerships. This disparity in the amount of partnerships shows that the Education Team can improve their audience diversity and *reach*. With that said, in the interviews, it was noted that the Education Team has been focusing on expanding their offerings for the Early Learning audience, ages birth to 5 years old. Our findings show that they have been progressing towards this goal, as the Early Learning audience has the second highest amount of partnerships.

B. STAKEHOLDER RESPONSES

Out of 33 external contacts, we received 27 responses to our stakeholder survey. Organizations with multiple respondents were Monash University (3), the Geography Teachers Association of Victoria (2), and Deakin University (2).

From our data, the stakeholders seek *reputation* the most in a partnership with Museums Victoria, followed by *innovation* and *expertise*. The partners value *resources* the least in their engagements with the Museum. Most of the scores for the indicators are spread out, almost resembling a normal distribution. However, the distribution for *reputation* is heavily skewed to the left -- the mean is larger than the median and most of the rankings are very high. The distribution shows that *reputation* was the most popular attribute

for the external partners. Furthermore, we discovered that the Tertiary organizations rate the Museums Victoria's partnership the highest in every value indicator.

We also asked the external contacts about the future of this relationship. We discovered that 63% of the respondents are very likely to continue this partnership. Additionally, 67% of the respondents would recommend Museums Victoria as a partner to other organizations. This speaks highly of the Museum's value to their partners and the nature of their engagements.

C. OPEN ENDED CODING

In response to the open-ended questions, the partners indicated that they value Museums Victoria for six major benefits: expertise, space, status, resources, exposure to wider audiences, and collaboration. These responses showed that the partnering organizations value Museums Victoria most for its knowledge and creative spaces. The data also noted that the partnering organizations value the engaging provocations and teaching resources that the Museum provides in addition to its audience exposure. It is necessary to note that these themes closely matched the value attributes that we developed, which indicates that our value metrics were reasonably accurate.

Furthermore, the partners indicated six types of recommendations which the Museum could do to improve the relationship: no improvements, communication/engagement, resources, formal relationship, reciprocal benefits, and staffing. From the 28 distinct coded responses, the most common response was 'no improvements' for the relationship. This shows that a large portion of respondents have a positive opinion of their relationship with Museums Victoria. The second highest represented response was that the organizations would like the Museum to provide more resources and improve their communication/engagements with the organization.

D. CASE STUDIES

In order to do a more in-depth analysis, we did a few case studies on specific partnerships. These partnerships were chosen by our lead sponsor, Carolyn Meehan. The partnerships selected were the Geography Teachers Association, the McCoy Project, the Catholic Education Commission of Victoria, and the Department of Education and Training. These were chosen to represent relationships the museum has with different categories of organizations.

FINAL THOUGHTS

Overall, we found that Museums Victoria's Education Team does a good job of maximizing their external partnerships. Most of these partnerships are of low to medium effort and produce a medium to high benefit. The Education Team has no relationships that were very low in terms of effort versus benefit. Moving forward, we recommend Museums Victoria work towards moving these relationships into a higher value status through improving the benefit of these partnerships. One way this can be addressed is by looking at the stakeholders' open-ended responses and acting on some of their suggestions as this could provide more benefit or make the partnership more efficient. Museums Victoria's educational partners think highly of Museums Victoria as a partnering organization.

Finally, this project serves as a starting point for Museums Victoria to more comprehensively understand how they interact with other organizations and will hopefully lead to a more robust partnership tracking and evaluating system. By mapping their interactions with external partners, Museums Victoria will be able to understand and meet the needs of their diverse stakeholders. Furthermore, Museums Victoria will be able to improve their existing partnerships and develop new ones with a higher degree of accuracy than in the past. Most importantly, Museums Victoria will to be able to grow with the expanding role of museums in today's society.

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    Section 5.2 – written by Andrew Thomas, reviewed by all

Appendix

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TABLE OF CONTENTS

LIST OF TABLES

TABLE OF FIGURES

CHAPTER 1: INTRODUCTION

The role of museums is rapidly evolving in modern society (Arinze, 1999). Due to changing visitorship, improving technology, and shifting societal norms, museums need to constantly re-evaluate their existing programs and improve their offerings to remain relevant and up to date. Museums are becoming increasingly focused on reflecting the values of their communities. Paul Tichmann, curator of the Lithuli Museum in South Africa, argues that, "these changes call for the museum professional to adopt a multidisciplinary approach, to be sensitive to competing voices in interpretations, and to be constantly engaged in consultation with communities," (Tichmann). Museums often function as a source of identity for communities and bring different community groups together. According to Patrick Green, former CEO of Museums Victoria, "the capacity of museums to adapt their mission to the changing needs of communities they serve is an undoubted strength that in part accounts for their longevity as cultural institutions," (Greene, 2006).

Museums Victoria is the largest public museum organization in Australia, with three main operating museums. With the increasing roles of museums in society, it is critical that Museums Victoria understands and meets the needs of all their diverse stakeholders. The museum acknowledges this in their strategic plan which states that, "Museums Victoria's impactful, collaborative and enduring partnerships and networks will position us and raise our profile as an innovative and inclusive museums organisation," (Strategic Plan, 2017).

With over 2 million ticketed visitors in 2018, Museums Victoria has a good understanding of what groups of people are physically accessing the museums resources (Black, 2018). However, Museums Victoria's resources extend far beyond visits to their museums. They offer a collection of education programs for all ages and publish thousands of documents in their collections database. The challenge lies in monitoring the external partnerships of the museum. There are no simple numbers or characteristics to assess this demographic, but it is becoming more important to understand this audience's motives and needs in order to continue providing value to them. In preliminary background research, Museums Victoria identified this core challenge by saying, "If the organisation is to fulfill its potential as an inclusive space for sharing and exchanging knowledge, experiences and expertise, it is

important that it creates conditions that guarantee continuity and secure relations," (Catching the Wave 2.0, 2018).

Prior this project, Museums Victoria had only a preliminary understanding of their partnering organizations with the Education Team. Furthermore, it was unknown who the stakeholders were, how many there were, and what their needs were. The largest gap in this research was a lack of knowledge management: individual employees knew who they interacted with outside of the museum, but collectively the Museum's interactions as a whole were not documented. It was also ambiguous if the Museum had the same perception of the relationship as the stakeholders.

This project's research was designed to satisfy Museums Victoria's need to further understand their partnerships' value with the Education Team. Working with the Education Team at Museums Victoria helped us focus the scope of our stakeholder analysis. In this report, the term "partnering organizations" will be used to define this group of external stakeholders. This project contributed to the creation of a visual network of partnering organizations. This process of stakeholder mapping was completed with the assistance of Museums Victoria's Education Team. Our first step was to interview the Team to better understand their metrics of value of their partnering organizations and to create a list of organizations with external contacts. These interviews and subsequent surveys helped us classify the value of these organizations to Museums Victoria and the value of Museums Victoria to the organizations. Finally, we produced the stakeholder map to visually represent the interactions that we had documented. From the mapping process, we drew strategic insights for their outside partnerships. Overall, this research was essential for Museums Victoria to develop and remain progressive in the museum field. Our project has provided a framework that can be applied to other departments throughout the Museum to continue its growth. It will continue to be important for Museums Victoria to explore and solidify a deeper understanding of their relationships with partnering organizations.

CHAPTER 2: BACKGROUND

In this background chapter, we will address the following topics:

I.   The function, fundamental challenges, and importance of tracking a museum's value.

II.   Stakeholder mapping and an approach to visually displaying this knowledge.

III.   A detailed description of Museums Victoria and its entities.

IV.   Museum's Victoria's future strategic plan for 2017-2025.

SECTION 2.1: UNDERSTANDING THE INTRICATE VALUE MUSEUMS PROVIDE

2.1.1 THE FUNCTION OF A MUSEUM

A museum, no matter what size, has to perform a wide variety of different roles. According to Emmanuel Arinze, the President of the Commonwealth Associations of Museums, "the traditional role of museums is to collect objects and materials of cultural, religious and historical importance, preserve them, research into them and present them to the public for the purpose of education and enjoyment" (Arinze, 1999). However, as museums have grown in size and complexity, so have their responsibilities. Museums today have to organize events, manage online resources, and maintain historic buildings on top of their traditional roles of preservation and exhibition. Visitors now include educational groups, researchers, and corporate events. Many museums even function as a source of identity or pride for the local community (Greene, 2006). As Stephen Weil (2005) once said, "nobody familiar with a museum can be other than dazzled by

the extraordinary range of activities in which it regularly engages" (p. 38).

With such a diverse range of capabilities and responsibilities, museums are hardly static institutions. A museum must be able to adapt to the changing needs of its community and the different fields it is involved in. With the rise of the internet, museums now need to transfer their mainly print and physical collections into digital collections as users increasingly demand to be able to access these resources online (Williams, 2018). In today's society, museums are also "being revitalized as marketplaces for new ideas in [their field], and as forums for engaging members of their communities in exploring potential impacts on our society" (Alpert, 2013). Museums are in a unique position that allows them to reach the conscience of their community, foster dialogue, improve understanding, and encourage positive change (Arinze, 1999).

Although a museum takes on many distinct roles, almost all of them have one major aspect in common: they involve interactions with groups outside of the museum. Getting visitors in the door requires engaging with the local community and working with schools to bring in educational groups. Partnerships with universities and researchers allow

these groups to view the museum's collection and make use of its highly specialized information. Acquiring new information and developing exhibits also relies heavily on outside sources. Museums often partner with researchers to bring groundbreaking knowledge to the museum's audience (Alpert, 2013). To create new exhibits, museums often borrow artifacts from other museums or historical groups. Additionally, cultural groups may need to be consulted to make sure items are displayed in an appropriate manner. One example of developing a new exhibit would be creating autism-friendly online resources for a museum. Many key stakeholders such as autism experts, parents of autistic children, and the children themselves will be outside of the museum (Pryor, 2015). Without cultivating the requisite bonds with research groups, the community, sponsors, and cultural organizations, a museum will not have the resources to improve as an institution and reach its goals. A museum's partnerships and relationships are the foundation for the existence of the museum. This means that understanding its stakeholders is of considerably higher importance to a museum compared to other organizations.

2.1.2 THE FUNDAMENTAL CHALLENGES FACING A MUSEUM

The multitude of museum involvements often leads to an incredibly complex organizational system. A large museum will likely have dozens of branches and departments, each with a wide range of staff that cover many diverse skills and disciplines. Different departments might have various staff members with high level expertise in their own specialized subject (Greene, 2006). This may include topics related to the fields of study of the museum, but it can also include other outside topics. Web developers play an essential role in maintaining a museum's online presence and resources. Outreach staff focus on improving museum publicity and promote the museum to outsiders. Management staff set up special events and organize museum activities. This is all in addition to the numerous experts, researchers, and educational specialists the museum employs to maintain and improve their collections and exhibits. This means that a museum can often have a wide variety of individuals and departments with different skills all working together to achieve a museum's strategic goals.

Not only do the abilities of a museum's staff vary, but so do the goals a museum is trying to achieve. A museum can only set so many reasonable goals at one time, and with so many areas of involvement a museum will only be able to focus on some of these. This means that some museum goals may include entirely different departments and have little overlap with other goals. For example, one goal could be reworking the organizational structure of museum to be more networked (Greene, 2006). Another goal could include improving the museum library's ability to deliver services and resources to external users (Williams, 2018). An additional goal could be to add more interactive learning exhibits for young children. Each of these goals will have very different stakeholders, both internal and external to the museum. This means that developing a plan to achieve these goals can be difficult since what works well to accomplish one task might not work well in others.

The last major challenge that faces museums is that it can be difficult to determine the impact of a museum. In some fields there are much clearer indicators for success than others. In business, a company can point to figures such as profits or growth to give an idea of their value. A researcher can point to published papers to show they are influential and making an impact in their field. While these aspects certainly apply to museums, due to the multiplicity of roles a museum plays there is no individual metric a museum can use that will encompass all of their activities. This is partially because some activities are less quantifiable than others. For example, one of the fundamental goals of museums is to educate society and improve school curriculums (Arinze, 1999). Success in this field is hard to define quantitatively. While there are ways to determine the effectiveness of portions of a museum's work, coming up with an all-encompassing idea for the value of a museum is difficult.

2.1.3 THE IMPORTANCE OF CHARACTERIZING VALUE IN MUSEUM RELATIONSHIPS

Knowing the impact of a museum is essential for making sure the museum is working efficiently and achieving its goals. By tracking the value of the museum, the museum can have a better understanding of how it is reaching its goals and providing results. Additionally, mapping the flow of information both into and out of different museum subgroups

allows the museum to know the impact of specific departments and how these departments' work affects the museum in other areas.

Furthermore, mapping a museum's relationships is essential since most museums are run as non-profit educational institutions. This means that they rely mainly on ticket sales, government grants, donations, corporate sponsorships, individual bequests, and memberships to fund the museum (Alpert, 2013). In order to survive, a museum needs to form enough relationships and partnerships with these groups to maintain a flow of money into the organization. Since the majority of these groups are donation based, the museum needs to get these sponsors excited about their work and show that their donations are being put to good use. If a museum can't show that its donations are creating something of value, the sponsors will be hesitant to support the museum. This will ultimately remove a major source of income for the museum. Therefore, knowing the value of a museum and the impact of its work is an essential part of convincing sponsors to support the museum.

Lastly, it is critical that a museum understands the value that each one of its stakeholders provide. The value of ticketed audiences is easy to determine, as there is a monetary value that can be associated with their visits to the museum. On the other hand, the value of non-ticketed audiences is hard to determine. These groups often provide more benefits than just financial support, making it hard to determine their true value to the museum. Museums usually have tight operating budgets and staff time is fully spoken for (Alpert, 2013). Therefore, knowing the value of these partnerships is incredibly important because it allows the museum to allocate its resources to the stakeholders who will provide the biggest benefit.

In conclusion, knowing the value of a museum's relationships, both to the museum and to the stakeholders, is a critical piece of information for a museum's success. However, museums are incredibly complex organizations that play a wide variety of roles and rely heavily on partnerships with outside groups. Additionally, success for a museum can be hard to define and often varies depending on which area of a museum's work is being studied. With such a complicated network of relationships there is simply no easy way to determine a museums impact. In order to get an accurate assessment of value in museum relationships, more advanced

stakeholder analysis techniques are required to answer this question.

SECTION 2.2: STAKEHOLDER MAPPING

Stakeholder mapping is an effective tool to identify and classify the major groups or individuals that play a role in the organization's operations. Stakeholder relationships with organizations can be equivocal, however the fundamental idea behind stakeholder mapping is that only a few major attributes are needed to categorize and get meaningful information on stakeholders. There is not one specific method for stakeholder mapping. Depending on the circumstances different methods can be used successfully. Each stakeholder group can have multiple important characteristics, and these are not fixed for every situation. However, there are some attributes that can be considered essential in the majority of the situations. For example, the reason of the partnership, the level of engagement, importance of the stakeholder, and the nature of the relationship are some of the most frequent and important attributes that need to be understood. There is one general

method that applies to all types of stakeholder mapping. This overall method of mapping stakeholders consists of four different stages: identifying, analyzing, mapping and prioritizing (Morris, J., & Baddache, F., 2011).

2.2.1 APPROACH TO STAKEHOLDER MAPPING

The first phase of stakeholder mapping is to identify all of the organization's stakeholders. The number of stakeholders is not fixed and will change, as long as the museum runs its operations. Nowadays, not all stakeholders are easily recognized since people can act indirectly or through online services. Thus, it is important for organizations to understand not only the current and potential stakeholders, but also the indirect ones. Moreover, Museums Victoria deems this kind of stakeholder as a non-ticketed audience. Through brainstorming, researching, and interviewing current and potential stakeholders, Museums Victoria can better identify their non-visible stakeholders.

Once all of the stakeholders are listed, it is imperative to have them analyzed by further researching the stakeholder's relationship to the organization. The stakeholders' contribution,

drivers and barriers to the relationship, willingness to engage, and nature of each engagement are all vital for any organization to better understand their stakeholder network. (Morris, J., & Baddache, F., 2011). Short descriptions derived from background research and a variety of sampling methods can be helpful in the mapping process.

Mapping is a visual display that demonstrates the placement of one element in a certain domain and its association with a different element in a specific range. Stakeholder mapping can include current, potential and non-visible stakeholders in relation with their importance to their organization. Using the same criteria for all the stakeholders in the analysis will help determine each stakeholder's level of importance towards the company. There is a wide range of visual representation tools that can be used to map stakeholders including software programs and organizational charts.

Organizations have to decide how they are going to prioritize their stakeholders, because not every stakeholder group can receive the same level of attention. Stakeholder mapping helps organizations decide which stakeholder group or individual should be given more attention. Prioritizing stakeholders requires companies to decide on the most

important attributes of the stakeholders related to their situation.

