

**MEDIA RELATIONS AS EDUCATION:  
A STUDY OF VANCOUVER AQUARIUM NEWS RELEASES  
AND THEIR USE BY THE PRINT MEDIA**

**by**

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## **Abstract**

In 1993, the Vancouver Aquarium developed new strategic objectives that implemented the institution's commitment to conservation education. Media relations were identified as an area which the institution could utilize in order to provide educational information to the general public and, thereby, effect its conservation education mandate. This thesis addresses two questions (a) How does the Vancouver Aquarium use its media relations opportunities to promote educational information? and (b) Do the print media use the educational information conveyed in Vancouver Aquarium news releases? Vancouver Aquarium news releases were selected as an appropriate media relations opportunity for transmitting educational information to the media. The print media, specifically newspaper articles, were chosen as the type of news item to be examined. Thirty news releases were selected and matched with 81 corresponding newspaper articles. Factors examined included: content of news releases and newspaper articles, type of information (event, animal and conservation messages), readability of news releases and the source of the newspaper articles. The results of the content analysis revealed that all 30 news releases contained Event and Animal Messages, but only 47% of the news releases contained Conservation Messages. Percent concurrence was calculated in order to compare content of the news releases with the content of the newspaper articles. This analysis indicated that news releases are an effective method of transmitting Event Messages, and somewhat effective at transmitting educational information (Animal and Conservation Messages). A model of the Vancouver Aquarium communication process was developed.

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## Introduction

For in the end we will conserve only what we love, we will love only what we understand and we will understand only what we have been taught. Baba Dioum

The 1990s have been a time of change for the Vancouver Aquarium. In 1993, after 37 years, the Founding Director of the Vancouver Aquarium, Dr. Murray Newman retired, and Dr. John Nightingale became the new director of this dynamic institution. This change in leadership coincided with the organization's review of its mission statement and the development of a set of strategic objectives which were published as *The New Wave: Guidelines for Future Vision, Directions and Growth* (1994).

These objectives provided a framework for the future strategic plans of the Vancouver Aquarium. Each major area<sup>1</sup> of the organization developed a set of guidelines that were part of the whole and, together, support the Vancouver Aquarium's mission statement:

The Vancouver Aquarium, Canada's Pacific National Aquarium, is a self-supporting, non-profit association dedicated to effecting the conservation of aquatic life through display and interpretation, education, research and direct action (*The New Wave*, 1994, p. 5).

"A Sea Star: Communicating Our Identity" is the section of *The New Wave* that governs the Marketing and Guest Services area of the Vancouver Aquarium. Its main objective is "to clearly communicate our identity, generating a strong basis of support, by promoting an exchange of information, ideas, resources, and expertise to both local and global communities, through the theme of aquatic conservation and the waters of Canada." (p. 25). As Communications Manager

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<sup>1</sup> Major areas of the Vancouver Aquarium included Marketing & Guest Services, Education, Operations, Development, and Finance & Administration.

for the Vancouver Aquarium, I was part of the Marketing and Guest Services team that was responsible for taking *The New Wave's* objectives and guidelines, and translating them into actions that would support the Vancouver Aquarium's mission statement and vision.

I identified media relations as a specific area in which I could incorporate the Vancouver Aquarium's mission statement and *The New Wave's* guidelines. This paper is an exploration of how the Vancouver Aquarium used media relations as education; specifically, how Vancouver Aquarium news releases were used by the print media.

## **Chapter 1: Expanding the Vancouver Aquarium's Education Mandate: Utilizing Media Relations**

Aquariums and zoos are popular places. Cherfas reported that in North America some 115 million annual visits are made to more than 100 zoos (Kellert & Dunlap, 1989). Why are they so popular, and what is the current motivation behind a visit to a zoo or aquarium? Kellert and Dunlap (1989) looked at the reasons why visitors came to three zoos in the United States, using closed-ended questionnaires, open-ended interviews, and observations of visitor behaviour. Family enjoyment and to see animals were the reasons most often cited for visiting a zoo. Thus a visit to a zoo or aquarium was primarily seen as a social occasion or event. To learn about animals or to teach children about animals ranked third and fourth amongst respondents as a reason for a zoo or aquarium visit. This information highlights a potential discrepancy between the visitors' expectations and motivations, and an institution's mission. Traditionally, a zoo or aquarium was a place to enjoy a casual family outing, be entertained, and have a recreational experience. However, there is increasing pressure on zoos and aquariums to validate their existence and to justify the incarceration, no matter how humanely expressed, of wild creatures divorced from their natural habitats (Kellert & Dunlap, 1989).

Over the last two decades, the directors and staff of living museums have begun to change the focus of their institutions. Anthea Hancocks (1987) proposed that the museum (and this may be extrapolated to include living museums such as aquariums and zoos) may be used as a tool for social awareness. There is increasing concern about the rights of animals, the condition of the environment (both local and global), and the realization that everyone is part of the problem and

therefore may be part of the solution (Miller & Williams, 1983). Concurrently, living museums are increasingly trying to present and display animals in a naturalistic way, as part of an ecosystem, rather than as isolated individuals. As well, zoos and aquariums can promote awareness of environmental issues, provide information on the natural world and humankind's impact on it, and potentially, create attitudinal change. Thus, the mission statements or institutional objectives of living museums commonly include concepts such as: the conservation of endangered species, basic biological and animal care research, increasing public awareness and knowledge of animals and the issues concerning them through education (Hubell, 1991).

William Donaldson, President of the Philadelphia Zoological Society, expressed this popular point of view when he said, "The ultimate justification for zoos as institutions ... is the exhibition of animals for educational purposes" (Kellert & Dunlap, 1989, p. 5). William Conway, Director of the New York Zoological Society goes further, "[Zoos and aquariums'] contribution towards conservation may have a more lasting effect through exciting the interest and concern of human beings in their environment and in the creatures with which they share it." (Conway, 1982, p. 8). Dr. Michael Robinson, Director of the National Zoological Park, calls the living museum "the ultimate weapon in defending the biological world through environmental education." (Kellert & Dunlap, 1989, p. 5). Dr. John Nightingale, Executive Director of the Vancouver Aquarium, sees aquariums as bridges between the natural world and humans.

An August 14, 1995 news release from the American Zoo and Aquarium Association cited a 1995 Roper Organization Poll that indicated "nine out of ten Americans believe zoos and aquariums are essential to educating the public about animals" (p. 1) and "88 percent [of Americans] agreed

these institutions are important in educating children about animals” (p. 1). The trend, within the industry is, therefore, to regard museums [including science centres, zoos and aquariums] as a type of educational institution (Hancocks, 1987), rather than just as a place for entertainment and recreation.

### The Vancouver Aquarium

Since its opening on June 15, 1956, over 27 million people of all ages have visited the Vancouver Aquarium. Since its conception in the early 1950s, in response to the Massey Royal Commission on Arts, Letters and Sciences (1990 Annual Report, 1991), the Vancouver Aquarium strove to be more than just a public aquarium providing a venue for visitors to see aquatic life. It worked to unite education, scientific research and recreation in all of its endeavors.