2.2.2 DISPLAY METHODS OF STAKEHOLDER MAPPING

The aforementioned stakeholder mapping approach can be applied to most stakeholder relationships; however, every situation requires a different methodology. This can be the way stakeholders are identified, the attributes that are chosen to be analyzed, and the visual representation tool used to show the results. One method was developed by Pryor (2015), who categorized stakeholders as consumers, creators and contributors. Based on the level of influence and interest attributes, stakeholders should be involved, informed, consulted, or monitored. Stakeholders that are highly interested and influential should be satisfied and informed. Stakeholders that have a great influence and low interest should be consulted with caution in order to avoid extensive frustration. Meanwhile, stakeholders with low influence and high interest can be informed about ways that they can contribute. Moreover, stakeholders with low influence and low interest can be monitored in case they change their stakeholder position. In

this case, the results were shown through a quadrant chart (Figure 1).
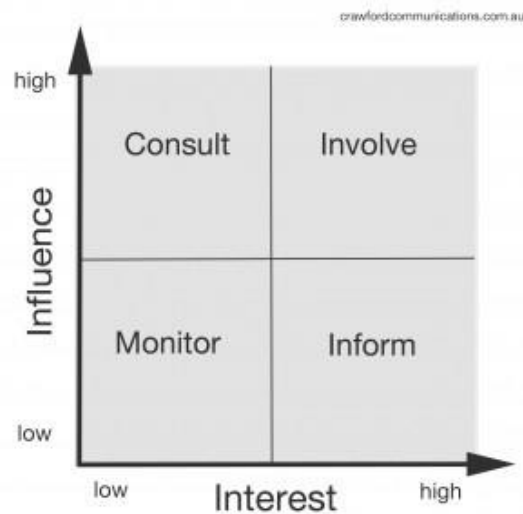
Figure 1 - Influence v Interest grid

Another stakeholder mapping method was developed by Mitchell, Agle, and Wood in *Toward a Theory of Stakeholder Identification and Salience: Defining the Principle of Who and What Really Counts (1997).* In this method they used three major attributes to categorize stakeholders: power, legitimacy, and urgency. Power was defined as the extent to which the stakeholder can influence the relationship. Legitimacy was defined as the perception that the stakeholder's actions are appropriate for the situation. The last attribute,

urgency, is the degree to which stakeholder claims call for immediate action. A Venn diagram with these attributes is created and each stakeholder is placed into the appropriate region (Figure 2). The region a stakeholder is in determines how the stakeholder acts and how the project manager should manage that relationship.
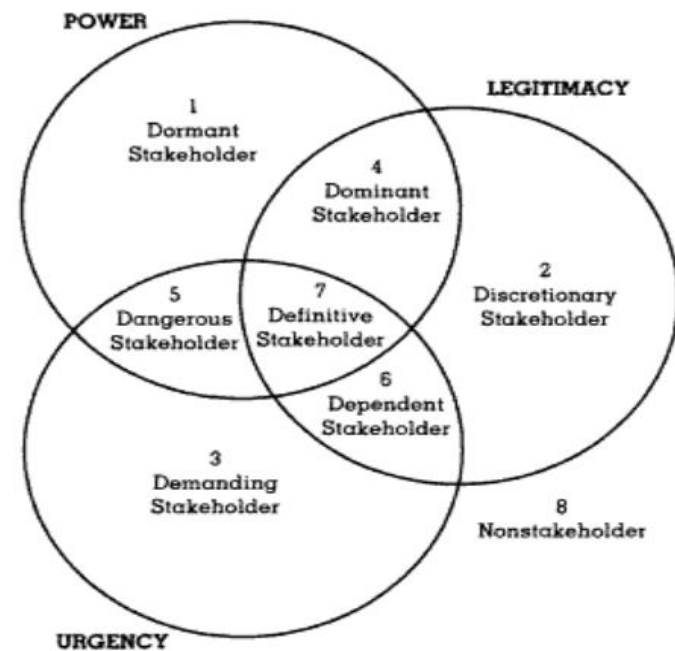
Figure 2 - Stakeholder typology

2.2.3 UNDERSTANDING STAKEHOLDER VALUE

Determining the value of each stakeholder to an organization is an important reason to map stakeholders. Value can be a very ambiguous term, as it can be defined very differently by each organization. To map stakeholders, it is necessary to come up with a collection of attributes about each stakeholder. These attributes should include the necessary information to make a judgment about a particular stakeholder's value.

A specific example of showcasing stakeholder value was used by a student research team at Worcester Polytechnic Institute (Stark, Wilson, Savoie, & Li, 2018). This teams report, *Identifying Knowledge Flow to Develop a Strategic Plan*, dove into the stakeholder relationships at the Port Phillip EcoCentre. With the help of Gephi, a mapping software, the team created a stakeholder map (Figure 4). The map includes color coding, various line thickness, and bolding to identify different attributes (Figure 3). Attributes that the team determined to be important were type of knowledge, type of stakeholder, level of effort, knowledge flow, and strength of relationship. From this map, the group was able to draw conclusions on stakeholders depending on where they were in relation to the EcoCenter and the type of relationship they had.

The team also used a two axis metric, change versus effort, to establish stakeholder importance. This enabled the group to determine which sponsors should be prioritized the most (Stark, Wilson, Savoie, & Li, 2018). While there are multiple paths to take to map stakeholders, the core steps remain the same: identify, analyze, map, and prioritize.
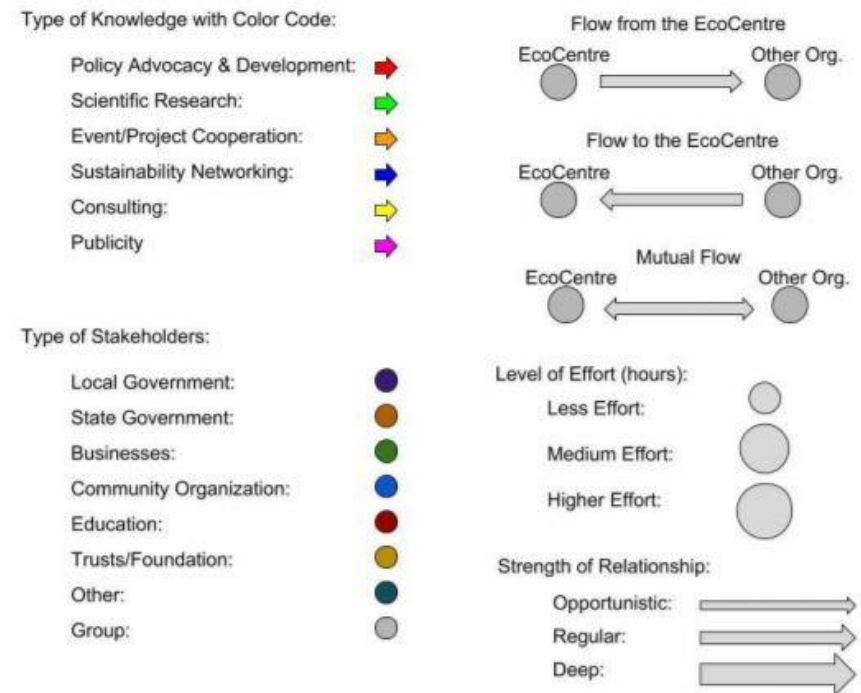
Figure 3 - Coding stakeholder interactions (Identifying Knowledge Flow to Develop a Strategic Plan, 2018)

map stakeholders, the core steps remain the same: identify, analyze, map, and prioritize.

SECTION 2.3: MUSEUMS VICTORIA, A NETWORKED MUSEUM

Museums Victoria is one of Australia's non-profit organizations and operates the Melbourne Museum, Immigration Museum, and Scienceworks. Museums Victoria started in 1854 and has grown into Australia's largest public museum organization (Black, 2018). As Museums Victoria continually grows, they build more relationships which create a network of diverse partnerships. The museum has a broad range of impact extending locally, regionally, nationally, and globally. Museums Victoria's core network includes three main operating museums. Together, they provide three primary types of value: education, research, and culture.

The Melbourne Museum is the largest museum under Museums Victoria and is devoted to the culture, history, natural environment and people of Victoria. It saw over 1.1 million visitors last year (Black, 2018). The Melbourne

Figure 4 - Mapping stakeholder interactions via Gephi (Identifying Knowledge Flow to Develop a Strategic Plan, 2018)

From this map, the group was able to draw conclusions on stakeholders depending on where they were in relation to the EcoCenter and the type of relationship they had. The team also used a two-axis metric, change versus effort, to establish stakeholder importance. This enabled the group to determine which sponsors should be prioritized the most (Stark, Wilson, Savoie, & Li, 2018). While there are multiple paths to take to

Museum, itself, is a very complex network of relationships with education, research, and community organizations.

The Immigration Museum focuses on displaying the history and impacts of immigration to Australia. These topics are conveyed through the eyes of the immigrants by using their stories and experiences as the backbone of their exhibits. This museum saw a crowd of almost 118,000 visitors last year (Black, 2018). Due to the cultural ideals of the museum, these partnerships are more centralized to local and regional organizations and individuals.

The Scienceworks Museum features innovative interactive exhibitions about science and technology in Melbourne's suburb of Spotswood. The initial mission of this museum, founded in 1992, was to become a place where children can be entertained by experimenting with science. In 2017-2018, Scienceworks recorded 481,037 visitors (Black, 2018). The partnerships found here are geared towards more educational organizations in the state of Victoria specifically.

Museums Victoria runs an Outreach Program from each of the three main operating museums. The Outreach Program brings exhibits and collections to groups of people who may not be able to physically make it to the museum for a variety of

factors including age, travel restrictions, and even imprisonment. Museums Victoria describes its Outreach Program as a "Museum in a van," (Museums Victoria, 2019). In this van, the museums provide several learning opportunities ranging from learning kits, virtual experiences, and interactive presentations. Each experience is catered to serve different age groups from kindergarten to adults. In 2017-2018, the program affected over 180,000 people, a 1,000 percent increase from 1999 (Black, 2018).

2.3.1 EDUCATION

One of the primary purposes of a museum is to educate the general public about what they have to offer in terms of knowledge, information, and artefacts. Museums Victoria provides educational resources in several different mediums of engagement. They educate by providing people with interactive exhibits; however, they also educate on more personal level. The Outreach Program serves as an external outlet for education. This program offers a unique educational experience that is provided across the Melbourne community as well as the region of Victoria. In addition to this, Museums Victoria had 255,725 educational visits in 2017-2018 (Black, 2018).

Educational visits could include student classes from the region touring the museum or attending a tailored presentation.

The highest level of partnerships in the educational sector of the museum would likely fall under local and regional governments. For example, the Department of Economic Development, Jobs, Transport & Resources and the Department of Education and Training, which belong to the Victorian Government, are identified as key partners and supporters (Museums Victoria 2019). According to Museums Victoria Annual Report for 2017-2018 they reached 100% of the areas under the Victoria Local Government (Black, 2018). It is important that Museums Victoria is in communication with these agencies in order to provide relevant educational value to students. Under the government associations, they work with individual schools to cater to their curriculums and needs. One supporter they have recognized in this field is the Victorian Curriculum and Assessment Authority (Museums Victoria, 2019). On a personal level, Museums Victoria offers an MV Teachers program, which is an online subscription service for teachers and students in Victoria. It is designed to give easy access to all museums and education services as well as help plan school group excursions to their venues. There are

three levels of partnerships that Museums Victoria establishes in order to provide direct educational value: regional government, regional schools, and teachers or other individuals.

2.3.2 RESEARCH

Museums Victoria also plays a vital role in the research field. It allows people with similar areas of expertise to participate in research studies to further the general knowledge of their respective fields. Additionally, it is an outlet for researchers to display their work to the public. Museums Victoria published 101 works of research last year and engaged in varying professional partnerships in order to establish itself as a place for research (Black, 2018).

The Museums Victoria Library Collection has been in existence for over 160 years. It serves as a continuing collection for the Museum's curators. "With a collection of over 40,000 titles, the library is considered to be of high significance to scholars, researchers and artists, along with Museums Victoria's staff," (Museums Victoria, 2019). The archives preserve records documenting the administration, collecting, exhibition, education, and research history of

Museums Victoria. A database of this size and importance is used as a main resource for existing and potential partners in the scholarly research field.

One essential category of partnerships is between Museums Victoria and other museums or cultural/educational institutions. Museums Victoria has a strong track record of ongoing partnerships in the museum field with 180 collection items loaned to other institutions last year (Black, 2018). Museums Victoria also receives several artifacts and exhibits from partnerships around the globe. From September 2018 to March 2019, the Melbourne Museum held an exhibit revolving around the life of Nelson Mandela with a goal of continuing his legacy and creating a society that is equal for all. This exhibit featured over 200 artefacts which left South Africa for the first time. After Melbourne, the exhibit will be traveling around the world for the next five years (O'Brien, 2018). Being able to work closely with other museums is ideal for innovative ideas and sustained growth. Museums Victoria contains more than 17 million items in their state collection (Black, 2018); there is a lot of opportunity to partner with other organizations to share this wealth of knowledge and collections.

There is a very specific, targeted engagement between museums and local universities, because a museum is an extremely valuable resource for students and professors. Museums Victoria identifies several secondary academic institutions as key supporters such as the University of Melbourne, The University of Sydney, and The University of Tasmania. Exploring partnerships with universities is beneficial in both forms of museum access: online databases and visitation. Furthermore, there are many behind-the-scenes interactions between museums and local higher education institutions that make this partnership work including curriculum matching and yearly conferences.

2.3.3 CULTURE AND COMMUNITY

Museums Victoria employs transitional themes in their strategic plan in order to stimulate continuous growth. One transitional theme is to, "Place First Peoples' living cultures, histories and knowledge at the core of Museums Victoria's practice," (Black, 2018). To follow through with this theme, Museums Victoria is involved with several with cultural and community organizations in the region. "Over the course of the past year a large number of diverse programming opportunities

were developed to further strengthen Museums Victoria's commitment to the communities of Melbourne and Victoria," (Black, 2018). Museums Victoria is a forward-thinking non-profit which is always looking to diversify its partnerships to widen the impact of their work. A specific example from last year is, "a partnership with the Melbourne Food and Wine Festival featured Hiakai Hangi, a traditionally prepared hangi feast event with culturally diverse chefs, and the Viking Long Table Dinner in conjunction with the Vikings: Beyond the Legend exhibition." (Black, 2018). In Melbourne alone, there are going to be several different opportunities to establish new partnerships with cultural organizations who might have a particular interest in an exhibit or workshop.

The Immigration Museum would play a primary role in the aforementioned cultural partnerships. Despite its smaller visitation numbers, the Immigration Museum has a wide variety of exhibits and resources available to the public. In addition to its permanent exhibits such as "Immigration Stories and Timeline" and "Identity: Yours, Mine, Ours," the Immigration Museum also hosts temporary exhibits, festivals, and special events. The museum also has a wide variety of educational programs and resources. Some commonly offered

resources are school programs and visits, professional learning workshops, and the Outreach Program. Two key supporters of Museums Victoria cultural events and experiences are the Gunditj Mirring Traditional Owners Aboriginal Corporation and Multicultural Arts Victoria.

In conclusion to this section, it is vital to simply have an appreciation for the complexity of Museums Victoria's network of partners. It is very difficult to keep track of all of Museum Victoria's engagements with their sponsors, supporters, and partners. Museums Victoria is striving to broaden their impact and find ways to reach new groups of people, so being able to understand all of these relationships is necessary to sustain growth and success. The more partnerships they can cultivate and expand, the easier it will be for them to achieve their core mission as an organization.

SECTION 4: THE FUTURE OF MUSEUMS VICTORIA

2.4.1 OVERVIEW OF THE STRATEGIC PLAN

Museums Victoria has a clear path for the near future, which has been shaped by their 2017-2025 strategic plan. Museums Victoria's mission is to "create knowledge and experiences that help us understand the world," (Strategic Plan, 2017). It is obvious that Museums Victoria wishes to continue to build memories and share information about Australia's past, present, and future. Museums Victoria's former CEO states "the capacity of museums is to adapt their mission to the changing needs of the communities they serve is an undoubted strength that in part accounts for their longevity as cultural institutions," (Greene, Building the Networked Museum). By sharing stories and creating captivating spaces, Museums Victoria wishes to enlighten its visitors and accessors. Furthermore, Museums Victoria aims to fulfill their strategic plan with Three Transformational Themes and Five Strategic Objectives. Each will develop experiences and spaces for the betterment of the museum's future. More information on the strategic plan and its purpose can be found in Appendix A.

2.4.2 A FUTURE WITH STAKEHOLDERS

Museums Victoria highlights the need to build economic value through engaging with stakeholders and non-ticketed audiences who possess possibilities for future growth. A non-ticketed audience could be online users, students, or various outreach programs. In addition to non-ticketed audiences, there are many kinds of stakeholders such as sponsors, partners, and donors. Although programs and exhibitions may not be developed specifically for them, stakeholders are extremely important in supporting and giving resources to ensure that projects and activities are undertaken. Therefore, Museums Victoria must also better understand their relationship with stakeholders.

While Museums Victoria has a firm grasp on their ticketed audiences' wants and needs, their relationships with non-ticketed audiences is less clear. They do not have a firm understanding of who they are, how many they are, and what their needs are. According to Patrick Greene, the CEO of Museums Victoria during their rebuild, "it was vital to define

the special characteristics of each Museum Victoria site and to build on their strengths. Extensive research among visitors and non-visitors identified the needs of four different motivational groups. That enabled us to describe, develop and market the essence of each museum," (Greene, Building the Networked Museum). Therefore, Museums Victoria is currently placing a heavy emphasis on identifying their non-ticketed audiences.

To grow as an organization and remain progressive, it is timely for Museums Victoria to explore and better understand their stakeholders. In order to do so, Museums Victoria will need to map their engagements with stakeholders and non-ticketed audiences. For example, determining the stakeholders' role in Museums Victoria, the nature of the engagements, and the level of effort required for the partnerships are all ways of furthering the development of the museum. Overall, stakeholder identification is an instrumental task to comprehend Museum Victoria's wider impact and aid in the museum's betterment for the future.

CONCLUSION

Museums Victoria has a very complex organizational structure and their stakeholders are extremely important in furthering the museum's development. Due to Museums Victoria having many entities, such as the Melbourne Museum, Scienceworks, and the Immigration Museum, there is a complex web of interactions and connections. Museums Victoria's strategic plan outlines how they plan on continuing to deliver value to their stakeholders. In addition, a mapping system is a more in-depth analysis that helps understand the role and value of each stakeholder in the museum. In order to fulfill this plan, we identified, analyzed, mapped and prioritized the relationships between Museums Victoria and their partners.

CHAPTER 3: METHODOLOGY

Project Mission:

This project aided the Museums Victoria Education Team to further understand their engagements with partnering organizations and determine the value of their relationships by mapping their stakeholders.

Project Objectives:

1. Identify the partnering organizations involved with Museums Victoria Education Team and what they value in a partnership
2. Classify the value of these partnering organizations to Museums Victoria and vice versa
3. Visually represent these relationships by mapping stakeholder interactions
4. Analyze the data from the interviews and stakeholder map and present our findings to Museums Victoria

In this section, we will cover all four project objectives in-depth with their corresponding research questions. The methods used to answer each research question will be covered in full.

OBJECTIVE 1: IDENTIFY THE PARTNERING ORGANIZATIONS INVOLVED WITH MUSEUMS VICTORIA EDUCATION TEAM AND WHAT THEY VALUE IN A PARTNERSHIP

In order to assess the Education Team's partnerships, it was first necessary that we interview each member of the Team to discuss their roles and values (Appendix B). The interview format followed a semi-structured layout using questions we had prepared in advance, but we often moved on to more specific questions as each interview progressed. The list of questions (Appendix C) was revised with our leading sponsor, Carolyn Meehan, Audience Insights Manager. Additionally, we sent out the questions at least two days prior to each interview to allow for adequate preparation on behalf of the interviewee.

The interviews occurred over the first two weeks of our time at the Museum and were conducted by all team members. Each interview ranged in time from 20 to 40 minutes and was recorded at the employee's discretion along with a dedicated note taker for the meeting. The main outcome of these interviews was a list of partnering organizations and contacts (Appendix D). In the interview, the organizations mentioned were carefully recorded. Following the interview, a follow up email was sent that contained the list of organizations recorded for the interviewee to check over and add/remove any organizations. Also, we asked that they provide a contact for each organization so that we could reach out to them at a later point with their discretion.

These interviews were important to introduce ourselves and the project to the Museum staff. Also, it is was monumental for us to discover the core values that each team member holds for their partnerships. This enabled us to determine the key stakeholder 'value attributes' that we were going to gather data on. It also helped us break down the highly subjective topic of value into its component parts, allowing us to better focus our questions in the surveys.

After all the interviews were conducted, the list we had come up with was then broken up and revised into major categories of organizations. We chose to categorize the organizations in terms of education sector, tertiary education, professional organizations, foundations, research organizations, government, industry, and festivals/event organizations. This

was done with the help of Linda Sproul, Education and Community Programs Manager. The final list was then sent to the entire Education Team to review. This list became the basis of our project and outlined the scope of the research we would be conducting.

OBJECTIVE 2: CLASSIFY THE VALUE OF THESE PARTNERING ORGANIZATIONS TO MUSEUMS VICTORIA AND VICE VERSA

Based off the list of organizations and notes from the initial interviews within the Education Team, we generated two surveys: one for the Education Team and one for the stakeholders (Appendices E and F). The survey for the Education Team was not sent to all the people who were interviewed. With the help of Linda Sproul, we determined that some team members, based off the interactions within their roles, did not fit into the scope of this project. A total of 9 museum staff received our survey.

For the Education Team, we wanted to better understand the nature of engagements with their partnering organizations. We asked them to choose the focus of their partnership, with the options of program development, professional development, and experimental research. Next, we inquired about what they got out of the partnership, such as programs, reports, or funding. We allowed this to be a free

response question where they could write in what they deemed applicable. These questions were necessary to find the distinct nature of the relationship because each one is unique.

We then asked about which education audience they target, because each employee works with varying school levels. We created our options based on Australia's education levels, such as 'Early Learning', which is ages 0 to 5 years old, 'School', which is foundation to grade ten, 'VCE / VCAL / VET', which is specialized schooling, 'TAFE', which is Technical and Further Education, 'University', and 'Other'. Breaking down education audiences into these categories helped the team find out which audiences are well represented, and which ones are currently lacking attention. This categorization was done with the help and direction of Linda Sproul.

The next survey questions focused on time. First, we wanted to explore if the partnership is ongoing, ad hoc, or lapsed because a common theme in our interviews was that employees did not interact with some organizations on a consistent basis. Rather, they were in sporadic communication whenever needed. Second, we inquired about how long the partnership has lasted and if the Museum Victoria employees see a future in this partnership. This helped us indicate both the history and the perceived future for the partnership. Third, we asked how many times per year the staff collaborates with this partner to establish the frequency of interactions. Finally, we had the Education Team members rate on a scale from 0-10 how much time they devote to this partnership. This question is essential because the time and effort spent by the Education Team is the 'cost' of that partnership. Each number from 0-10 corresponded to a specific number of hours worked to ensure that responses remained consistent across all Education Team members.

The last survey question utilized the 'value attributes' that we derived from our initial interviews with the Education Team. We asked the staff to rate on a scale of 0-10, how much each partnership benefits Museums Victoria in the following categories: *reach, reputation, expertise, resources, innovation,* and *profile*. These core benefits were synthesized by our team from the reoccurring themes in the responses to questions 10 and 11 from our initial interviews (Appendix C). We then revised and further defined the attributes with the help of Linda Sproul and Carolyn Meehan (Appendix E). The ratings of these benefits served as the main variables in our project which would help us determine the value of each partnership.

We sent the partnering organizations a similar survey (Appendix F) using the list of contacts developed during Objective 1. This list included a total of 33 people external to the Museum. This survey did not include questions regarding the history of the relationship as that information was already collected from the Education Team.

Initially, the survey asked, "What value does your partnership with Museums Victoria provide to your organization?" This was an open-ended question to get them thinking about the term 'value'. Next, the primary part of this survey was to receive feedback from each contact on how their partnership with Museums Victoria benefits their organization. The survey asked, on a scale of 0-10 (0 = Extremely Unlikely, 10 = Extremely Likely), "how likely is the partnership to do

each of the following for your organization?" The same 'value attributes' were listed below; however, we did not use the key words like *reach*, *reputation*, etc. Rather, we only gave them our definitions of each term. The purpose of this was to not confuse them with differing definitions of our key words.

Overall, our surveys for the Education Team and partnering organizations were vital in defining value. They allowed us to transform a qualitative concept of value into a quantitative assessment by rating various value indicators. These ratings were then instrumental in creating value driven quadrant charts and mapping the relationships, which is described more in detail in Objectives 3 and 4.

OBJECTIVE 3: VISUALLY REPRESENT THESE RELATIONSHIPS BY MAPPING STAKEHOLDER INTERACTIONS

In order to determine the value of Museums Victoria's partnerships we created a flow map that tracks the amount and type of benefit that each external partner provides. This benefit map was used to identify the most valuable partnerships and the areas for improvement. The information collected in the previous objective was assigned to a specific attribute on the benefit flow map. The types of information used and how they were represented on the benefit flow map is shown in Figure 5.

Figure 5 - Benefit flow map key

In our benefit flow map the nodes represent the different external partnerships of the Education Team, with the center node being Museums Victoria. The lines connecting the nodes, also called edges, represent the benefits gained from that partnership. The first step of making this map was to assign the node attributes. From our interviews with the Education Team we determined that the education audience for the partnership was an important attribute to keep track of. Therefore, we decided to use the color of the node to represent to education audience. For the size of the node we chose to use the amount of time spent on that partnership, which we called effort. This data came directly from the 0-10 rating by the Education Team members on how many hours they spent working on that partnership. Larger nodes correspond to a higher amount of time required to maintain that partnership and vice versa. We chose to include effort because it is essentially the cost of the partnership and is therefore important to track.

The second step of making this map was to show the benefits each partnership provides Museums Victoria. This was done by linking the partnering organizations to Museums Victoria using edges. The color of the edge represents the type of benefit that organization is providing. Since we developed 6 different categories for benefit, this means that there are six edges connecting each external partner to Museums Victoria. However, since Gephi cannot represent multiple edges between two nodes in a way where you can see them all, the six benefit edges end up overlapping. The thickness of the edge represents how much of each type of benefit the partnership provides. The 0 to 10 responses on the partnership benefits question corresponds to the thickness and determines the weight of the benefits. This weight comes into use when applying the layout to the map. The algorithm used to determine the placement of the nodes has unconnected nodes repel each other and connected nodes attract each other, where the amount of attraction is dependent on the weight of the connection. Therefore, if a partnership is rated to be highly beneficial in many categories, the weight for that partnership's connections will be much higher causing it to appear closer to Museums Victoria on the benefit flow map. The opposite is also true: partnerships with lowly rated benefits will have smaller weighting and will therefore appear farther from Museums Victoria. This creates a system where you can easily see the most beneficial partnerships since they are the ones closest to the center of the map.

To create this benefit flow map we looked at a few mapping software programs and decided to use Gephi because it is a free open source program with an excellent user interface. It is also highly customizable, allowing us to vary the node size, node color, node position, connection size, connection color, and connection direction. Another key feature that Gephi has is the ability to filter the flow map based on different criteria. This is important because it allows Museums Victoria to isolate specific partnerships or types of benefits and look at only those relationships. Importing data into Gephi is done through a spreadsheet which makes easy to update the map with new information.

This map helps visualize the nature of stakeholder relationships and allows Museums Victoria to know who their most connected stakeholders are. It also gives Museums Victoria an accessible, malleable tool that they can use moving forward to track their future relationships.

OBJECTIVE 4: ANALYZE THE DATA FROM THE INTERVIEWS AND STAKEHOLDER MAP AND PRESENT OUR FINDINGS TO MUSEUMS VICTORIA

Once the benefit flow map had been produced, the next step was to analyze the data and interpret results. From the benefit flow map we were able to draw several key insights. The most important information on the map is the position of the partnering organization. Due to the layout applied to the map the closer a partnership is to Museums Victoria the more beneficial it is. This made it easy to draw conclusions about which partnerships benefit Museums Victoria the most. The ability to filter the benefit flow map in Gephi also allowed us to isolate specific partnerships or attributes. From this information we could then better interpret the map to draw conclusions and provide recommendations. For example, we can look at only one type of benefit flow to see which partnerships are providing the most benefit in this area and which partnerships provide no benefit. Another useful way to filter the map is by education audience. This lets us see which education audiences have extensive partnerships and which ones do not. Lastly, the effort filter removes all nodes that are below a certain amount of effort. This allows us to focus in on only the partnerships that require a large amount of effort to maintain.

Another method we used to analyze the data was graphing the stakeholders based on two major attributes: benefit and effort. By looking at where partners fall in a benefit vs effort graph, we determined the value that each organization provides Museums Victoria. This allowed us to see how each partnering organization compares to each other in terms of value. Additionally, the position of an organization gives Museums Victoria a recommendation on how they should interact with them. For example, partnering organizations with a high benefit and low effort provide an excellent value to Museums Victoria and should be prioritized. On the contrary, stakeholders who have a low benefit yet high effort are not very valuable and Museums Victoria should minimize interactions with these groups. The full table of stakeholder value along with the method of engaging with the stakeholder are shown below (Table 1).

Table 1 - Stakeholder Value Chart

Benefit	Effort		
	Low Effort	Medium Effort	High Effort
High Benefit	High value -Prioritize these stakeholders	Significant value -Maintain relationship, reduce effort if possible	Medium value -Work to reduce effort
Medium Benefit	Significant value -Maintain relationship, increase benefit if possible	Medium value -Work to either increase benefit or reduce effort	Poor value -Consider, but need to reduce effort before significant investment
Low Benefit	Medium value -Work to increase benefit	Poor value -Consider, but need to increase benefit before significant investment	Low value -Do not engage these stakeholders

A vital part to this project was staying in touch with the Education Team and keeping their goals in mind. Therefore, we met several times prior to our final presentation with the team members mentioned in Objective 1. At these meetings, we presented them with the information gathered from those weeks in a form of partial stakeholder maps. From this, we were able to get their opinions on our work and continue to revise our mapping in response to their feedback. The information that we provided with this project will be used by the Education Team further understand their engagements with outside partners, so it was very important that they remained on the same page with us throughout the project.

CONCLUSION

The role of museums in society have been shifting more rapidly now than in any other time in the past. To keep up with this change, it is vital that museums understand the needs and wants of their communities. Although ticketed audiences have been studied extensively in the past and are generally well understood, these groups are far from a museum's only stakeholders. Nowadays, a significant portion of a museum's work involves stakeholders that interact with the museum in a non-ticketed manner. The identity and value of these groups are often not fully understood, meaning that museums are missing critical knowledge on this important group of stakeholders. With this project we aimed to help Museums Victoria bridge this gap by demonstrating the value of their non-ticketed stakeholders in the Education Team.

We are confident that the methodology employed in our project has clearly demonstrated the value of the partnering organizations with the Museums Victoria Education Team. The impacts of this project can go far beyond just the Museums Victoria Education Team. This process can be easily applied to other departments within Museums Victoria to learn about their stakeholders. This research is also unique for the museum field, as not many institutions have done similar work. This means that this project can serve as a template for other museums looking to better understand their relationships.

CHAPTER 4: RESULTS

In this chapter, we will discuss the results and findings from the Education Team at Museums Victoria and their stakeholders using network maps, graphs, and charts to display the collected data. Many organizations are mentioned throughout chapters 4 and 5. Please refer to the Stakeholder Glossary (Appendix K) for brief background information about each relationship. Not all of the stakeholders mentioned were included in the glossary due to the available information regarding the nature of each relationship.

SECTION 4.1: EDUCATION TEAM SURVEY

We sent a survey to the Education Team that asked the team to classify the focus of the partnership, state its outcomes, specify their target audience, and relay whether or not the relationship was ongoing for each organization (Appendix E). Most importantly, our survey had the education team rate how the partnership benefits MV in the following categories: *reach*, *reputation*, *expertise*, *resources*, *innovation*, and *profile*. Our ultimate goal from this data was to create a benefit map using Gephi software.

4.1.1 GEPHI BENEFIT MAP

Figure 6, on the next page, shows the benefit map developed from the Education Team responses. In total, we identified 67 partnerships that were relevant to this project and included them in our survey for the Education Team. This map ended up being much smaller than we were anticipating because we were unable to acquire a full collection of survey responses. This meant that we only had 25 organizations we could map. While this benefit flow map fails to represent the entirety of the Education Team's work, it still provides some valuable insights for the partnerships we do have data on.