### Traditional Methods for Conveying Educational Information

At the heart of the Vancouver Aquarium is its function as an informal education centre - a place where families and groups could go to experience freshwater and marine life first-hand. Hopefully, while viewing the Aquarium's inhabitants and exhibits, visitors learn more about aquatic life and the influence the human race has on the aquatic world. These learning opportunities occur through the direct observation of the animals in the Vancouver Aquarium, via graphics and exhibits, and by interacting with trained biologists (presently known as “Naturalists”) who interpret the living exhibits and behaviour of the animals living within the exhibits.

In addition to the expected function as an informal learning centre (the aquarium itself), the Vancouver Aquarium staff and volunteers developed formal education programs for school

children. The Vancouver Aquarium currently provides ten school programs which are based on the British Columbia science curriculum and are targeted to specific grade levels from the primary to secondary school level. These formal programs also include a unique outreach project, the AQUAVAN.

The Vancouver Aquarium's commitment to education does not stop with the Aquarium displays and its school programs. The institution also provides a wide array of public education programs from workshops and lectures, to field trips and eco-adventure travel packages. Originally designed as a benefit for Vancouver Aquarium members, these public education programs are now available to the community at large.

Vancouver Aquarium members regularly receive a members' publication called the *AquaScene* (editing and publishing was a responsibility of the Communications Manager). In addition to aquarium news and events, the *AquaScene* is an important venue for communicating the Vancouver Aquarium's educational messages and concerns. In recent years, the Aquarium's education staff have also begun producing a number of other publications, including a teachers' newsletter, several different educators' manuals and fact sheets on marine animals.

Vancouver Aquarium research scientists and associates regularly publish their findings in the scientific literature, speak at seminars and conferences, and use a variety of opportunities to share the results of their work. The research staff work closely with the Communications Manager, Naturalists, and Education Staff so that new findings are shared not only with the scientific community, but also with the general public.

The presentation of research, publications, formal school programs, public education programs, and, indeed, the Aquarium facility itself, are all traditional methods of delivering educational messages to the public. The challenge for Vancouver Aquarium staff has been, and continues to be, to find new educational opportunities in all aspects of the Aquarium's operations.

#### New Educational Opportunities within Marketing and Communications

The Vancouver Aquarium has recognized its role in helping to increase knowledge about the aquatic and marine environments, to change attitudes toward specific species of animals, and to increase society's awareness of environmental and conservation issues. Over the past few years, Vancouver Aquarium staff have examined and restructured many aspects of its operations. The staff used this process to ensure that all facets of the Vancouver Aquarium reflected its role as an educational institution. For example, displaying killer whales in a naturalistic setting, providing educational and interactive graphic displays in the underwater viewing area of the killer whale habitat, supporting field research, and using trained naturalists to discuss what is occurring in the killer whale habitat and to link that to current field research, are all ways in which the Vancouver Aquarium increased visitors' knowledge of the natural history, biology and ecology of killer whales.

The Marketing and Guest Services team at the Vancouver Aquarium also examined the ways in which the Aquarium is presented, advertised, and promoted in light of its educational role.

Traditionally, the Aquarium has been marketed as a tourist attraction and as a fun place for a family outing. This traditional approach did little to promote the Vancouver Aquarium's mission

statement: of effecting the conservation of aquatic life through display and interpretation, education, research, and direct action. It became clear to the senior management staff<sup>2</sup>, the Marketing Manager and myself, that the Vancouver Aquarium could market<sup>3</sup> itself in a manner that increased awareness and knowledge about the aquatic world, while meeting the need to improve attendance and accomplish other traditional marketing objectives. In my role as Communications Manager, I was in a position to use some of the marketing techniques and efforts of the Aquarium as an educational tool. More specifically, the communications or public relations strategies of the Vancouver Aquarium could be utilized to promote educational messages.

Media relations is an important component of any public relations strategy. There are several techniques that can be used to communicate with the media. For the purposes of this paper, unless otherwise noted, "media" will refer to journalists, reporters and other members of the media, rather than specific forms of media (such as television, radio and newspapers). News releases, public service announcements (PSA)<sup>4</sup>, on site media opportunities, interviews, press conferences, and contact through telephone calls, mailings, and faxes are just some of the ways a Communications Manager interfaces with the media, and all of these are potential educational tools. In addition to providing logistical details or event messages (what is happening, where, and

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<sup>2</sup> Senior management staff consisted of the Executive Director and Directors. When this study began the Marketing Manager and Communications Manager reported directly to the Executive Director.

<sup>3</sup> "Market" refers to opportunities by which the Vancouver Aquarium promoted itself and its endeavours. Marketing can be divided into paid and unpaid opportunities. Paid marketing refers to advertising and promotional campaigns. Unpaid opportunities typically focus on public relations and media relations.

<sup>4</sup> Public Service Announcements contain information about specific events. They announce an event and invite the public to participate. The media incorporate this information into broadcasts or community events columns that feature "what is happening in the local community".



when) it is possible to include biological information (animal and conservation messages) in these written materials. This information might reveal a little known animal or phenomenon, or clarify a common misunderstanding. For example, people may not realize that sharks do not have a bony skeleton like that of humans, rather, they have a skeleton made out of cartilage. Many people think that all sharks are ferocious man eaters found only in the Tropics, and are surprised to learn that over 20 species of usually relatively benign sharks live in B.C. waters. These are just two examples of biological information that could be incorporated into materials for the media. My role as Communications Manager enabled me to combine my skills as an educator with my knowledge of biology, in order to use the Aquarium's interactions with the media as opportunities for education.

### The Research Questions

Thus far, I have explored why the Vancouver Aquarium was motivated to incorporate educational opportunities into all aspects of its operations, and what role I played, as Communications Manager, in this endeavour. This paper is an exploration of the use of the news release, a traditional media relations tool, as a method of conveying educational information to the general public. Specifically, I examined the transfer of information between the Vancouver Aquarium and the print media. In this thesis I address two questions (a) How does the Vancouver Aquarium use its media relations opportunities to promote educational information? and (b) Do the print media use the educational information conveyed in Vancouver Aquarium news releases? Factors to be examined include: content of news releases and newspaper articles, type of information (event, animal, and conservation messages), readability of news releases, and the source of newspaper

articles (daily and community newspapers, news services). Before considering these factors it is useful to examine the media's influence on public knowledge, how news releases were selected as the media relations tool to be considered, and why the print media were chosen for this study.

### The Media's Influence

In considering the Vancouver Aquarium's media relations as an opportunity for promoting its education mandate, an assumption is made that the media can influence public attitudes and knowledge. Before discussing specific ways in which the Vancouver Aquarium incorporated educational information into its media relations strategies, it is useful to consider how people form attitudes and opinions about animals and environmental issues from the mass media?, Do media influence public attitudes and knowledge?, Can this influence be tracked and measured? These questions are useful in understanding whether a specific media tool (such as Vancouver Aquarium news releases) can be used to promote educational information such as transmitting biological and conservation messages to the general public.

### How do People Form Attitudes and Opinions About Animals and Environmental Issues?

In recent years, researchers have begun to look at attitudes towards animals and environmental issues in an attempt to understand what those attitudes might be and how they are developed (Vockell, 1982; Kellert & Westervelt, 1984; Westervelt, 1984; Eagles & Muffitt, 1990).