Figure 6 - Benefit Map

Node Key
- School
- Early Learning
- General Public
- University/School
- All
- University
- School/VCAL
- Other
- MV

Edge/Line Key
- Reach
- Innovation
- Profile
- Expertise
- Reputation
- Resources

Node labels: VLV, Monash University, ACER, TAC, Maternal Child, Aurecon, Upwelling Festival, SPP, RMIT, DLTV, Playgroups Victoria, Melbourne City Experience, Gowrie Broadmeadows, ACHPER, Museums Victoria, Ardoch Youth Foundation, Deakin University, University of Adelaide (CSERG), Hobsons Bay Libraries, VCAA, CECV, DET, Wodonga Fair, Mildura Arts Center, DATTA Vic, Kids Teaching Kids

29

The center node is Museums Victoria with all of its partnerships orbiting around it. The partnerships that provide the most benefit are the ones that are closest to Museums Victoria. Individual types of benefit are represented by the color of the arrow and the amount of benefit is represented by the thickness of the arrow. The color of the node describes the type of education audience that partnership is focused on. Node size represents effort, which was determined by the number of hours the Education Team put into the relationship per week.

Table 2 - Gephi Benefit Map Key

Attribute	Visual	Representation/Meaning
Size of Node	High Low	Effort
Color of Node		Education Audience
Thickness of Arrow	Low High	Amount of Benefit
Color of Arrow		Type of Benefit

For effort, two of the largest nodes are the Strategic Partnership Program and the Catholic Education Commission of Victoria. This means that Museums Victoria invests a significant amount of their time into these two partnerships. The Strategic Partnership Program is a part of the Department of Education and Training that provides significant funding for Museums Victoria if they meets their strategic goals for public school education. The Catholic Education Commission of Victoria plays a very similar role and provides funding, but for Catholic schools instead of public schools. Between these two organizations the Museum can reach most of the schools in Victoria. Funding is essential for Museums Victoria; therefore, it is vital that so much time is invested into these relationships. This effort seems to be well rewarded because both of these organizations are fairly close to Museums Victoria on the chart, meaning that they are very beneficial.

Additionally, the Transport Accident Commission is a very high effort node on the map. This makes sense since they are a rather unique partner and have a long term exhibit focused around their content. The Department of Education and Training in general also shows up as one of the higher effort partnerships. Since they are the government body

responsible for education in Victoria, it is essential for Museums Victoria to work frequently with them, so this result makes sense.

On the contrary, most of the smaller, low effort nodes are at the periphery of the map. This is logical since the less important relationships will generally have less time invested into them. However, there are a few low effort organizations that end up fairly central in the map. Some of these are the Victorian Curriculum and Assessment Authority and the Ardoch Youth Foundation, which end up being some of the most beneficial partnerships despite not requiring much effort to maintain. This means that these partnerships provide excellent value to Museums Victoria, and they should consider working with them more often. One interesting pattern is that all of the outreach related partnerships are considered low effort and are generally not highly beneficial. This seems to suggest that the outreach program, although mildly beneficial, is not a major focus of the Education Team.

Breaking down the map by the type of benefit allows us to look more closely at how the Education Team is interacting with these partners. The six filtered benefit maps are in Appendix G. The *reach* benefits tend to range from medium to high in a fairly expected manner, with the Mildura Arts Center having the only unexpected value. This organization's *reach* was the lowest on the graph despite the fact that it is an outreach partnership, which are generally focused on reaching a much wider audience. In the *innovation* category only a few organizations were considered high benefit. These organizations were generally either funding or research related organizations. Partnerships that were primarily *reach* related, like outreach or teachers associations, had low scores in *innovation*. The high *innovation* partnerships tended to be government or research organizations.

Profile benefits were mostly high and there were not any noticeable patterns or significant observations here. *Expertise* was another area where there were a few highly beneficial partnerships and many other low benefit partnerships. Universities scored very low in this category despite the fact that they tend to have lots of individuals with specialized knowledge. This may indicate that the Education Team has not taken full advantage of the *expertise* contained in these universities. It would be useful for Museums Victoria to continue to collect and input data on this topic to receive a fuller picture about their university partnerships.

The benefits from *reputation* are fairly high across the board, with the exceptions of Virtual Learning Victoria, the ACHPER, and the Catholic Education Commission of Victoria. The fact that the Catholic Education Commission of Victoria is so low for this category is rather surprising given the importance of this partnership.

Lastly, the *resources* category is highly variable -- a third of the partnerships give large benefits and the rest give little to no benefits. This shows that the Education Team is highly reliant on a few *resources* for their operations, which means if they were to lose one of these highly beneficial partnerships it could lead to a major reduction in the number of programs they can run. It would be useful for the Education Team to foster more medium benefit relationships in this area to reduce the risk of this happening. Another interesting thing to note is that all of the high effort partnerships provide a large amount of *resources* to the Education Team. This indicates that the Education Team spends a significant time and effort on keeping *resources* flowing into Museums Victoria.

4.1.2 VALUE ANALYSIS

Overall, the partnerships that the Education Team has developed are very beneficial. However, some are more beneficial than others. These differences are highlighted below in Table 3, which shows which educational relationships are the most beneficial to Museums Victoria and which are least beneficial. The overall benefit for each organization was obtained by averaging the 6 benefit subcategories. This is only a rough estimate of overall value since some of these benefit subcategories may not be weighted equally. The full list of all organizations ranked by overall benefits is found in Appendix I.

Table 3 - Most and Least Beneficial Partnerships

5 Most Beneficial Partnerships		5 Least Beneficial Partnerships	
Organization	Overall Benefit	Organization	Overall Benefit
University of Adelaide (CSERG)	9.67	Australian Council for Health, Physical Education, and Research (ACHPER)	4.5
Department of Education and Training	9.50	Virtual Learning Victoria	5.67
DET Strategic Partnership Program	9.17	Hobsons Bay Libraries	6.17
Ardoch Youth Foundation	8.83	Gowrie Broadmeadows	6.17
Australian Council for Education Research	8.5	Mildura Arts Center	6.17

Our results indicated that the most beneficial partnership was the Computer Science Education Research Group (CSERG) at the University of Adelaide. This was surprising because it was not an organization that was commonly identified by the Education Team as being highly beneficial. It was followed closely by more expected organizations like the Department of Education and Training and their Strategic Partnership Program. However, one thing to take into account is that only a few members of the Education Team interact with the University of Adelaide CSERG, whereas the majority of the Education Team interacts with the Department of Education and Training. Therefore, in practice some organizations like the Department of Education and Training might end up being more beneficial in reality due to their wider impact within the Education Team. It is best to use these ranking only as a rough estimate and not as a definitive list of which organizations are most beneficial.

There are a lot of similarities between these highly beneficial partnerships. These organizations have generally been partnered with the Education Team for a long time and interact with MV at a much higher frequency than average. All but one of the organizations were in the School [F-10]

education audience. These partnerships also tended to focus mostly on program development. The one area where there seemed to be no common pattern was the effort for the partnership. The partnerships had an even mix of high, medium, and low effort required to maintain the relationship.

In terms of the least beneficial partnerships there were fewer surprises. All of the organizations in this list were groups that were identified as low effort. The most common education audience was Early Learning [0-5] with 3 organizations. However, aside from that there was not really any major similarities between these organizations. They all had varying partnership focuses, frequency of events, and length of partnership.

Although looking at the benefit is useful, to truly understand the most valuable partnerships we also need to consider the effort required to maintain that partnership. Therefore, for this report we defined value as the amount of benefit the Education Team receives based on the amount of effort it costs them. This is essentially the return on investment for the partnership. The best way to visualize this is to plot benefit vs effort on a scatter plot like the one pictured on the next page (Figure 7).
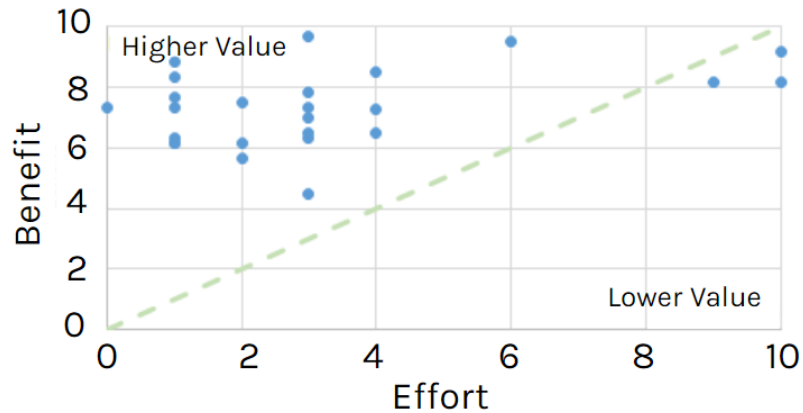
Figure 7 - Value Plot

Each blue dot on the graph represents a partnering organization. The names of the organizations have been omitted from this graph due to the lack of space. The dotted green line represents when both benefit and effort are equal. In terms of value, this line would represent a neutral value where that partnership is neither positively nor negatively valuable. The region above and to the left of the line is where the benefit is higher than the effort. Organizations that fall in this area are considered valuable partners, with the ones closest to the top left corner being the most valuable. The region below and to the right of the line is where the effort is higher than the benefit. Organizations that fall in this area may be considered

as having lower value because they are producing too little benefit for the amount of time invested. The farther down and right you go in this area, the less valuable the relationship becomes.

As can be seen, the Education Team has done an excellent job of managing their relationships. Every partnering organization falls either to the top left of the line or just about on the line. This means that the Education Team is getting good return on investment for their work with all of these partnerships. The organization that is closest to the top left and therefore the highest value is the Ardoch Youth Foundation. The only three organizations that are below and to the right of that line are the DET Strategic Partnership Program, the Catholic Education Commission of Victoria, and the Transport Accident Commission. Although this graph indicates that they provide less benefit per amount of effort, this does not mean that they are unimportant partners. All three of these partnerships are still highly important and provide extensive benefits for MV; they just require a larger time investment to get these rewards.

Again, as a whole, practically all of the Education Team's partnerships are providing Museums Victoria with a positive value. However, it is interesting to see which partnerships are providing more or less value compared to the average. To do this we made a 3x3 table of benefit vs effort where each axis had a below average, average, and above average category (Table 4). To establish the value range for each category we set the "average" category to be the average plus/minus one half of the standard deviation. This method was chosen because in a normal distribution roughly one third of all values fall within a half of a standard deviation of the average, meaning each category would have roughly a third of the data for that axis.

Table 4 - Value Table

	Below Average Effort 0-1.9	Average Effort 1.9-4.6	Above Average Effort 4.6-10
Above Average Benefit 8.0-10	Ardoch Youth Foundation, Victorian Curriculum and Assessment Authority	University of Adelaide (CSERG), Australian Council for Education Research	Department of Education and Training, Strategic Partnership Program, Catholic Education Commission of Victoria, Transportation Accident Commission
Average Benefit 6.7-8.0	Upwelling Festival, Maternal Child Health Nurse Network, RMIT	Playgroups Victoria, Digital Learning and Teaching Victoria, Deakin University, DATTA Vic, Kids Teaching Kids	
Below Average Benefit 0-6.7	Wodonga Children's' Fair, Mildura Arts Center, Gowrie Broadmeadows	Melbourne City Experience, Aurecon, Monash University, Hobsons Bay Libraries, Virtual Learning Victoria, ACHPER	

The organizations in the top left of the table provide the most value to the Education Team. There are only two organizations in this area: the Ardoch Youth Foundation and the Victorian Curriculum and Assessment Authority. These groups provide a large amount of benefit for only a small amount of effort invested, so the Education Team should consider expanding their relationships with these organizations. Other organizations that are highly valuable are the University of Adelaide CSERG, the Australian Council for Education Research, the Upwelling Festival, the Maternal Child Health Nurse Network, and RMIT. No organizations fell in the lowest value category in the bottom right.

The organizations on this chart that provide the least value are the Melbourne City Experience, Aurecon, Monash University, Hobsons Bay Libraries, Virtual Learning Victoria, and ACHPER. Although these partnerships theoretically have the least value out of all the Education Team's partnerships, they still provide positive value to Museums Victoria. However, if there was a need to scale back on some partnerships, these organizations would be the most pragmatic choices. However, there could be outside circumstances or benefits that this method does not take into account. For example, these organizations could be providing benefit in ways that we did not survey. Additionally, something like a legal obligation to the partnership could prevent the Education Team from dropping a partnership. Therefore, it is important to use these results as only part of the whole picture and to take into account additional information in order to make the best decisions for Museums Victoria.

Figure 8, on the next page, is a box and whiskers plot of the responses for each value attribute. The average rating for each attribute throughout the list of organizations is the 'X' represented in each data series. Therefore, you can see that the highest attributes that the Education Team values in partnering organizations are *reputation* and *profile*. In contrast, the lowest attribute is *resources* with an average rating of 6. The box for each data series is where the middle 50% of the data points lie, the interquartile range, and the horizontal line in the box is the median. The extension lines outside of each box are the upper and lower extremities of the responses. Anything outside these lines are considered outliers. The interquartile range (IQR) shows where the Education Team is most certain they are getting the most value from. For example, the *resources*

IQR is very large, so there is an associated disparity between those responses whereas the *reputation* IQR is very small, which shows more precise responses. Thus, the data shows that the Education Team is confident that they are getting a very high amount of *reputation* from all their partnerships. On the other hand, they are getting highly variable amounts of *resources* from their partnering organizations. This information may be useful for the team to compare what they think they are benefitting from the most and what our data suggests they are actually benefiting from.
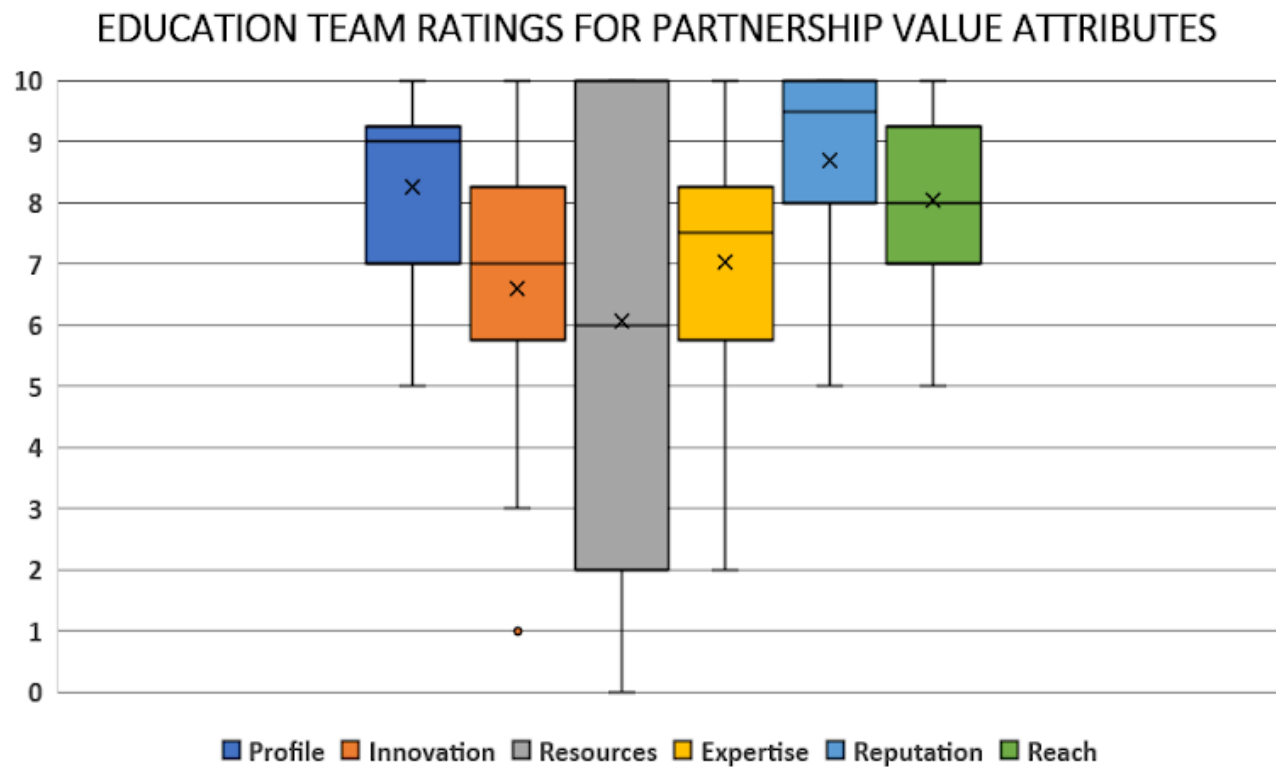
Figure 8 - Overall education team ratings

4.1.3 AUDIENCE ANALYSIS

The primary objective of the qualitative responses from the Education Team was to uncover the nature, focus, and audience of each partnership. By looking at the responses for each individual organization, we were able to develop some conclusions. However, if the data from the responses are juxtaposed against each other, more insights can be found.

First, we looked at the type of audience reached by each partnership and the years they were in existence. The respondent was asked to give the answer for the length of the partnership in years. Some responses did not follow this format by leaving it blank or giving arbitrary answers like "a long time", "short", or "unsure". These responses were removed from the data set to be analyzed. From this, we were left with 21 different data points. Figure 9, to the right, represents this data by showing the average length of each partnership in years for each education audience group. For example, the average partnership for School [F-10] has existed for 8 years. School [F-10] represents the Australian grade levels Foundation to Year 10.

Figure 9 - Education Audience v. Length of Partnership

To pull some interesting results from this data, it is important to look at the number of partnerships under each education audience. Figure 10, on the next page, shows the breakdown of the varying education audiences covered by the Education Team's partnerships. So, out of the 39 responses, 20 of the responses were for School [F-10]. The next highest amount of partnerships was 7. This disparity represents a lack of diversity in the Educations Team's audiences.

Education Audience
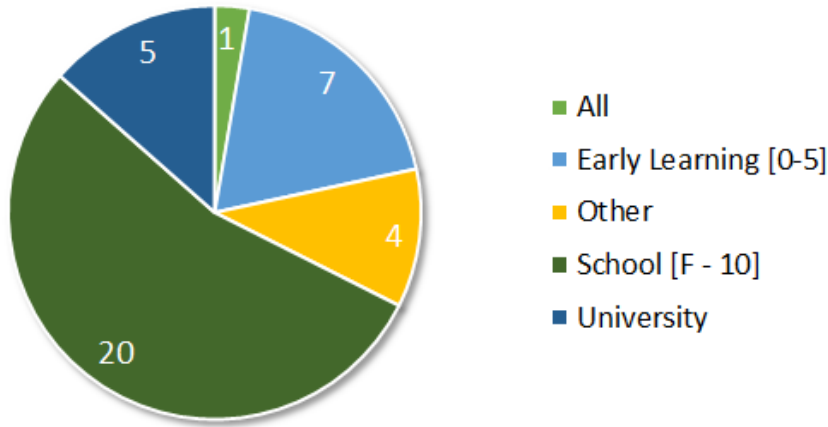
Figure 10 - Education audience

It is an interesting comparison to see that the largest audience group, School [F-10], corresponds to the longest average length in partnership. This affirms that the partnerships that make up their largest audience are beneficial and worthwhile because they are the ones that last the longest.

However, this does not mean that the partnerships with the shortest spans are not important. The Education Team has made it a priority to focus more work on Early Learning [0-5]; this audience represents children from birth to age 5. Since this has been a recent goal, it is expected that the lengths of these partnerships would not be very long. Figure 10 shows how well

they are adapting to this new priority that Early Learning [0-5] is their second largest education audience in terms of partnerships.

Secondly, we compared education audience and the focus of the partnership, either program development, professional development, or other. Figure 11, below, shows the breakdown of all of the responses for the focus of each partnership. Common responses under "other" were networking, information sharing, and advocacy. This displays an ideal balance of the types of partnerships Museums Victoria has. This balance is important to maintain because they do not want to spend too much time or energy in one specific area of focus.
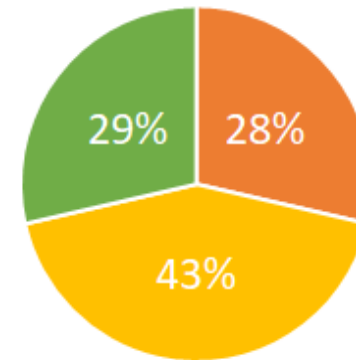
Figure 11 – Partnership focus breakdown
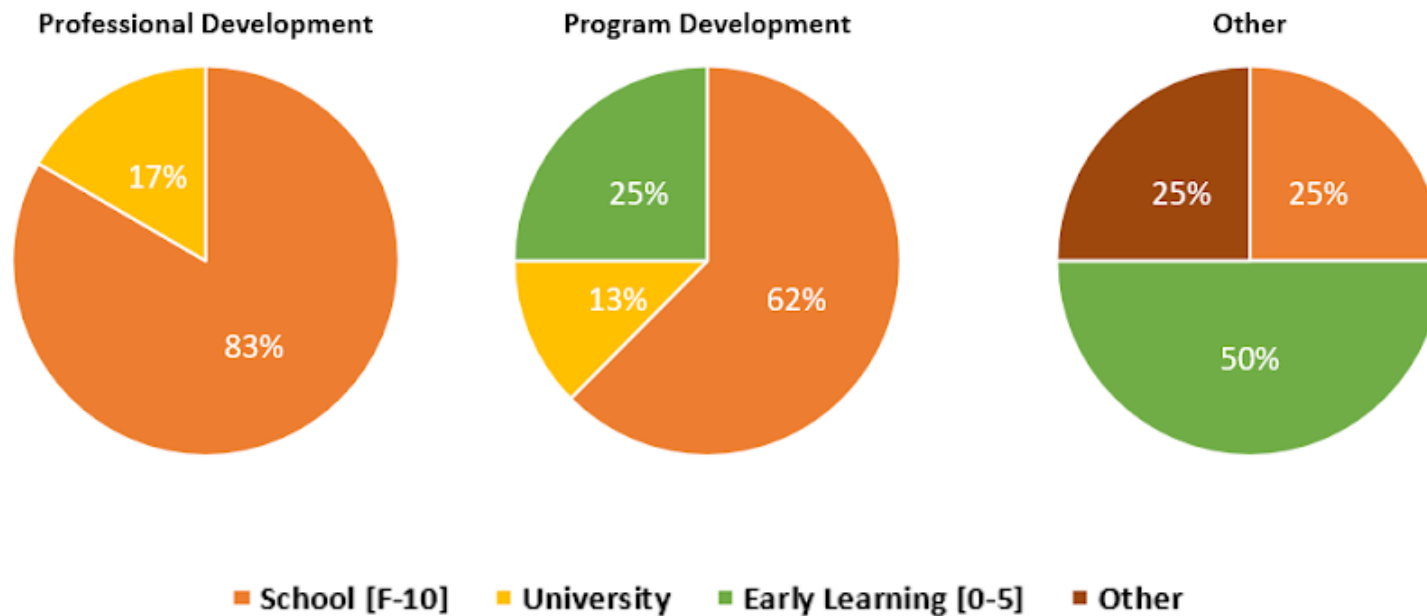
Figure 12 - Partnership focus breakdown by education audience

Figure 12 shows how each education audience relates to the three main focuses of partnerships. As previously stated, the Education Team has been working toward improving their resources and developments in Early Learning [0-5]. The previous charts show that one way they can improve on their role in the early learning education audience is by incorporating professional development into their work, because it is not represented in Figure 12. Additionally, the charts display a large disparity between School [F-10] and the other audiences. Once again, this shows a lot of opportunity for the Education Team to diversify their audiences.

SECTION 4.2: STAKEHOLDER SURVEY

Our initial list of Museums Victoria's partnering organizations totaled to 156; although after meeting with Linda Sproul, we managed to filter the list by focusing on the most relevant partnering organizations for the Education Team. From this list, we received 33 contacts from 28 different partnering organizations. The survey had open-ended questions and rating questions on values ranging from 0 to 10.

4.2.1 VALUE ATTRIBUTES

Out of 33 external contacts, we received 27 responses to our stakeholder survey. Organizations with multiple respondents were Monash University (3), the Geography Teachers Association of Victoria (2), and Deakin University (2). Our high response rate was due to using our Museums Victoria email account, explaining the project, and sending a one-week follow up email with a deadline. We also indicated that they were identified as a contact person for their organization by a staff member in the Museums Victoria Education Team.

Our survey asked "How likely is the partnership to do each of the following for your organization?" We applied this question for following categories: Develop new audiences and expand existing ones, align with your organization's mission and values, enhance your organization's knowledge, bring financial support or other assets like bodies, equipment, etc. to your organization, foster new ideas and advancements for your area of practice, and build your organization's reputation. The stakeholders rated these attributes on a scale of 0-10, with 0 being not at all likely, and 10 being very likely.

These phrases described the key value attributes that the Education Team looks for in a partnership: *reach, reputation, expertise, resources, innovation*, and *profile*. The averages and standard deviations of responses are shown in Table 5, on the next page. The top three rated attributes were *reputation, innovation,* and *expertise*.

Table 5 - Mean and Standard Deviation for Value Indicators

	Reach	Reputation	Expertise	Resources	Innovation	Profile
Mean	7.4	8.8	7.7	5.4	8.1	7.6
Std. Dev.	4.7	3.7	4.1	5.3	3.8	4.2

For an individual analysis of each value indicator, graphs from each response are shown in Appendix J. From these graphs, the stakeholders overall seek *reputation* the most in a partnership with Museums Victoria, followed by *innovation* and *expertise*. The partners value *resources* the least in their engagements with the museum. All the scores for the indicators were spread out, almost resembling a normal distribution. However, the distribution for reputation was heavily skewed to the left -- the mean was larger than the median and most of the rankings were very high. This distribution shows why *reputation* was the most popular attribute for the external partners.

Figure 13, on the next page, is a box and whiskers plot to represent all of the value indicators in one graph. The boxes show 50% of the responses from the MV stakeholders. Tighter boxes, like *reputation* and *expertise*, represent that the respondents had more similar responses than a wider box like reach. *Reputation* had the highest median, showing that was what stakeholders valued most in the museum. Stakeholders deemed *support* and *resources* as the least valuable attributes in their partnership. All value attributes were ranked with a median above a 5, suggesting that MV is doing an excellent job maintaining what a stakeholder would expect in a partnership.

MV STAKEHOLDER RESPONSES
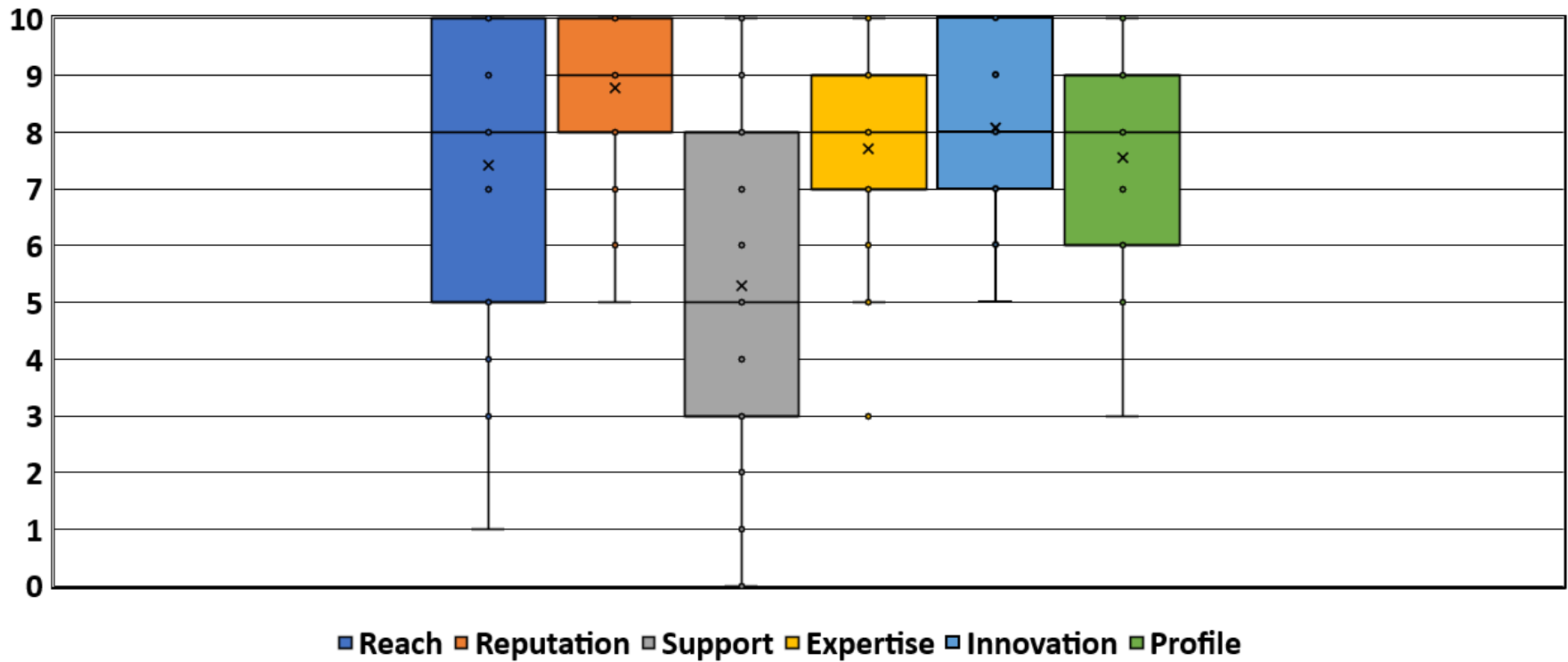
Figure 13 - Museums Victoria stakeholder responses for partnership value attributes

Additionally, the data from the stakeholder surveys was then categorized by the kind of stakeholder. Examining data in such way is vital for the Education Team, because it helps the Education Team generalize what each kind of stakeholder seeks most in their relationship.

Table 6 - Average Value Indicators for Categorized Stakeholders

Row Labels	Count of Organization	Average of Reach	Average of Reputation	Average of Expertise	Average of Resources	Average of Innovation	Average of Profile
Education Sector	2	9.00	9.00	8.00	5.00	8.00	8.00
Festivals/Events	1	8.00	8.00	8.00	8.00	8.00	8.00
Government	4	8.00	8.25	7.75	5.00	7.75	6.25
Industry	1	8.00	8.00	8.00	3.00	7.00	8.00
Other	2	6.00	9.00	5.50	2.50	7.00	7.50
Professional	6	7.17	8.00	7.83	7.17	8.33	8.17
Research	1	10.00	10.00	5.00	9.00	6.00	9.00
Tertiary	10	6.90	9.40	8.20	4.50	8.60	7.40
Grand Total	**27**	**7.41**	**8.78**	**7.70**	**5.30**	**8.07**	**7.56**

Out of the 27 organizations, 10 that responded were a part of Tertiary Education, 6 were Professional Organizations, 4 were Government Organizations, 2 were the Education Sector, 2 were Other, and 1 respondent was from Festivals, Industry, and Research. The table shows a breakdown of the average response for the six value indicators within each stakeholder's category. To improve their relationship with the Education Sector, Government, Industry, and Other, they could offer them more *resources* whether that be financial or assets like bodies, or equipment. They could also strengthen their area of *expertise* for the research partnerships. However, with their research partner, Museums Victoria is doing very well with *reach* and *reputation*.

Table 7, below, shows that the Tertiary organizations ranked Museums Victoria's partnership the highest in every value indicator, where 'Other' category ranked it the lowest. The reasoning behind these rankings can be interpreted more through our coding of free responses.

Table 7 - Total Average Ratings for Categorized Stakeholders

Row Labels	Average of the Averages
Education Sector	7.00
Festivals/Events	7.00
Government	6.71
Industry	6.14
Other	5.64
Professional	7.52
Research	7.14
Tertiary	7.76

We also asked the external contacts about the future of this relationship. As shown in Figure 14, 63% of the respondents are very likely to continue this partnership. Meanwhile, 7.4% are very unlikely to continue the partnership. The partner that gave a negative mark explained this in their free response, saying that to continue the partnership they would need a Museum Victoria award for a graduate teacher and more "Aboriginal and Torres Strait Islander resource kits with local, contemporary and sound pedagogical activities".

How likely are you to continue this partnership?

How likely are you to recommend this partnership?

Very Unlikely   Unlikely   Neutral   Likely   Very Likely
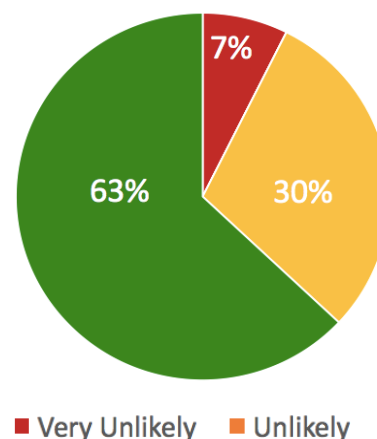
Figure 14 - Likelihood of partners continuing the relationship
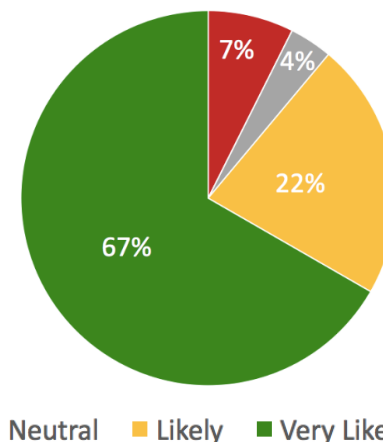
Figure 15 - Likelihood of partners recommending Museums Victoria

For the Museum, 67% of the respondents would recommend Museums Victoria as a partner to other organizations. This speaks highly of the museum's value to their partners and the nature of their engagements.