Important influences on the development of attitudes regarding animals and environmental issues include age, gender, area of residence, ethnic background, pre-existing knowledge level, participation in animal-related activities or environmental education programs, courses at school,

teachers, parents, television, and movies. These studies also indicate that one of the main influences on attitudes towards animals and environmental issues is mass media.

It is important, from the perspective of the Vancouver Aquarium, to consider whether the mass media can influence attitude. The main objective of the Vancouver Aquarium's mission statement is to create a positive attitude, in the public, towards conserving aquatic life by whatever means are available. Knowledge is just one component of attitudes. The formation of attitudes also involves values (Kelsey, 1994). While the ultimate goal of the Vancouver Aquarium's mission and vision may be to change values, its primary tool is knowledge, educating people about aquatic life. The Vancouver Aquarium's move to incorporate education into its marketing and public relations strategies assumes that, if the Vancouver Aquarium provides educational information to the media (in order to improve knowledge about biological, environmental, and conservation issues), then the media, in turn, can provide such information to the general public, and, therefore, influence the attitudes of the general public.

#### Do Media Influence Public Attitudes And Knowledge?

Some studies have asked students to report what they felt were important sources of knowledge or information about environmental issues. A survey of over 3,000 Grade 11 students in New York state found that electronic media was the most common reported source of information on the environment, followed by print media, school, friends or family, in descending order (Hausbeck, Milbrath & Enright, 1992). This appears to be equally true in other countries. An international study that looked at Grade 9 and 10 students in Australia, England, and Israel

reported that the students felt that mass media (radio, television, and print) were the most important sources of knowledge on environmental issues (Blum, 1987). Mass media were considered by the students to be more important than general education in school, biology or ecology courses, and even special environmental courses in school.

Although the studies by Hausbeck et al. were conducted with children and students, it is reasonable to assume that the media do have a role in influencing the general public's attitudes toward animals and environmental issues. This is an important assumption when exploring the possible impact media opportunities/stories generated by the Aquarium might have on public attitudes and/or information.

It should be noted that these studies did not identify the type of media story or program that the subjects reported as being a primary influence or source of knowledge, that is, whether the source of information was a nature or wild-life documentary, panel discussion or talk show, children's program or cartoon, magazine or newspaper article, or television news story. Therefore, these studies can only be viewed as an indication that the media have some influence, but not cannot quantify or specify that influence.

It would be an error to assume that the media are the most effective method to develop or effect changes in attitude about animals and the environment, or that effecting such attitude changes will lead automatically to a conservationist society or even an environmentally informed public. In fact, attitude is just one of the factors Newhouse (1990) identifies as important in developing environmentally responsible behaviour. She includes locus of control, sense of responsibility, and

knowledge as other important factors. Newhouse suggests that for an educational program to actually effect environmentally responsible behaviour it must first be appropriate for the level of knowledge, attitude and moral development of the individual; that information is a central component; and that this must be coupled with information about action strategies.

One of the difficulties in utilizing the mass media as a vehicle to transfer or promote knowledge about animals or environmental issues is that one cannot exercise the amount of control that Newhouse suggests is necessary in order to effect a change in behaviour. In utilizing the mass media, one has to rely on the journalists and reporters to reliably interpret the information they have been given (via a news release, PSA or other materials). Although you can suggest an appropriate audience or select media opportunities that target specific audiences (i.e., children's magazines, top 40 radio, ethnic newspaper, etc.) you cannot ensure that the information presented will be at an appropriate level, be complete or be accurate. These potential drawbacks to utilizing the mass media to communicate the Vancouver Aquarium's educational messages need to be acknowledged. However, the opportunities for promoting the Vancouver Aquarium's educational mandate provided by the mass media are extremely important.

#### Can This Influence Be Tracked And Measured?

Thus far I have discussed studies that have looked at attitude and self-reported sources of influence or knowledge. Ostman and Parker (1987) developed a quantitative study that explored the impact of education, age, newspapers and television on environmental knowledge, concerns, and behaviours. They proposed four hypotheses based on their literature review, and then tested

these hypotheses by conducting a telephone interview survey with a random sample of 336 individuals 16 years or older who were members of a household with a telephone in Ithaca, New York.

Their hypotheses included statements about the relationship between audience attention, education and age with respect to environmental content, levels of environmental awareness, environmental knowledge, environmental concerns, and subsequent behaviours. Ostman and Parker (1987) also predicted a difference “between the effects of newspaper use for environmental content compared with television use for environmental content” (p. 5) and that newspaper use was more likely to lead to increased “audience attention to environmental content, increased levels of environmental awareness, increase environmental knowledge, increased environmental concern and subsequent behaviors that are environmentally positive” (p. 5).

From their results they concluded that there are “positive interconnections between environmental knowledge, concerns and behaviours” (p. 8), but they could not draw any cause or effect links since the data were only correlational. They also concluded that education (years in school) appears to be a good predictor of environmental knowledge and subsequent behaviour. A most interesting finding was that newspaper use for environmental information was useful in predicting attention, awareness, concerns, and subsequent behaviours, but that television was not a useful predictor. The results of Ostman and Parker’s studies suggest that information conveyed via the print media might be more influential, than information conveyed via the broadcast media (television and radio).

Ostman and Parker (1986/1987) noted that one cannot examine media effects in isolation, that there are a number of other variables that should be considered, including comprehension of environmental messages, psychological variables leading to medium selection, and use of non-media sources of information (i.e. media information is not exclusive). They also suggest that the examination of media effects should be combined with analysis of media content or linked to specific messages. The content analysis of Vancouver Aquarium news releases and of subsequent newspaper articles, based on those news releases, is an integral part of this study.

Ostman and Parker (1986/1987) used the same telephone survey of 336 residents of Ithaca, New York to determine "Which mass media source of environmental information are used most frequently by a public?" (p. 9). Newspapers and television were reported as the most frequently used media; 18.5% of respondents used newspapers "very often" and 12.3% used television "very often" to "get information on environmental topics" (p. 12). This is in keeping the reports of students' sources of environmental knowledge and issues discussed earlier (Blum, 1987; Hausbeck et al., 1992). But Ostman and Parker also found other factors that should also be considered. Factors such as education (schooling), interest in a particular issue, and light versus heavy use of a particular type of media could influence an individual's reliance on a particular type of media as a source of environmental information. The authors also found that newspapers were used most often for environmental information. They noted that this might be due to the fact that, in the sample area, there were a great many community newspapers that provided local information, and there was little local information on the television stations, since they were

network affiliates broadcasting from a nearby city. Once again, the results of this study indicated that the media are used significantly as a source of environmental information.

Many researchers from a variety of disciplines have considered the influence of the mass media. Berger (1995), McQuail and Windahl (1993), Shoemaker and Reese (1991), Stein (1979), and Bryant and Zillmann (1986) have authored books that reviewed theories of mass media communication and influence. Berger (1995) noted that "many different communication models have been created ... they enable us to understand complicated matters by separating them into their components and seeing how they function" (p. 12). The purpose of these models is to examine the communication process. This thesis explored part of the Vancouver Aquarium's communication process. Bearing in mind that people are influenced in their attitudes and opinions about animals and environmental information by the mass media, it is reasonable to assume that the Vancouver Aquarium can utilize the media to promote its educational mandate and further its mission statement. Before determining whether or not educational information found in the media (provided by the Vancouver Aquarium) can have an influence on the general public, it must be determined whether the media are receiving the educational information and appropriately incorporating it into a medium available to the general public. In other words, before the broader communication process of the Vancouver Aquarium's influence on the general public can be explored, the fundamental communication processes between the Vancouver Aquarium and the media must be examined. Media relations are used to interface with the media. It is possible to examine the media relations opportunities used by the Vancouver Aquarium, and determine which opportunity or tool is suited for transmitting educational information to the media.