4.2.2 OPEN-ENDED CODING

Our survey contained two open-ended questions which were coded. The first question was 'what value does your partnership with Museums Victoria provide to your organization?' Most responses indicated the importance of the projects that the museum collaborates on and helps sponsor. The survey also described the creative spaces, engaging provocations, and teaching resources that the museum provides.

In the first section, there was one long-answer question that asked "What value does your partnership with Museums Victoria provide to your organization?"

Value Provided by MV to Stakeholders
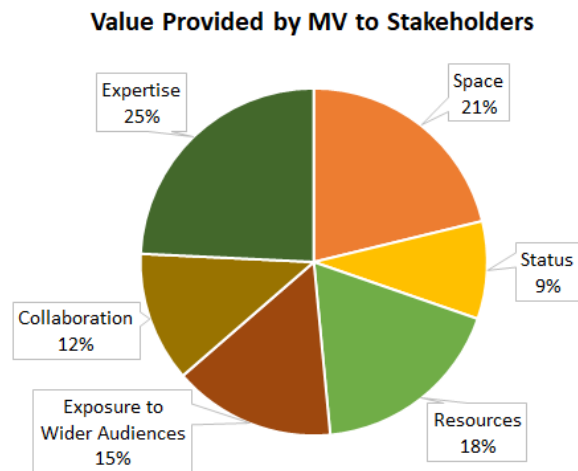
Figure 16 - Value provided by Museums Victoria to stakeholders

From this there was a wide range of feedback, so we coded the responses to pull some valuable conclusions. The values that Museums Victoria provides to these partners were defined into 6 categories of: expertise, space, resources, exposure to wider audiences, collaboration and status.

The 'expertise' category refers to things such as "educational enrichment" and "staff knowledge" that Museums Victoria passed on to the partner. Many partnering organizations acknowledged that Museums Victoria was able to have a "deeper understanding of their issues" and support them with their expertise and experience.

The category 'space' falls under the situations where Museums Victoria provided a space or "an outlet" in order to host a specific event. The partners seemed pleased with the way Museums Victoria handles situations where the partner cannot host an event.

The 'resources' category is related to services that Museums Victoria provided that were proven to be helpful to the partnering organizations; examples of resources mentioned include "Teaching Resources" and "Physical and Human Resources".

The category 'exposure to wider audiences' means that the partnering organizations had the "opportunity" to reach new audiences since Museums Victoria attracts a large and diverse audience. An example of a response was, "exposure to a wider audience beyond the education sector".

Another category that we formed is related to the times that Museums Victoria collaborated with its partnering organizations in order to achieve a certain goal; "In partnership with Museums Victoria we are able to co-design educational experiences for our staff and students" serves as an example of 'collaboration'.

The least mentioned response category out of the six was coded as 'status'. It refers to the impact of each relationship to the profile of the partnership organizations. An example of a response that demonstrated 'status' was, "It has greatly assisted in lifting the profile of the STEM Video Game Challenge".

This open-ended question was asked in the first section of the survey, which means that the respondents did not know the value attributes that we had sent them to rate from 0 to 10 in section 2. The coded categories that were formed from the responses are similar to the values attributes that we included in the rating questions in section 2. The categories of 'expertise', 'exposure to wider audiences', 'resources' and 'status' are aligned with most of our value attributes such as *expertise, reach, resources* and *profile*.

In the stakeholder survey, there was another short answer question which read: "Is there anything that can be done to improve the relationship with Museums Victoria?" The coded responses are shown below in Figure 17.
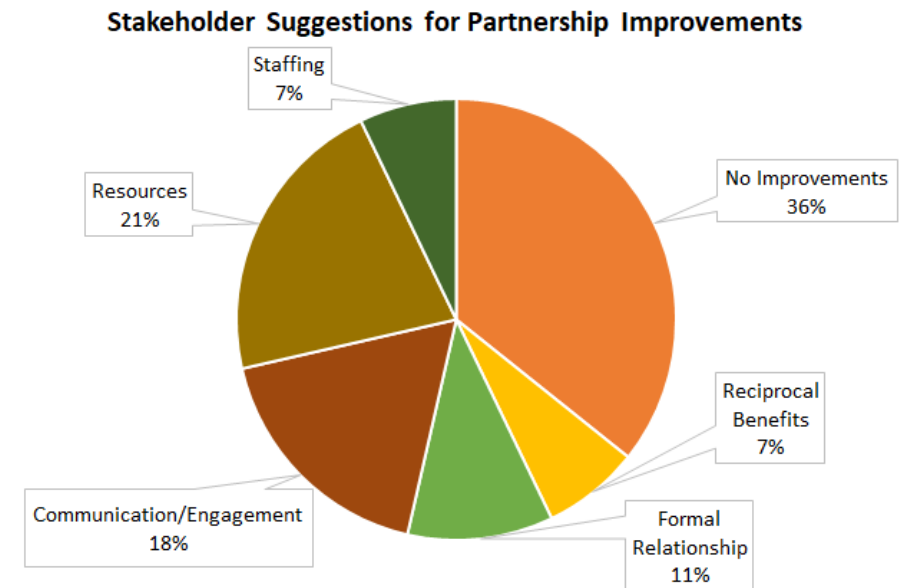
Figure 17 - Stakeholder suggestions for partnership improvements

The recommendations for improving the partnership were categorized into six major groups: no improvements, communication/engagement, resources, formal relationship, reciprocal benefits, and staffing. Each response could fall into more than one of the stated categories. In total, there were 28 distinct responses. The most common response was 'no improvements' for the relationship. This shows that a large portion of respondents not only have a positive opinion of their relationship with Museums Victoria, but there is nothing they could think of which would make it better. These responses were short and simple. One respondent said, "we are very happy with the partnership as it is at present."

The category 'resources' included primarily educational resources and materials. Respondents stated that they would like more specific content/resources for their particular area of expertise. One person's response was that they desired more resource kits with local, contemporary and sound pedagogical activities. None of the respondents seem dissatisfied with the partnership. However, their suggestions provide ways to increase the productivity of the partnerships.

For 'communication/engagement', the common response was that they would like to have a stronger connection between the people within the organization and the contact(s) at the museum. For example, one stakeholder said, "A clearer connection between research projects would build a deeper research-informed knowledge." The premise of these responses were for a better communication about the goals, outcomes, and expectations of the shared work. The responses were never negative, but rather constructive.

The responses for 'formal relationship' were very specific in saying that they would like to have a "more formal relationship". This could include more scheduled meeting times or an easier way of making contact or processing information. For example, one person wrote, "a more seamless booking rigmarole for pre-service teachers." This also crossed over into reciprocal benefits, where a couple people mentioned that they were not receiving mutual benefits. One person wrote, "At present Museums Victoria and [our organization] are not official partners and are not part of the reciprocal benefits that come with such an arrangement." Someone also mentioned that they would like the Museum to, "hear [their] organisation's needs and requirements so there can be a way of meeting in the middle." Although some people felt the relationship was not mutual, they still said that they were either likely/very likely to

continue the partnership and recommend them as a partnering organization.

The last response concerned 'staffing'. The respondents were adamant that they would like to see more manpower dedicated to the relationship by the Museum. For example, it was stated that they would like the Museum to, "provide more resources and staffing to [their] Education team."

Overall, the responses were very insightful and suggested few improvements to the relationships. Even the respondents that were more critical than others were still likely to continue the partnership. The third highest response, communication/engagement, is something that can perhaps be cleared up with more diligent communication efforts. Not all of the suggestions are possible to implement, but it is very valuable for the Education Team to be aware of this moving forward.

SECTION 4.3: CASE STUDIES

In order to do a more in-depth analysis, we did a few case studies on specific partnerships. These partnerships were chosen by our lead sponsor, Carolyn Meehan, after looking at a plot of partnerships done by members of the Education Team (Appendix H). The partnerships selected were: the Geography Teachers Association, the McCoy Project, the Catholic Education Commission of Victoria, and the Department of Education and Training. These were chosen to represent the relationships the Museum has with different categories of organizations.

4.3.1 GEOGRAPHY TEACHERS ASSOCIATION

The Geography Teachers Association remarked that their partnership with Museums Victoria has excellent value across all the museums. Specifically, the partnership was "involved in providing curriculum-related sessions/fieldwork at Conferences held both at the museum locations and their Annual Conference". Moreover, another representative from the Geography Teachers Association remarked that the partnership "is of enormous value to them and has been for

many years. It allows Museums Victoria to provide a deeper understanding of the natural world to students and teachers."

In areas of improvement, the Geography Teacher Association believes that Museums Victoria should "dedicate annual meeting time to discuss forthcoming opportunities and provide more resources and staffing to your Education team". They would also like the museums to "develop more resources that specifically relate to Geography".

From the Museums Victoria Education Team perspective, this partnership gives high value and high benefit. This was determined by the team placing all of their external partnerships on a quadrant chart of benefit vs. effort. Since the team highly values this partnership, an annual meeting time would allow this relationship to flourish. The team already places a lot of time into the relationship, so another suggestion is to increase staffing to be able to provide the Geography Teachers Association with their desired resources.

4.3.2 MCCOY PROJECT

The McCoy Project is a joint initiative between Melbourne University and Museums Victoria that promotes innovative collaboration between projects and research. This partnership has historic context as their work together dates back to the mid-1850s. From the Melbourne University website, the project aims to, "create an environment where scholarship based on Museums Victoria's collections can flourish, develop and deliver quality collaborative projects that will have significant impact, and develop the next generation of research communicators."

From our data collection, this partnership has delivered on their promises. Several head collaborators from the university rated their relationship with Museums Victoria as an average of 9 on *innovation*, which reflects the mission of the project. The highest ratings from the museum's partners came at an average of 10 for both *reputation* and *expertise*. These attributes are essential in a worthwhile partnership as it should be benefiting the organizations both in the public eye and in overall knowledge.

One survey respondent from Melbourne University wrote, "in my personal experience, working and conducting research with MV has been essential in understanding teaching and learning in alternative educational settings. I highly value the partnership with MV." When asked what improvements can be made to the relationship, the main idea was devoting

more time to the relationship. This is very good comment on how beneficial the relationship is to both parties. If they say they already value the relationship highly and would like more devoted time, then it shows that they would like to produce more benefits because they see value in the results.

In a team building exercise, members of the Education Team placed this partnership in the high effort, high benefit quadrant (Appendix H). It is becoming clear that this is an integral partnership moving forward for both organizations as they are receiving great benefits and it is necessary for both organizations to remain innovative in today's changing society.

4.3.3 CATHOLIC EDUCATION COMMISSION OF VICTORIA

The Catholic Education Commission of Victoria places high value on their relationship with Museums Victoria. Through their partnership, Catholic Education Commission is "able to co-design educational experiences for their staff and students which are engaging and educational." When asked on how to improve the relationship, the commission stated that there is "no room for improvement."

The Education Team believes that the focus of this partnership is for professional development. They receive funding and a report from the partnership. The partnership reaches the School [F-10] audience. The partnership is ongoing and subject to funding rolling over. The partnership has lasted 4 years in recent iteration, but 35 years in entirety. Museums Victoria is likely to continue this partnership, as they have had over 10 events with the Catholic Education Commission of Victoria.

A team member typically spends 20-30 hours per week working on this partnership. The main takeaway for the museum from this relationship is the audience *reach*, *resources*, and building Museums Victoria's *profile*. This relationship is proven to be mutually beneficial and requires no change in effort.

4.3.4 DEPARTMENT OF EDUCATION AND TRAINING

The Department of Education and Training (DET) understands the value that Museums Victoria offers to them. The education audience of this partnership ranges from Early Learning [0-5] up to the University level. Museums Victoria

also partners up with the Victorian Curriculum and Assessment Authority (VCAA) and the Strategic Partnership Program (SPP) which fall under the Department of Education and Training (DET).

The Victorian Curriculum and Assessment Authority (VCAA) understands the value that Museums Victoria offers to them. More specifically, Museums Victoria provides "creative space, resources and focus on learning from birth to five years". They did not mention any specific improvements that would result in a better relationship but noted that they "will maintain collegiate connections" with Museums Victoria. From the Education Team plotting exercise (Appendix H), the VCAA was plotted at maximum benefit and above average effort. This high benefit is most likely due to the tremendous reach the VCAA provides into Catholic schools in Victoria.

From the Education Team's standpoint it is believed that the focus of this partnership is about networking, information sharing and advocacy. The outcomes of this partnership are advocacy and conference papers. This is an ad hoc partnership in which a member of the Education Team spends about 20 hours/week over 3 times a year working on it. Museums Victoria appraises the *reach, reputation, expertise,*

profile and *innovation* of The Victorian Curriculum and Assessment Authority very highly but acknowledges that it does not receive any financial *resources*.

For the Strategic Partnership Program (SPP), Museums Victoria believes this partnership's focus and purpose is to develop a program. The main outcome from this relationship is for Museums Victoria to receive funding from this government organizations. The education audience of this relationship is School [F-10] and it is an ongoing relationship that has lasted for more than 20 years. An education team member typically spends 30-40 hours/week on this partnership, which shows the importance of it. The Strategic Partnership Program's (SPP) *reach, innovation, resources* and *reputation* is highly valued by Museums Victoria, but the *expertise* value attribute has plenty of room for improvement. However, this is expected due to the specific nature of this partnership, which falls under funding.

Overall, the Department of Education and Training and all of its entities are vital to the growth of Museums Victoria due to the heavy focus on funding and *reach*. This partnership is one that requires great efforts not only to maintain but to drive the relationship forward. As we have found, this extra effort is something that museum staff must put forward in order

to receive the benefits from this partnership. From the Education Team's plotting exercise (Appendix H), the DET was placed in the top right quadrant at high effort and equally high benefit.

CHAPTER 5: CONCLUSION

Overall, we found that Museums Victoria's Education Team does a good job of maximizing their external partnerships. Most of these partnerships are of low to medium effort and produce medium to high benefit. The Education Team had no relationships that were very low in terms of effort versus benefit. Moving forward, we recommend Museums Victoria work towards moving these relationships into a higher value status through improving the benefit of these partnerships. One way this can be addressed is by looking at the stakeholders' open-ended responses and acting on some of their suggestions as this could provide more benefit or make the partnership more efficient. Museums Victoria's educational partners think highly of Museums Victoria as a partnering organization.

One key insight comes from an analysis of the Education Team's audiences. The School [F-10] education audience was the leader in terms of number of programs, developments, and partnerships. This audience had a total of 20 partnerships whereas the second highest audience had only 7 partnerships. This disparity in the amount of partnerships shows that the Education Team can improve their audience diversity and *reach*. With that said, in the interviews, it was noted that the Education Team has been focusing on expanding their offerings for the Early Learning [0-5] audience. Our findings show that they have been progressing towards this goal, as the Early Learning [0-5] audience had the second highest amount of partnerships.

SECTION 5.1: PROJECT IMPLEMENTATION

A secondary objective for our project was to provide a plan on how to apply this mapping process to other departments in Museums Victoria. A major advantage of this type of analysis is that it can be applied to any type of partnership between organizations. As long as an organization has interactions with different groups this method can be applied to gather data and draw valuable insights about their relationships. The first step in this process is to establish the scope of the project. This step includes determining both the internal members that will be interviewed and what kind of external stakeholders will be examined. Once the list of internal members relevant to the project has been developed, the next step is to interview these people. The first piece of information that should be gathered from these interviews is a list of the external stakeholders they interact with. This list of external partners that will be later surveyed and included in the analysis. Contact information for these stakeholders can be gathered either at this interview or at a later date by email or other means of communication.

The second piece of information that should be gathered is what the internal members value about their partnerships and useful characteristics about outside stakeholders. This allows a more precise definition of value by breaking down the concept of value into more specific benefits. These benefits will go on to form the core of the benefit flow map. Knowing what stakeholder characteristics are important will allow additional data to be gathered in the surveys that will be useful for the department being studied. Using this information gathered in the first round of interviews, the next step is to develop surveys for both the internal members and the external stakeholders. Each survey should be focused on how the partnership benefits the group being surveyed, not the other way around. This is important because there could be a disparity between the benefits that one group think they provide versus what they actually provide. The last part for this step is to send out the surveys and wait for responses.

Lastly, after getting responses the data needs to be processed for input to the flow map. Our report provides a template on how to do so, but this process can be changed to better suit the specific needs of the individual project. Data that is not incorporated into the flow map also needs to be processed into a form that is easier to read. This includes coding open-ended questions, creating graphs and

tables, or picking out a few relevant examples. Overall, this process is highly customizable and easily applied to any similar partnership study.

SECTION 5.2: IMPROVEMENTS

Although we are happy with the results of our project, there are some aspects of it that we would change given the chance. We would try to get them the survey sooner by speeding up the interview and survey development process because only 6 of the 9 members responded. This left us with incomplete data regarding several of their key external partnerships. We would also be much more active in reminding them about our survey and its importance. Another area where we could improve is in the breakdown of certain partnerships. Some organizations, such as universities and government agencies, interact with the Education Team in multiple ways. These interactions are often very different and bring different costs and benefits along with them. While we do break down some of the organizations into their smaller parts, it would be good to separate out these interactions more comprehensively. Had we known this at the start of the project we could have asked about this kind of information in our initial interviews with the Education Team. Still, despite these shortcomings we feel that we have been able to provide the Education Team with valuable information about their partnerships.

Finally, this project serves as a starting point for Museums Victoria to more comprehensively understand how they interact with other organizations and will hopefully lead to a more robust partnership tracking and evaluating system. By mapping their interactions with external partners, Museums Victoria will be able to understand and meet the needs of their diverse stakeholders. Furthermore, Museums Victoria will be able to improve their existing partnerships and develop new ones with a higher degree of accuracy than in the past. Most importantly, Museums Victoria will be able to grow with the expanding role of museums in today's society.

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APPENDIX A: STRATEGIC PLAN FOR 2017-2025

A.1.1 MISSION OF THE STRATEGIC PLAN

Museums Victoria came out with a strategic plan for 2017-2025 that outlines its main initiatives and objectives for the future. Museums Victoria aims to "create knowledge and experiences that help us understand the world," (Strategic Plan, 2017). Museums Victoria additionally desires to share information about the culture and science of Australia and to allow people to grasp a part of the past, present, and future. Museums Victoria's former CEO states "the capacity of museums is to adapt their mission to the changing needs of the communities they serve is an undoubted strength that in part accounts for their longevity as cultural institutions," (Greene, Building the Networked Museum). By sharing stories and creating captivating spaces, Museums Victoria wishes to enlighten its visitors and accessors.

Exploring Victoria; Discovering the World is the title of the strategic plan and highlights the museum's dedication to its communities, research, discovery and a global perspective (Greene, Building the Networked Museum). Three Transformational Themes and Five Strategic Objectives create a backbone of the plan. They will help develop experiences and spaces for the betterment of the museum's future. The plan also aims to create an unmissable center of excellence and innovation. Overall, the themes and objectives will also shift Museum Victoria's focus from a direct audience to a broader, more networked organization.

A.1.2 HISTORY OF THE PLAN

Museums Victoria has been evolving within the past ten years. Compared to the 2005-06 Annual Report, the Melbourne Museum grew in visitation from 680,175 people to 1,140,618 people (Annual Report, 2016). Ten years ago the museum focused more on the number of publications by staff, presentations by staff, and research projects. However, the newer report (2016-2017) focuses on the number of satisfied

visitors, number of students visited, collection stored to industry standard, and volunteer hours in addition to memberships. Therefore, it is evident that the museum's vision really grew and they place a larger importance on data analytics for the continuation of the museum evolved.

Key historic events, like a financial crisis, have also shaped Museums Victoria's strategic vision. In 2002, Museums Victoria had a $6 million projected deficit along with a declining number of visitors at the Melbourne Museum. Under new leadership, Museums Victoria began to transform, and the entire company structure was feeling positive about the change. According to Patrick Greene, the CEO of Museums Victoria during their rebuild, "it was vital to define the special characteristics of each Museum Victoria site and to build on their strengths. Extensive research among visitors and non-visitors identified the needs of four different motivational groups. That enabled us to describe, develop and market the essence of each museum." (Greene, Building the Networked Museum) Therefore, Museums Victoria created a well-defined vision of what it intended to accomplish, which is very important in planning and stakeholder communication.

A.1.3 THREE THEMES OF THE STRATEGIC PLAN

There are three main themes of the strategic plan that encompass Museums Victoria's future until 2025. The first theme is to "develop and implement a strategy that ensures Museums Victoria, in partnership with our First Peoples, inclusively sets First Peoples' living cultures, histories and knowledge at the core of Museums Victoria's practice," (Strategic Plan, 2017). Therefore, it is evident that Museums Victoria highly values their aboriginal heritage. Theme two is to "develop a set of foundation narratives that tell the story of the Universe, Life and Humans, and which align all of Museums Victoria's sites, experiences, research, collections, exhibitions and programs," (Strategic Plan, 2017). This theme places an emphasis on the kinds of artefacts, exhibits, and information the museum will showcase in the future. Lastly, the third theme is to "develop a digital life for Museums Victoria that takes the wonder and inspiration of our collections, knowledge and expertise beyond our walls through audience-centred experiences that connect with hearts and minds," (Strategic Plan, 2017). The final theme exemplifies

Museums Victoria's concentration on upcoming technology and creating a virtual user experience.

A.1.4 FIVE OBJECTIVES OF THE PLAN

Museums Victoria divides their plan into five main objectives in order to convey their main themes. The first objective is to "provide unmissable experiences for all audiences," (Strategic Plan, 2017). Museums Victoria aims to create a unique and engaging experience that will ultimately increase their audience size. Museums Victoria wishes to "grow total annual visitation to 3.25 million and triple their annual digital reach by 2025, securing its place among the world's top 10 most visited museums," (Strategic Plan, 2017). Museums Victoria also wants to create a system that will assess if all programs match the museum's three themes.

The second objective of Museums Victoria's strategic plan is to attain the "primary material collection that inspires and allows excellent inquiry into our region's big contemporary and historical questions," (Strategic Plan, 2017). By owning research that is relevant to the Melbourne and Australia area, it will increase the amount of people wanting to access the museum. Moreover, attaining collections that draw

curious and inquisitive viewers will give Museums Victoria a competitive advantage.

Museums Victoria's next objective is to "engage with, welcome and celebrate all communities," (Strategic Plan, 2017). To fulfill this goal, Museums Victoria has decided to "transform the Immigration Museum into a vibrant living multicultural center for the exploration of identity and multicultural life in Melbourne and Victoria," (Strategic Plan, 2017). They also want to create ways to better include underrepresented audiences in their museums. One method is to strengthen Museums Victoria's multi-lingual services. Overall, these tasks will improve Museums Victoria's annual visitation from under-represented audiences, such as indigenous peoples, people with disabilities, people from social or economic disadvantage, people from rural and regional areas, and non-English speaking communities (Strategic Plan, 2017).

The fourth objective of Museums Victoria is to "build economic value by driving innovation and enterprise through creating experiences that engage public and commercial audiences with the possibilities of the future," (Strategic Plan, 2017). To achieve this objective, Museums Victoria will first

redevelop Scienceworks as a Museum of the Future. They will also strive to rapidly deliver programs that relate to current and pressing issues. Another idea is to "establish an incubator that works with partners to seed, develop and fund new concepts that drive economic value and contribute to Museums Victoria's sustainability," (Strategic Plan, 2017). Lastly, the museum aims to build a learning lab that allows visitors to learn whether they are retired or in preschool.

The last objective is to "make Museums Victoria a sustainable and thriving organization. Their future is underpinned by financial growth, a strong brand and an engaged and high-performing workforce," (Strategic Plan, 2017). To fulfill this strategic objective, Museums Victoria will integrate First Peoples across all areas of Museums Victoria. They will also "grow Museums Victoria's sustainable funding base through new philanthropic, corporate and commercial revenue streams and by optimising existing funding streams," (Strategic Plan, 2017). Overall, enhancing Museums Victoria's brand and improving its marketing will better the museum for the future.

A.1.5 DELIVERING THE PLAN

The backbone for delivery of the plan is formed by Museum Victoria's knowledge and spaces. Under knowledge, Museums Victoria will leverage their research, collection, and digital life. Moreover, within spaces, Museums Victoria will apply their Melbourne Museum and IMAX, Scienceworks and Planetarium, Immigration Museum, Bunjilaka Exhibit, Royal Exhibition Building, Outreach, and Digital Platforms to underpin all of what they aim to achieve (Strategic Plan, 2017). Each space is very essential to the experiences that they offer, whether physical or virtual.

A.1.6 ENABLERS OF THE PLAN

In order to enable the strategic plan, Museums Victoria must rely on multiple resources. First, Museums Victoria will develop their people for the betterment of their organization. They believe that their staff are the heart and face of Museums Victoria. In order for the staff to become more engaged with the museum's audience, the staff needs to have cultural awareness, participate with the community, and maintain continuous development (Strategic Plan, 2017).

Another enabler for the strategic plan is culture. Museums Victoria aspires to create a culture that is supportive and promotes people to embrace challenges and work collaboratively (Strategic Plan, 2017). In order to advance the museum's objectives, Museums Victoria will also need to create a culture with a positive attitude towards risk taking and growing commercial value.

Partnerships are also essential for the strategic plan to succeed. "Museums Victoria's impactful, collaborative and enduring partnerships and networks will position us and raise our profile as an innovative and inclusive museums organization," (Strategic Plan, 2017). Museums Victoria specifically aims to strengthen partnerships with Victorian Indigenous communities and organizations. Furthermore, they want to utilize tourism operators, other museums and cultural organisations, the Victorian Department of Education and Training, Victorian community organisations, and lastly research institutions and universities (Strategic Plan, 2017). Without partnerships and stakeholders, the museum would not be able to continue its success and current offerings.

APPENDIX B: LIST OF MUSEUM STAFF THAT WAS INTERVIEWED

Alex Price: Outreach Program Manager

Bek Bates: Program Coordinator, Life Sciences

Bridget Hanna: Digital Coordinator, Education

Elke Barczak: Program Coordinator, Road Safety Education Center

Jan Molloy: Program Coordinator, Humanities

Liz Suda: Program Coordinator, Humanities

Mei Lui: Program Coordinator, STEM

Priscilla Gaff: Program Coordinator, Life Sciences

Rebecca Hart: Education Placements Officer

Susan Bamford-Caleo: Senior Programs Officer, Federation Handbells

Tiffany Garvie: Programs Project Officer

Trish Christies: Program Coordinator, Space & Astronomy

APPENDIX C: EDUCATION TEAM INTERVIEW PREAMBLE AND INTERVIEW QUESTIONS

Interview with Education Team Members

Date:
Time:
Interviewee:
Interviewers: Andreas Bitsos, Jackie Magaha, Nick Samuelson, Andrew Thomas

Interview Preamble:

May we record this interview? [ ]

We are a group of students from Worcester Polytechnic Institute in the United States working with Museums Victoria with advising from WPI faculty.

Our project mission is to identify and classify the value of Museum's Victoria partnering organizations.

This interview is designed to have a preliminary understanding of your work with Museums Victoria and connections with organizations outside of the museum.

Table 8 - Education Team Interview Questions

1	Can you describe your role in Museums Victoria to us?
2	What audience age group do you primarily work with?
3	Who are the partners that you work with?
4	How do you use these relationships/partners? What is the nature of the interactions?
5	How often are you in contact with them? Daily Weekly Bi-Weekly Monthly Yearly
6	How much time do you devote to this relationship?
7	How long has this partnership/relationship lasted?
8	What benefits do you get from the partnership/relationship and vice versa?
9	Where do you see this partnership/relationship going in the future?
10	What do you value in your partnerships/relationships?
11	What metrics/attributes would you use to determine value in a stakeholder?

APPENDIX D: LIST OF PARTNERING ORGANIZATIONS

Tertiary
- Deakin University
- La Trobe University
  - Maternal Child Health Services
- Melbourne University
  - McCoy Project
- Monash University
  - Asia-Australia Research Studies Network
  - Robert Blackwood Partnership
- RMIT
- Swinburne Uni. of Technology
- University of Adelaide
- Victoria University

Education Sector
- Australian Council for Education Research (ACER)
- Catholic Education Commission of Victoria (WeSTEM)
- Catholic Education Melbourne
- Independent Schools Victoria

Professional Organizations
- Australian Council for Health, Physical Education and Recreation (ACHPER)
- Australian Education Union
- Biology Teacher Network
- Digital and Technology Teachers Association (DATTA Vic)
- Digital Learning and Teaching Victoria (DLTV)

- English Teachers Association
- Environmental Teachers Association
- Geography Teachers Association Victoria
- History Teachers Association Victoria
- Science Teachers Association of Victoria (STAV)
- Social Education Victoria
- Teacher Earth Science Education Programme (TESEP)
- Victoria Association for Philosophy in Schools (VAPS)
- Virtual Learning Victoria

Foundations
- Ardoch Youth Foundation
- Asia Education Foundation
- Jean Monnet Foundation of Europe

Research Organizations
- ARC (Australian Research Council)
  - Fleet (ARC Centre for Future Low-Energy Electronics Technologies)
  - OzGrav (ARC Centre of Excellence for Gravitational Wave Discovery)
- CERES

Government
- Australian Learning and Teaching Council
- Department of Education and Training
  - STAR^6 Grant
  - STEM Unit
  - Strategic Partnership Program (SPP)

- o Victorian Curriculum and Assessment Authority
- Department of Foreign Affairs and Trade
- Study Melbourne
- Sustainability Victoria
- Transport Accident Commission
- United Nations: Victoria, Australia Branch

Festivals/Event Organizations
- Melbourne Writers Festival
- Astrolight
- Explore the City
- Mildura Arts Centre
- Robotica

- Upwelling Festival
- Wodonga Children's Fair

Other
- Advance Program
- AMAZE
- Building Bridges
- Ecolinc
- Gowrie Broadmeadows
- Invisible Farmers Project
- Maternal Child Health nurse network
- Zoos Victoria

APPENDIX E: SURVEY TO EDUCATION TEAM MEMBERS

Organization	[insert organization]
What is the focus of the partnership? Choose one option.	*Select from* Program Development Professional Development Experimental Research Other
What is the outcome(s) of this partnership? Choose all that apply.	A program A report Funding A conference paper Other
What education audience(s) does this partnership reach? Choose all that apply.	Early Learning [0 - 5] School [F - 10] VCE / VCAL / VET Tafe University Other
Is this partnership ongoing? Choose one option.	Yes Lapsed Ad Hoc
How long has this partnership/relationship existed in years?	less than 1 year, 1 year, 2 years, etc

Question	Options
Are you likely to continue this partnership?	Yes or No
How many times a year do you have events/collaborate with this partner?	ex. 1, 2, 3... times a year
How much time do you devote to this partnership?	0 = No time 1 = 0-20 hours per year 2 = 20-40 hours per year 3 = 40-60 hours per year 4 = 5-10 hours per month 5 = 10-20 hours per month 6 = 20-30 hours per month 7 = 30-40 hours per month 8 = 10-20 hours per week 9 = 20-30 hours per week 10 = 30-40 hours per week
On a scale from 0-10, rate how this partnership benefits Museums Victoria for each catergory:	Reach = develops new audiences and expands existing ones Reputation = aligns with and extends MV's mission and value Expertise = enhances MV's staff knowledge Resources = Brings in financial support or other assets (bodies, equipment) Innovation = fosters new ideas and advancements for MV practice Profile = extends MV's reach by marketing, networking, digital and shared channels, etc.

Note: The above survey was sent to Liz Suda, Bek Bates, Mei Lui, Elke Barczak, Jan Molloy, Priscilla Gaff, Trish Christies, Alex Price, Bridget Hanna.

The survey was completed by Bek Bates, Mei Lui, Elke Barczak, Trish Christies, Alex Price, Bridget Hanna

APPENDIX F: SURVEY TO PARTNETING ORGANIZATIONS

Email Address: _____

What organization do you work for?

What value does your partnership with Museums Victoria provide to your organization?

On a scale of 0-10, how likely is the partnership to do each of the following for your organization?

   0 = Extremely Unlikely   10 = Extremely Likely

- Develop new audiences and expand existing ones
- Align with your organization's mission and values
- Enhance your organizations knowledge
- Bring financial support or other assets like bodies, equipment, etc. to your organization
- Foster new ideas and advancements for your area of practice
- Build your organization's reputation

Is there anything that can be done to improve the relationship with Museums Victoria?

How likely are you to continue this partnership?

Very Unlikely | Unlikely | Neutral | Likely | Very Likely

How likely are you to recommend Museums Victoria as a partner to other colleagues or organizations?

Very Unlikely | Unlikely | Neutral | Likely | Very Likely

Reach

Node Key

- School
- Early Learning
- General Public
- University/School
- All
- University
- School/VCAL
- Other
- MV

Innovation

Profile

Node Key

■ (purple)	School
■ (green)	Early Learning
■ (blue)	General Public
■ (dark)	University/School
■ (orange)	All
■ (pink)	University
■ (teal)	School/VCAL
■ (tan)	Other
■ (gray)	MV

VLV
Monash University
ACER
TAC
Upwelling Festival
SPP
Maternal Child
Aurecon
RMIT
Playgroups Victoria
DLTV
Gowrie Broadmeadows
Melbourne City Experience
Museums Victoria
ACHPER
Ardoch Youth Foundation
Deakin University
University of Adelaide (CSERG)
Hobsons Bay Libraries
VCAA
CECV
Mildura Arts Center
DET
Wodonga Fair
DATTA Vic
Kids Teaching Kids

Expertise

Node Key
- School
- Early Learning
- General Public
- University/School
- All
- University
- School/VCAL
- Other
- MV

Reputation

Resources

Node Key
- School
- Early Learning
- General Public
- University/School
- All
- University
- School/VCAL
- Other
- MV

APPENDIX H: EDUCATION TEAM EXERCISE RESULTS

A benefit/effort matrix chart with BENEFIT on the vertical axis and EFFORT on the horizontal axis.