### Selecting a Media Relations Tool

To analyze a particular type of media relation opportunity or tool, it was necessary to be able to look at it over time. News releases and public service announcements are two media relations tools that are kept on file at the Vancouver Aquarium and could, therefore, be accessed and followed over time. Other media opportunities such as on site media opportunities, interviews, press conferences, and contact through telephone calls, mailings, and faxes have not been recorded or filed with any regularity and, therefore, difficult to study over any period of time. Public service announcements (PSA), produced by the Vancouver Aquarium, are used to announce particular events such as education programs, entertainment, demonstrations, or workshops. The information in the PSA is typically included in the community events section of a newspaper, or in radio and television broadcasts. A PSA is useful for announcing educational opportunities at the Vancouver Aquarium, but they are not particularly useful for conveying detailed information; they are rarely interpreted discussed or used as the basis for a news story. The media will only incorporate logistical information, short promotional titles, or slogans into their columns or broadcasts. This is because PSAs are essentially free advertising, and are provided as a community service by newspapers, television and radio stations.

News releases are longer than PSAs and, therefore, can contain more information, and are used as an information source for a more extensively developed news item by the media. Typically, news releases are produced by the Communications Manager (or similar position) in order to announce an event or situation of importance to the institution. The event might have already occurred, or it might be anticipated to happen in the future. The news release is sent to selected members of the

media, particularly assignment editors and producers who determine which stories reporters will cover. The news release is designed to pique the interest of the media and provide basic information regarding the event or situation.

Routinely, Vancouver Aquarium news releases were distributed by fax and sent to key contacts in the media. This "contact list" or "media list" consists of assignment editors, television news producers, reporters, bureau chiefs, and editors for various broadcast and print media outlets. As Communications Manager, I would then call my contacts at the various newspapers and television stations to ensure that they had received the fax, and to "pitch" the story. "Pitching" the story refers to a very short conversation (usually less than two minutes) in which I would summarize the key message(s) of the news release, particularly the event or situation of interest, the logistical details, and why this story was unique or unusual, and I would try to convince the contact that the story should be covered. The news release and the "pitch" contain the same basic information (the former in written form, the latter given verbally), although there is usually more space within the news release to provide additional or background information.

As previously mentioned, rather than just providing the basic details of the event (what was happening, where, and when), I could incorporate additional biological and conservation information into the news release. Presumably, the media would then use this information when they covered the event or story featured in the news release. The general public would read or watch the story and learn the biological and/or conservation information. Therefore the Vancouver Aquarium would hopefully have used the media to contribute to the fulfillment of its education mandate.

As Communications Manager, in response to the guidelines outlined in *The New Wave*, I chose to utilize the news release in order to promote the Vancouver Aquarium's education mandate because (a) the news release format provided space in which to present educational information, and (b) animals and situations concerning the environment were common subjects for Vancouver Aquarium news releases. Later, when I determined that I would study how the Vancouver Aquarium used the media to promote its education mandate, I selected news releases because they were routinely kept on file, and could be tracked over time and through subsequent media publication. It should be noted that as Communications Manager, every effort was made to also incorporate educational information and promote the Vancouver Aquarium's educational messages in other media relations opportunities such as PSAs, Fact Sheets, press conferences, and interviews.

#### Selecting a Media Item

In order to ascertain whether the Vancouver Aquarium had used the media to contribute to fulfilling its education mandate, it was necessary to first identify the educational information in a Vancouver Aquarium news release and then determine the extent to which that information was included in a news item, produced by a media contact who had received the news release. In other words, I wished to examine the flow of an educational message from the Vancouver Aquarium to the media, and whether it was presented in a news item that was available to the general public. The Vancouver Aquarium news release was the method of information transmission to the media, and newspaper articles, and radio and television news items were the methods of transmission to

the general public. This thesis focuses on the information transfer between the Vancouver Aquarium and the media.

Originally, I considered looking at any items that appeared in electronic (radio and television) or print media which referred to information contained in a Vancouver Aquarium news release.

However, upon examining the radio and television items that were on file at the Vancouver Aquarium, it became clear that there were gaps in the electronic media record. As a result, it was difficult to assemble data over a significant period of time. There was also much greater variability in the form that the news item could take within the electronic media. A news item could consist of interviews, narration by the reporter, a combination of video or audio tape from the event with interviews of Vancouver Aquarium staff and comments from other individuals. In addition, some items were only covered by television reporters and others, only by radio. This variability made comparison between items difficult. Conversely, there was an extensive record of newspaper articles and less variability in the form a newspaper article might take. In addition, the studies by Ostman and Parker (1986/1987), Hausbeck, Milbrath and Enright (1992), and Blum (1987) supported the influence that the print media have on animal and environmental information, and on public attitudes and opinion regarding animals and the environment. For these reasons I chose to use newspaper articles as the media item to compare with the Vancouver Aquarium news releases.

This study, then, concerns itself with the information transfer between the Vancouver Aquarium and the media (via news releases) and the potential for the transfer of that same information to the general public (via newspaper articles). This study is of value to the Vancouver Aquarium, and to

myself, as Communications Manager, because it will determine whether or not the educational information presented in Vancouver Aquarium news releases is used by the media and transmitted to the general public, and, therefore, available to influence the general public's attitude towards the conservation of aquatic life.

### Summary

In this chapter the trend in the zoo and aquarium industry was discussed. This trend towards developing an all encompassing education mandate in order to better promote animal and conservation issues has been embraced by the Vancouver Aquarium. The Marketing and Guest Services staff examined its operations and identified opportunities for incorporating educational content into these endeavours. As Communications Manager, I developed a media relations strategy that used the Vancouver Aquarium news releases as an educational tool. This strategy assumed that the media could be utilized to promote educational information/messages to the general public.

The influence of mass media on students and the public with regard to animals and environmental issues was discussed. The process by which the media receive information from the Vancouver Aquarium was explained and a specific media relations tool to be studied (the news release) was identified. Newspaper articles based on Vancouver Aquarium news releases were identified as a specific news item that might contain educational information presented in such news releases.

An examination of the Vancouver Aquarium's news releases and subsequent newspaper articles should answer the main research questions of this paper, (a) How does the Vancouver Aquarium

use its media relations opportunities to promote educational information? and (b) Do the print media use the educational information conveyed in Vancouver Aquarium news releases?

## **Chapter 2: Using Content Analysis to Compare News Releases and Newspaper Articles**

In determining the methods for this study it was important to bear in mind the main research questions (a) How does the Vancouver Aquarium use its media relations opportunities to promote educational information? and (b) Do the print media use the educational information conveyed in Vancouver Aquarium news releases? The methods used also had to examine factors such as: content of news releases and newspaper articles, type of information (event, animal, and conservation messages), readability of news releases, and the source of newspaper articles (daily and community newspapers, news services).