Upper left (green — high benefit, low effort):
- Dept. of Foreign Affairs & Trade
- Playgroups Vic
- Melbourne Writers Festival
- DATTA Vic
- Hobsons Bay Libraries
- VAPS
- Gowrie Broadmeadows
- Uni of Adelaide

Upper right (yellow — high benefit, high effort):
- Kids Teaching Kids
- VCAA
- Monash Uni
- Dept. of Education
- History Teachers Assoc.
- Geography Teachers Assoc.
- Deakin Uni
- United Nations
- Social Educ.
- ACER
- Catholic Educ.
- Melbourne Uni
- Vict.
- Upwelling Festival
- McCoy Project
- Transport Accident Commission

Lower left (yellow — low benefit, low effort):
- Study Melbourne
- OzGrav
- FLEET

Lower right (red — low benefit, high effort):
- Aurecon

APPENDIX I: STAKEHOLDERS RANKED BY OVERALL BENEFIT

| Organization	Overall Benefit
University of Adelaide (CSERG)	9.67
Department of Education and Training	9.50
DET Strategic Partnership Program (SPP)	9.17
Ardoch Youth Foundation	8.83
Australian Council for Education Research (ACER)	8.50
Victorian Curriculum and Assessment Authority	8.33
Catholic Education Commission of Victoria (WeSTEM)	8.17

TAC	8.17
Playgroups Victoria	7.83
Upwelling Festival	7.67
Digital Learning and Teaching Victoria (DLTV)	7.50
Maternal Child Health Nurse Network	7.33
RMIT	7.33
Deakin University	7.33
DATTA Vic	7.25
Kids Teaching Kids	7.00
Melbourne City Experience	6.50
Aurecon	6.50
Wodonga Children's Fair	6.33
Monash University	6.33

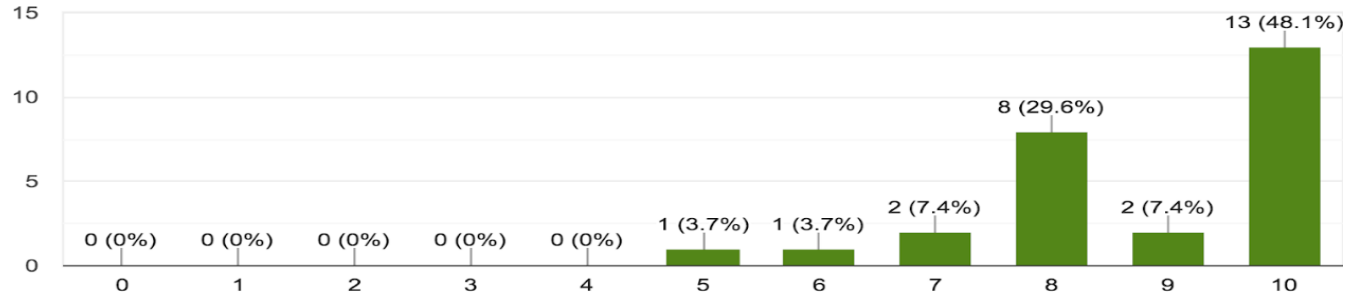|	
Mildura Arts Center	6.17
Gowrie Broadmeadows	6.17
Hobsons Bay Libraries	6.17
Virtual Learning Victoria	5.67
ACHPER	4.50

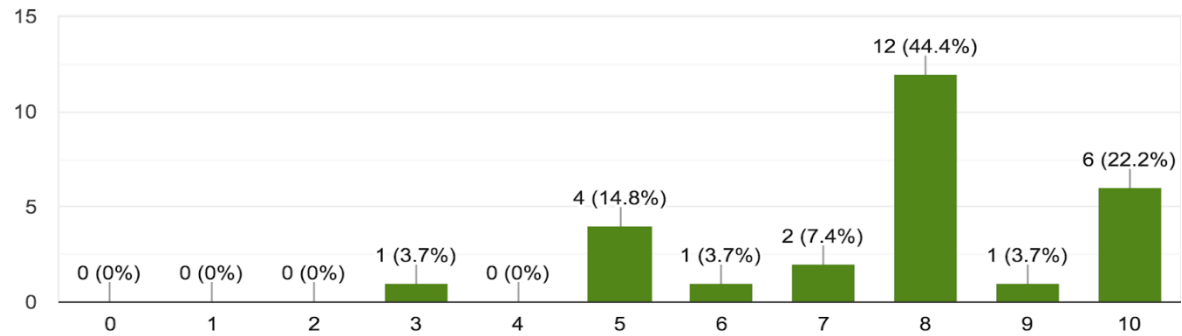**Develop new audiences and expand existing ones**
27 responses
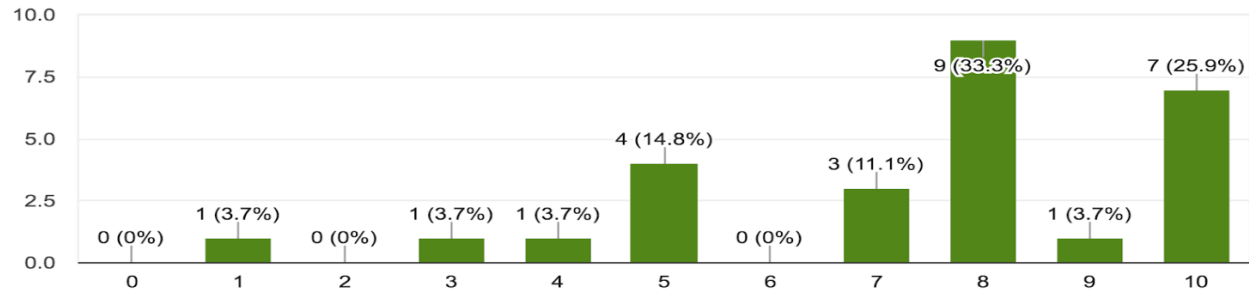
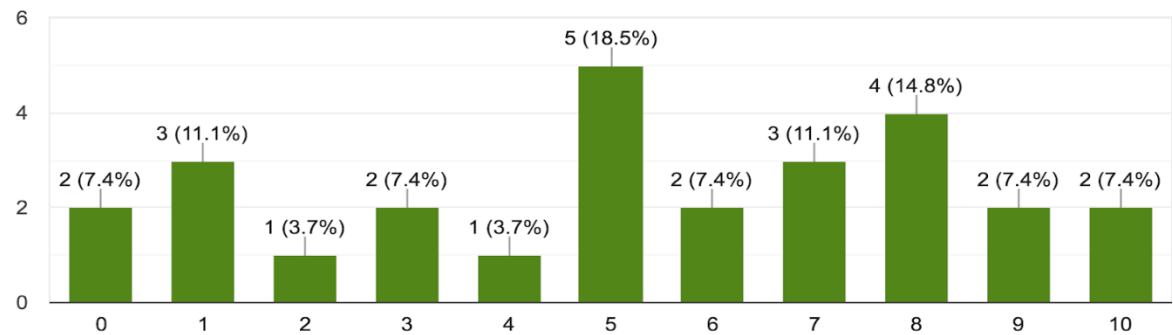**Align with your organization's mission and values**
27 responses

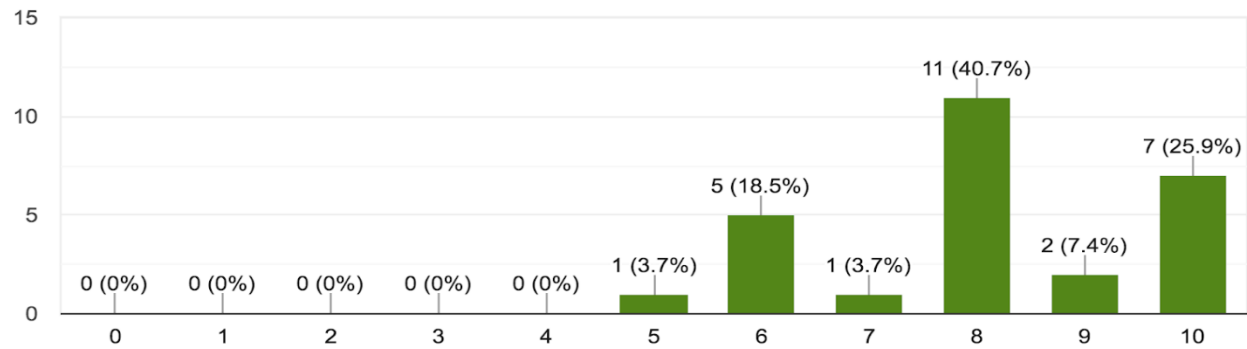## Enhance your organization's knowledge

27 responses

Bring financial support or other assets like bodies, equipment, etc. to your organization

27 responses

Foster new ideas and advancements for your area of practice

27 responses

| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

Values shown on chart:
- 0 (0%) at 0
- 0 (0%) at 1
- 0 (0%) at 2
- 0 (0%) at 3
- 0 (0%) at 4
- 1 (3.7%) at 5
- 5 (18.5%) at 6
- 1 (3.7%) at 7
- 11 (40.7%) at 8
- 2 (7.4%) at 9
- 7 (25.9%) at 10

Build your organization's reputation

27 responses

Values shown on chart:
- 0 (0%) at 0
- 0 (0%) at 1
- 0 (0%) at 2
- 1 (3.7%) at 3
- 0 (0%) at 4
- 4 (14.8%) at 5
- 4 (14.8%) at 6
- 2 (7.4%) at 7
- 7 (25.9%) at 8
- 3 (11.1%) at 9
- 6 (22.2%) at 10
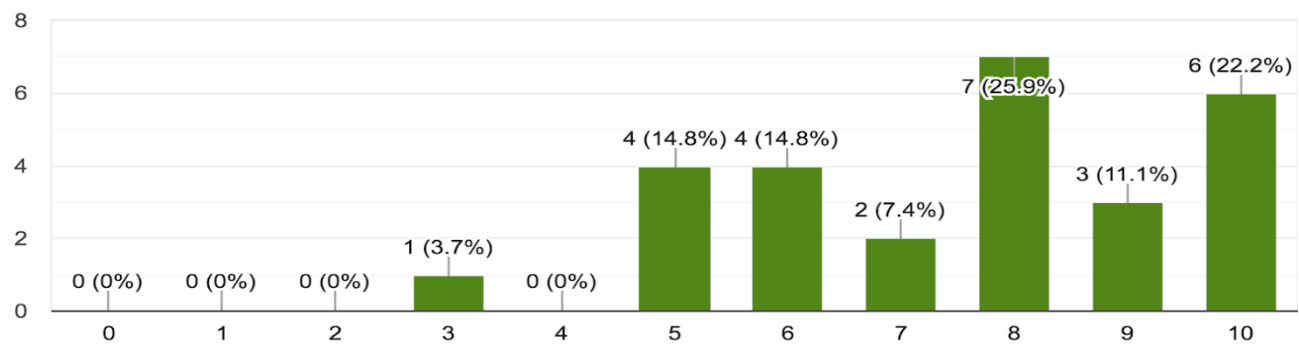
APPENDIX K: STAKEHOLDER GLOSSARY

Ardoch Youth Foundation

- This foundation is a children's education charity focused on improving educational outcomes for children and young people in disadvantaged communities. Museums Victoria prepares a report for this partnership which primarily benefits school grades F to 12.

Aurecon

- A global engineering and infrastructure advisory company in which Museums Victoria partners with to promote and provide resources for their bridge building competition.

Australian Council for Education Research (ACER)

- Their mission is to create and promote research-based knowledge, products and services to improve learning. Museums Victoria partners with this council to produce the STEM Video Game Challenge geared towards grade levels F to 10 by providing an outlet for kids to showcase their skills.

Catholic Education Commission of Victoria

- Museums Victoria works with this commission to produce a report which they then hope to receive funding in order to have a presence in catholic school grades F to 10. This partnership is focused around professional development.

Catholic Education Melbourne (CEM)

- The CEM's mission is to serve those in Catholic educational communities and contribute to the achievement of excellence and equity in schooling. Museums Victoria works with them to co-design educational experiences for our staff and students which are engaging and educational.

Deakin University

- Museums Victoria works with this university to provide education resources to their pre-service teachers. They share common interests regarding education, in particular the teaching of early-childhood and school students and their teachers and research.

Department of Education and Training (DET)

- Museums Victoria works with this organizations in all facets including, but not limited to: Program Development, Professional Development, Experimental Research, Networking, Information Sharing, Advocacy.
- *Strategic Partnership Program (SPP)*
    - This is the specific funding program under the DET which Museums Victoria provides reports for in order to continually receive funding.

Digital and Technology Teachers Association (DATTA Vic)

- Museums Victoria's work with this organization is focused on professional development. Together, they produce a conference paper. This relationship primarily benefits school levels F to 10 by elevating DATTA Vic's staff knowledge and resources.

Digital Learning and Teaching Victoria (DLTV)

- For Museums Victoria, this is a professional development relationship in which they produce a conference paper focused around school levels F to 10.

Geography Teachers' Association of Victoria (GTAV)

- Museums Victoria works with GTAV in order to provide professional development for their teachers by hosting conferences and professional learning events.

Gowrie Victoria - Broadmeadows

- Gowrie Victoria is a non-profit organization which commits itself to supporting early learning children and teachers. Museums Victoria's focus with this organization is on networking, information sharing, advocacy. They participate in collaborative research projects, specifically the development of Children's Gallery & Social Stories.

History Teachers' Association of Victoria (HTAV)

- Museums Victoria is in partnership with this association by providing their teachers special resources, education material, and exhibition information.

Hobsons Bay Libraries

- Museums Victoria works with this library in order to put on a program for early learners, birth to 5.

Kids Teaching Kids

- Kids Teaching Kids is an education model that uses local environment and sustainability issues as a theme and focus for learning. Museums Victoria is working with this organization for a pilot educational program for school levels F to 10.

La Trobe University

- *Maternal Child Health Nurse Network*
  - Museums Victoria works with this organization with a focus on networking, information sharing, advocacy to benefit families with young children and early learning.

Melbourne City Experience

- Museums Victoria works with this organization to put on a full day teacher professional learning program and GLAM ed networking support. This falls under a professional development partnership and benefits school levels F to 10.

Mildura Arts Centre

- This serves as one of Museums Victoria's outreach centers where they work together to develop and present a program benefiting the early learning school group. These events take place at a larger festival located at the arts centre.

Monash University

- Museums Victoria works with this university to provide educational resources to pre-service teachers in the fields of the Arts, Health Education, STEM, and Design and Technologies.
- *Department of Foreign Affairs and Trade*
  - Within this department, Museums Victoria works towards collaboration and engagement to foster cultural diversity.

Playgroups Victoria

- Playgroups Victoria is a social organization which bring young children, parents, families and communities together to learn and develop through informal play activities and social interaction. Museums Victoria does program development with this organization for early learners, birth to 5.

RMIT

- *EU Centre*
  - The EU Centre is a knowledge bank regarding relationships between the EU and Australia with a focus on teaching and research. Within the EU Centre at RMIT, Museums Victoria works to provide collaboration and professional development for teachers at RMIT.

Study Melbourne

- Study Melbourne is a Victorian Government Initiative that supports international students in their study journey in Melbourne, Victoria. Museums Victoria gives them a wider audience beyond the education sector.

United Nations Association Victoria

- Museums Victoria is in partnership with this association to provide a venue and host Model UN Conferences.

University of Adelaide (CSERG)

- Museums Victoria works with this university to put on a program that benefits school levels F to 10.

University of Melbourne

- Museums Victoria works with this university on research that has helped the them better understand teaching and learning in alternative educational settings.

- *Melbourne Graduate School of Education*

    - Museums Victoria works with this department in order to provide quality learning experiences for young children. They assist the university in knowing what conditions engage children, young people, and families.

Upwelling Festival and Wodonga Children's Fair

- This serves as one of Museums Victoria's outreach centers where they work together to develop and present a program benefiting the general public.

Victorian Curriculum and Assessment Authority

- Museums Victoria partners with this organization with a focus on networking, information sharing, advocacy to produce a conference paper. This primarily benefits the early learning school group which is birth to 5 years.

Virtual Learning Victoria

- Museums Victoria partners with this group in order to develop an education program primarily for school levels F to 10