In the previous chapter, various media relations opportunities or tools were discussed. Vancouver Aquarium news releases were selected as the most appropriate media opportunity to consider for this study, because archived news releases were available, the news releases incorporated educational information (in the form of animal and conservation messages), one person (the Communications Manager) was responsible for writing and distributing the news releases, and news releases were routinely used by the media as an information source and could be tracked through subsequent media publication. Newspaper articles (a print medium) were selected as the news item to be studied. Archived newspaper articles were available, news releases and newspaper articles use the same medium - the written word, and information regarding newspaper format and geographic location was readily available.

The study was conducted retrospectively. The data were selected from Vancouver Aquarium news releases after they had been written, and after the events featured in the news releases had occurred. This meant that the data were fixed and the data consisted of archival material.

### Inclusionary and Exclusionary Criteria

The data collected for this study consist of selected Vancouver Aquarium News Releases from July 1993 through December 1995, and newspaper articles were collected over the same time period via MH - Bowdens Media Monitoring Services (a commercial monitoring service utilized by the Vancouver Aquarium). There were 78 news releases produced between 1993 and 1995 inclusive. A news release was excluded if (a) there were no corresponding newspaper articles<sup>5</sup>; (b) they resulted in only newspaper photographs with minimal captions<sup>6</sup>, or (c) if the news releases was simply an announcement of management positions. To be in the study, a news release (a) had to be associated with newspaper articles that were on file at the Vancouver Aquarium, (b) had to be on file, and (c) had to be more than a simple announcement. As the Communications Manager, I wrote almost all of the Vancouver Aquarium news releases between 1993 and 1996 and, therefore, there was consistency in style. To be included in the study, newspaper articles had to have (a) appeared in a British Columbia or Yukon daily or community newspaper, (b) appeared after the distribution of a Vancouver Aquarium news release, and (c) dealt with the topic covered in the originating news release.

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<sup>5</sup> Sending out a news release does not guarantee a response from all forms of the media. The broadcast media (radio and television) might follow up on a news release, while there may be no response from the print media.

<sup>6</sup> Minimal captions meant that there was insufficient content for comparison with the news release.



In addition to determining what to study, it was necessary to select a method to analyze the news releases and associated newspaper articles. While it is possible to quantify each news release or article in terms of its number of words, sentences, pages or column inches in the newspaper, such quantitative analysis does not provide much useful information. Knowing the number of words in a news release or newspaper article does not indicate what the content is, and whether there is a relationship between the content of the news release and the content of the article. Qualitative information about the content of the data is more useful when trying to answer the research question, how do the print media use Vancouver Aquarium news releases?

Shoemaker and Reese (1991) proposed that “a study of media content also helps us to predict impact on its audience” (p. 23). While it is beyond the scope of this paper to predict the impact that the content of newspaper articles featuring Vancouver Aquarium stories may have, it is well within the scope to look at “what messages are available to an audience and, therefore, what messages are available to have an effect on the audience” (Shoemaker & Reese, 1991, p. 23). A comparison of the content of Vancouver Aquarium news releases and the associated, subsequent newspaper article(s) therefore would be a useful way to determine whether the messages that are available to the public via the print media were congruent with the messages contained within the corresponding Vancouver Aquarium news releases. Content analysis could determine whether the potential messages in Vancouver Aquarium news releases were included in the newspaper articles.

### Data Analysis

Content analysis is well suited to examining news releases and newspaper articles for the following reasons. Content analysis permits the researcher to meaningfully quantify and, possibly, encode qualitative information. Content analysis can be used to identify key pieces of information in a source document (news release), and then track that information as it appears in the print media (newspapers). Content analysis also facilitates the review of archival material and is easily applied to many forms of media. It can be applied to written materials, photographs, film, video, and artworks.

An important part of content analysis is the identification of the methods and categories used to encode the data. This process may be specific to each case, so it is important for the researcher to identify the categories and their criteria. Once parameters for encoding data in specific categories have been established, it is possible to use the same categories for similar documents or materials. This is particularly useful when examining and tracking specific content in newspaper articles.

Burrus-Bammel, Bammel and Kopitsky (1988) identified five steps to conduct content analysis research: (a) defining the population to be studied, (b) determining the sample, (c) isolating the unit of analysis, (d) encoding the data, and (e) conducting the statistical analysis. In this study, the population to be studied was the Vancouver Aquarium, and the British Columbia and Yukon print media. The sample consisted of selected Vancouver Aquarium news releases and articles from British Columbia and Yukon newspapers, and the unit of analysis was the written word contained within individual news releases and articles. The data were encoded by reviewing each news

release and newspaper article, and identifying three content categories: (a) Event Messages, (b) Animal Messages, and (c) Conservation Messages. The statistical analysis utilized descriptive statistics.

### Defining the Categories for Content Analysis

#### Content Categories

1. **Event Messages** were defined as information contained in “who”, “what”, “where”, and “when” statements. The “who”, “what”, “where”, and “when” statements were identified as content sub-categories. “Who” statements consisted of information about staff or specific animals at the Vancouver Aquarium (e.g., Qila, a beluga calf, or Bjossa, a 19-year-old female killer whale). “What” statements referred to the event or situation that occurred (e.g., an exhibit opening, an animal birth, a fish release). “Where” statements were concerned with the location of the event (typically on site at the Vancouver Aquarium). “When” statements provided details about time and date. “Who”, “what”, “where”, and “when” statements are commonly found in all news releases, not just those produced by the Vancouver Aquarium.

2. **Animal Messages** were defined as statements dealing with biological information, natural history, population statistics, or characteristics of individual animals. Animal Messages were further divided into three sub-categories: “individual animal information”, “population/species information” and “other information”. “Individual animal information” refers to descriptors of a particular animal (e.g., Finna, 19 year-old male killer whale from the waters off Iceland). “Population/species information” statements provided facts about a species or population as a

whole (e.g., Pacific whitesided dolphins are commonly found in temperate waters of the North Pacific Ocean). The “other information” sub-category included a broad range of statements that clearly referred to animal actions or information, but clearly did not belong in the first two categories. Animal Messages were one way in which the Vancouver Aquarium fulfilled its mandate of promoting aquatic education and awareness of aquatic species and ecosystems.

**3. Conservation Messages** were defined as statements about conservation and environmental issues. These messages were further sub-categorized as “concepts/principles”, “proposed action” and “significance to the wild population”. “Concepts/principles” statements commonly referred to the concepts of biodiversity and the significance of habitat conservation (e.g., loss of habitat means loss of life). “Proposed action” statements suggested a specific action the public could take to help conserve a species (e.g., by checking the labels of lotions to see if they contain sea turtle oil [an endangered wildlife product] an individual can choose not to purchase or use such lotions, and so, reduce the market demand for such products). The third sub-category of statements was “significance to the wild population”. These statements concerned a particular Vancouver Aquarium event or situation and its effect on a particular wild population (e.g., the statements might describe what effect a fish release could have on local wolf-eel populations). Conservation messages were important because effecting conservation is a key component of the Vancouver Aquarium’s mission statement:

For the purposes of this study, Animal Messages and Conservation Messages were considered as educational information. That is, these types of messages contained descriptive and factual information that could add to the general public’s knowledge of the animals or issues referred to

in a news release. Furthermore, this educational information was not essential to a news release, rather, it embellished the news release. The Event Messages provided the essential logistical information with regard to the topic of the news release. This type of information is found in every news release.

### Other Categories

1. **News Release Initiators** were defined as factors that caused a news release to be written. Six types of initiators were identified: Animals, Exhibits, Partnership, Initiatives, Research, Contests.

A news release could be initiated by more than one of these factor. For example, a news release about an exhibit opening featuring an animal never before displayed at the Vancouver Aquarium would be categorized as having both an “animal” and an “exhibit” initiator.

2. **News Release Format** identified which format a news release had (with a sidebar<sup>7</sup> or without a sidebar).

3. **Newspaper Format** referred to whether the newspaper article was from a daily or a community newspaper.

### The Content Analysis Procedure

The 78 Vancouver Aquarium news releases produced from 1993 to 1995 were reviewed and matched with appropriate newspaper articles that appeared in a British Columbia or Yukon daily or community paper, and dealt with the subject described in the news release. News releases and

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<sup>7</sup> See Figure 2 for an example of a Vancouver Aquarium News Release with sidebar, and Appendix A for an example of a Vancouver Aquarium News Release without sidebar.

newspaper articles were excluded from the study if they did not meet the criteria previously mentioned. Therefore, all the news releases in the study were associated with newspaper articles that primarily contained information from the news release. Thirty news releases and 82 corresponding newspaper articles were identified using the study's criteria. This does not imply that, during the period of the study, only 30 Vancouver Aquarium news releases resulted in newspaper articles, rather that, of the available pool of 78 news releases, 30 clearly met all of the study's inclusionary and exclusionary criteria. In fact, between 1993 and 1995, the vast majority of Vancouver Aquarium news releases resulted in news coverage in the print and/or broadcast media. Many news releases were excluded because it was not possible to determine whether the information in the associated newspaper articles came from a specific news release, or from other sources. Also, the news releases produced between January and June 1993 did not specifically incorporate educational information, and therefore were not included.

Each selected Vancouver Aquarium news release was reviewed and a different coloured highlighter was used to mark statements falling into each of the three content categories: Event Messages, Animal Messages or Conservation Messages. All of the news releases were reviewed and then the newspaper articles were matched to each separate news release. A specific news release was reviewed, and the Event Messages were noted, then the associated newspaper articles were read and if any of the Event Messages appeared they were highlighted. The process was repeated, with the same news release and set of newspaper articles, for Animal Messages, and then for Conservation Messages. After each set of news release and newspaper articles were reviewed, the data were encoded in the appropriate content category and its sub-categories.

The content analysis process and category definitions were used by an independent rater to analyze six of the Vancouver Aquarium news releases. The results of this blind, independent analysis supported the original content rating. The majority of discrepancies involved differences in the assignment of sub-categories. In the few cases where there was a discrepancy, the original categorization was used.

## Creating the Data Sheets

The results of the content analysis were recorded systematically on data sheets, as displayed in Figure 1, and included the following information: News Release Initiators, News Release/Paper Format, and News Release Content. Columns were added (one per article) until all newspaper articles associated with a particular news release were represented.

Categories	NR 19/10/94: Rescued Seals Return to Sea	Vancouver Courier 20/10/94
<b>News Release Initiators</b>		
Animals, Exhibits	Animals	
Partnerships, Initiatives		
Research, Contests		
<b>News Release/Paper Format</b>		
News Rel: sidebar/no sidebar	sidebar	
Paper: daily/community		community
<b>News Release Content</b>		
<b>Event Messages</b>		
Who	Aquarium Marine Mammal and Rehabilitation Centre	X
What	release of rescued seal pups	X
Where	Popham Island	X
When	Thursday, October 20, 1994	
<b>Animal Messages</b>		
Individual Animal Info	* 5 pups to be released	X
	* ages range from 2.4 to 4.5 months	X
Population/Species Info	* increase in seal pups coming into rehab may be due to recent increases in B.C. harbour seal population	
Other Info	* 90 seal pups have been brought into the Aquarium's rehab centre over the summer	
<b>Conservation Messages</b>		
Concepts/Principles	* watch seal pups for 24 hours, if the mother hasn't returned within that time call the Aquarium	
Supporting Data		
Proposed Action		
Significance to Wild Pop'n		

Figure 1. Example of Content Analysis Data Sheet.



News Release Initiators were divided into six sub-categories: Animals, Exhibits, Partnership, Initiatives, Research, Contests. If a news release concerned animals, "Animals" was noted in the News Release column beside the Animals/Exhibits row. If a news release referred to an exhibit, "Exhibits" was noted in the News Release column beside the Animals/Exhibits row. Similar entries were made if the news release referred to a Partnership, an Initiative, events concerning Research or Contests. A news release could be initiated by more than one sub-category. The News Releases Initiators category was only completed for news releases.

Similarly for the New Release/Paper Format category each news release was categorized as with a sidebar or without a sidebar, and each newspaper article was identified as being from a daily or a community newspaper.

The News Release Content categories (Event Messages, Animal Messages and Conservation Messages) were the basis of the content analysis. Each content category was divided into the sub-categories discussed earlier in this section. For every news release, each Event Message was located and reviewed, and identified as being in the "who", "what", "where" or "when" sub-category. Each "who" entry was logged into the "who" sub-category section verbatim. If the same "who" information occurred in an associated newspaper article, a "X" was noted in the appropriate newspaper article column. This process was repeated for all of the sub-categories under Event Messages, Animal Messages and Conservation Messages. The result was a collection of data sheets representing the qualitative information in each news release and its associated newspaper articles.

### Encoding the Information

The News Release Initiators, News Release/Paper Format, and News Release Content data were then tabulated and tables were developed for each section. For the News Release Content categories each entry was encoded by assigning a numerical value of “1” to each entry. For example, there might be eight separate verbatim entries from a news release in the “individual animal information” sub-category under Animal Messages, this would mean a value of “8”. For each associated newspaper article, the numerical value of “1” is assigned for each entry that corresponded to a news release entry. Thus, a *Vancouver Sun* article might mention four of the news release entries resulting in an assigned value of “4”; *The Province* article might mention three of the news release entries resulting in an assigned value of “3” and so on, until all newspaper articles entries were assigned a numerical value. From this numerical data, different calculations could be done, such as the total number “who” entries or “what” entries, or the total number of Animal Messages found in the associated newspaper articles, or the percent concurrence between a news release and its associated newspaper articles.

### News Release Readability

It was useful to consider the readability of news releases, as readability may be relevant to the media who have to read the news releases. A sample of ten news releases, produced between July and October 1994, was analyzed using the Readability Statistics package that is part of the “Grammar” tool of the Microsoft Word 6.0 software program. The news releases were selected because they were available in a format that could be easily transferred to Microsoft Word 6.0.

This program scans a selected section of text, or an entire document, for grammatical errors. It provides a word count for the document, and measurements of reading ease or reading grade level are calculated.

According to the Microsoft Word Readability Statistics dialog box, the Flesch Reading Ease scale calculates readability based on the average number of syllables per word and the average number of words per sentence. These scores can range from 0 to 100. The higher the score, the greater the number of people who can readily understand the document. The Flesch-Kincaid Grade Level used the same factors, (average number of syllables per word and words per sentence) to compute a grade-school level. A score of 9.2 means that a ninth grade student would understand the document. These scales provided information about the readability of the news releases considered in this study. Newspaper articles were not scanned for readability, since this study was primarily concerned about the media relations tool (news release) used to transmit information to the media, not the news item (newspaper article) used to transmit information to the general public. However, it would be an interesting study to consider and compare the readability of news releases and their associated newspaper articles.

#### A Framework for Considering the Data

The information from the data sheets and readability scales was considered in a variety of ways. Comparisons were made among news releases, among newspaper articles, and between news releases and newspaper articles.

### Comparisons Among News Releases

Each News Release Initiator was tabulated. The number of news releases with sidebars and without sidebars was determined. The number of Event Messages, Animal Message and Conservation Messages were calculated for each news release and then compared to the other news releases. The range and average number of entries were determined for each broad content category (Event, Animal, Conservation) and for each set of sub-categories (for example “who”, “what”, “individual animal information”).

From the readability scales, an average word count and an average Flesch Reading Ease for a news release was calculated, and an average reading grade level determined. These calculations and tables provided information about the format and content of Vancouver Aquarium news releases.

### Comparisons Among Newspaper Articles

The total number of articles from daily newspapers and community newspapers was determined. Articles produced by news services were also identified. These data provide information about the flow of information across the province, and whether or not there was any difference in the coverage given to Vancouver Aquarium news releases depending on a newspapers' proximity to the Vancouver Aquarium and/or the newspaper's format.

### Comparisons Between News Releases and Newspaper Articles

For the each newspaper article, a total number of entries was calculated for the content categories (Event Messages, Animal Messages and Conservation Messages) and for each sub-category. This information was used to calculate the percent concurrence between a news release and its associated newspaper articles. The percent concurrence was determined for each content category. The number of Event Messages, Animal Messages and Conservation Messages were also added together for each news release (total number of entries). This calculation was repeated for each associated newspaper article. The percent concurrence was determined by expressing the total number of entries for a newspaper article as a percentage of the total number of entries for the news release. This calculation was repeated for each newspaper article associated with a particular news release. The derived information for each set was then compared (a set consists of a news release and its matched newspaper articles).

The percent concurrence revealed the amount of concurrence or “relatedness” between a particular news release and its associated newspaper articles. This was useful in determining how much, and what type (Event Messages, Animal Messages or Conservation Messages) of information found in a news release was also found in an associated newspaper article and, therefore, whether information had been transmitted from the news release to the newspaper article.

### Summary

In this chapter content analysis was presented as a useful method of examining the content of Vancouver Aquarium news releases and associated newspaper articles. Burrus-Bammel et al.'s five steps to conduct content analysis research were reviewed with regard to the case of the Vancouver Aquarium and this study. The parameters of the study were defined: it was a retrospective study, the exclusion and inclusion criteria were provided, categories were defined, and the content analysis procedure was presented. A framework of comparisons for considering the data from the content analysis was proposed.

### **Chapter 3: The Results of the Content Analysis**

There are many ways to look at the results of the content analysis of the Vancouver Aquarium news releases and associated newspaper articles. Thirty Vancouver Aquarium news releases and 81 associated newspaper articles, written over the course of 29 months, were analyzed. When considering the results of this analysis it was useful to make comparisons among the Vancouver Aquarium news releases, comparisons among the newspaper articles, and comparisons between the news releases and the newspaper articles. Descriptive information regarding Vancouver Aquarium news releases and the source of newspaper articles were also considered.

#### **Vancouver Aquarium News Releases: Descriptive Information**

The 30 Vancouver Aquarium news releases analyzed in this study, produced between July 13, 1993 and December 14, 1995, were one letter-size page in length. Word counts conducted on a sample from the news releases (n=10) revealed that those news releases ranged from 303 to 508 words each, with an average of 361 words.

#### **News Release Format**

The Vancouver Aquarium news releases tended to be highly visual and followed a newspaper format with a large, bold headline: "Vancouver Aquarium", a second smaller headline that changed with the topic of the news release, and text arranged in columns and sidebars or in paragraphs (Figure 2).

The text format varied slightly among news releases but the basic template was maintained. This unique format was developed so that it would be eye-catching and easily discerned from other news releases. It was important that the news release be recognizable, and identified by media contacts as a Vancouver Aquarium news release. The Vancouver Aquarium news release format also maximized the limitation of a single page space.

The success of the Vancouver Aquarium news release's unique format was confirmed by feedback from media contacts, including an interview<sup>8</sup> with a television news producer/reporter who noted, "And that is one that always gets my attention [the VA news release] just the way the letterhead is and how things are positioned on the piece of paper. ... I can be across the room and I can see it coming off the fax machine and I know who it is." (B. Puri, personal communication, June 23, 1997).

Of the 30 news releases, 18 had sidebars and 12 did not. The sidebar was intended as a built-in "mini-backgrounder". A backgrounder or fact sheet is often used in media relations to convey background facts or information that may be useful to the reporter as he/she develops a story. A backgrounder or fact sheet may be included with a news release as a separate document, but more typically is supplied upon request, or at the time of an event. Sidebars were only included when there was sufficient space to fit all of the pertinent points of the news release in just two columns of text and on one page, and still leave room for the sidebar; if there was not sufficient space, a sidebar was not included. For the content analysis of the news releases, text from the main

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<sup>8</sup> I conducted an interview with Ms. Puri as a requirement for another program. However, some of her comments were very compelling and illustrated the media's perspective with regard to the utilization of news releases, therefore I have included them in this thesis.



paragraphs and sidebars (when present) were considered together. Sidebar information was considered as part of the main text because both the sidebar and the main text could include Animal and Conservation Messages. Typically, only the main text included Event Messages.

Although the basic layout of a Vancouver Aquarium news release varied from the format of a classic news release<sup>9</sup>, all Vancouver Aquarium news releases contained the standard news release elements: the date of issue, the place of issue (Vancouver), a title indicating that it was a news release, and a contact name and number for more information. In addition, all Vancouver Aquarium news releases contained the institution's mailing address, general telephone and fax numbers, and the institution's mission statement.

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<sup>9</sup> See Appendix B for an example of a classic news release.

### News Release Readability

The Readability Statistics tools in the Microsoft Word 6.0 program were used to determine reading ease and grade levels for a sample of ten news releases, and the results of these scales are presented in Table 1.

Table 1

#### News Release Readability Statistics (n=10)

<b>News Releases by Date</b>	<b>Flesch Reading Ease</b>	<b>Flesch-Kincaid Grade Level</b>
July 18, 1994	55.8	9.5
May 5, 1994	57.3	8.8
May 20, 1994	56.8	9.0
June 1, 1994	56.5	9.7
June 29, 1994	48.1	10.7
July 6, 1994	64.1	7.8
August 12, 1994	55.0	10.0
September 29, 1994	44.2	11.3
September 30, 1994	43.7	11.6
October 10, 1994	62.9	8.6
<b>Mean</b>	<b>54.4</b>	<b>9.7</b>

According to the statistics of the Flesch Reading Ease scale, a Vancouver Aquarium news release had an average score of 54.4 out of 100. The Flesch Reading Ease scale computes readability on the basis of the average number of syllables per word and the average number of words per sentence. Scores can range from zero to 100, with standard writing averaging between 60 to 70. The higher the score the greater the number of people who can readily understand the document. A score of 54.4 is slightly lower than the standard averages of 60 to 70, indicating that the

average Vancouver Aquarium news release is slightly more difficult to read than standard writing. The Flesch Reading Ease scores varied from a low of 43.7, for a news release about an award for a long-term research project on pandalid shrimp (cold water marine shrimp species), to a high of 64.1, for a news release concerning a new exhibit featuring Steller sea lions.

The Flesch-Kincaid Grade Level gave the sample of Vancouver Aquarium news releases a mean reading grade level of 9.7. The scale rated the news release about the announcement of receiving an award for research on pandalid shrimp, as the most-difficult-to-read (highest reading grade level of 11.6). The easiest-to-read news release, about the opening of the Steller sea lion exhibit, received the lowest reading grade level of 7.8, indicating that a grade 7-to-8 student should be able to understand the content of the news release. Readability has important implications for the target audience of news releases, editors and reporters.

#### News Release Initiators

After reviewing the 30 news releases selected for the study, six news release initiators were identified (Table 2). News release initiators were those factors that caused a news release to be written such as, the birth of an animal, the opening of a new exhibit, receiving an award, or a “name-the-animal” contest. The six initiator categories were Animals, Exhibits, Partnerships, Initiatives, Research, and Contests. A news release could have more than one initiating factor, and therefore be it could be listed in more than one category. For example, a news release about the opening of a new exhibit featuring Steller sea lions would be listed in the Animals category and under Exhibits. Almost every news release had an animal initiator; 29 out of 30 news releases

were listed in the Animals sub-category. Exhibits and Contests were the next most common factors initiating a news release. Partnerships, Initiatives and Research were the least frequent initiators.

Table 2

News Release Initiators

<b>News Release Initiators</b>	<b>Number of News Releases</b>
Animals	29
Exhibits	3
Partnerships	1
Initiatives	1
Research	1
Contests	3

Comparison of Event, Animal and Conservation Messages among News Releases

All of the 30 Vancouver Aquarium news releases analyzed contained Event Messages and Animal Messages. Less than half of the news releases (14 news releases or 47%) were identified as having Conservation Messages. Specific findings for each of these content categories and their sub-categories are presented in Table 3.

Table 3

News Release Content Analysis Regarding the Presence of Event, Animal and Conservation Messages

<b>News Release Content by Category &amp; Sub-category</b>		
	<b>News Releases Containing Entries, n=30</b>	
<b>Event Messages</b>	<b>30</b>	<b>100 %</b>
Who	20	67%
What	30	100%
Where	23	77%
When	20	67%
<b>Animal Messages</b>	<b>30</b>	<b>100 %</b>
Individual Animal Inf.	26	87%
Population/Species Inf.	25	83%
Other Inf.	30	100%
<b>Conservation Messages</b>	<b>14</b>	<b>47 %</b>
Concepts/Principles	14	47%
Proposed Action	2	7%
Significance to Wild Pop'n	2	7%

Event Messages Found in Vancouver Aquarium News Releases

The Event Messages category was broken down into four sub-categories: “who”, “what”, “where”, “when”. All 30 news releases contained Event Messages, although not all news release contained information from each of the four sub-categories (Table 3). Altogether there were 118 entries in the Event Messages category: 22 entries in the “who” sub-category, 50 entries in “what”, 26 in “where” and 20 in the “when” sub-category. As should be the case, every news release had information in the “what” sub-category. These results are shown in Table 4.

Table 4

Number of Event Messages Entries for Each News Release

<b>Number of Event Messages per News Release</b>					
<b>News Release</b>	<b>Who</b>	<b>What</b>	<b>Where</b>	<b>When</b>	<b>Total</b>
July 13, 1993	0	1	1	1	3
July 19, 1993	0	1	1	1	3
August 4, 1993	0	1	1	0	2
August 19, 1993	0	1	1	1	3
September 20, 1993	0	1	1	1	3
September 21, 1993	1	1	0	1	3
November 9, 1993	0	1	0	0	2
January 18, 1994	0	1	1	0	2
January 25, 1994	1	2	1	1	5
May 5, 1994	1	1	0	0	3
May 20, 1994	0	2	0	1	3
June 1, 1994	1	2	1	1	5
June 29, 1994	1	2	1	1	5
July 6, 1994	1	1	0	1	3
August 12, 1994	0	1	0	1	2
September 29, 1994	1	2	1	1	5
September 30, 1994	1	5	1	1	8
October 19, 1994	1	1	1	1	4
January 13, 1995	1	1	1	1	4
March 14, 1995	1	2	0	1	4
March 27, 1995	1	2	1	1	5
April 20, 1995	1	2	1	1	5
May 18, 1995	1	1	1	1	4
August 11, 1995	2	3	2	1	8
August 23, 1995	1	1	1	0	3
August 27, 1995	1	2	1	0	4
September 4, 1995	1	3	1	0	5
September 11, 1995	1	2	1	0	4
September 18, 1995	1	3	3	0	7
December 14, 1995	1	1	1	0	3
<b>Totals</b>	22	50	26	20	118

Since news releases are a tool to tell the media of an event or occurrence, it is not surprising to find that “what” information occurs in all of the news releases, and that there were more entries in the “what” sub-categories than in any of the other types of Event Messages. Nor is it surprising to find that at least 67% of the news releases also contained “who”, “when”, and “where” Event Messages.

#### Animal Messages Found in Vancouver Aquarium News Releases

The second of the content categories in the content analysis of news releases was Animal Messages, and Table 5 presents the detailed results of the content analysis for this category. The sub-categories for Animal Messages were “individual animal information”, population/species information” and, a miscellaneous sub-category called “other information”. Once again, all Vancouver Aquarium news releases in the study contained Animal Messages, but not every sub-category was represented in every news release (Table 3). All 30 news releases contained information pertaining to animals that was categorized as “other information”. In addition, at least 83% of the news releases contained “population/species information” and “animal information”. In total, 258 separate entries were made in the Animal Messages category: 111 in the “individual animal information” sub-category, 64 in “population/species information” and 83 items in “other information”.

Table 5

Number of Animal Messages Entries for Each News Release

<b>Animal Messages</b>				
<b>News Release</b>	<b>Individual Animal Inf.</b>	<b>Population/ Species Inf.</b>	<b>Other Inf.</b>	<b>Total</b>
July 13, 1993	4	1	3	8
July 19, 1993	0	3	0	3
August 4, 1993	4	7	1	12
August 19, 1993	5	2	3	10
September 20, 1993	2	5	2	9
September 21, 1993	3	1	2	6
November 9, 1993	3	3	4	10
January 18, 1994	2	7	2	11
January 25, 1994	0	1	3	4
May 5, 1994	6	3	1	10
May 20, 1994	5	2	2	9
June 1, 1994	4	2	3	9
June 29, 1994	4	1	6	11
July 6, 1994	3	4	3	10
August 12, 1994	6	3	1	10
September 29, 1994	5	3	1	9
September 30, 1994	0	2	2	4
October 19, 1994	2	1	1	4
January 13, 1995	3	5	1	9
March 14, 1995	5	0	3	8
March 27, 1995	3	3	4	10
April 20, 1995	0	0	6	6
May 18, 1995	6	1	5	12
August 11, 1995	0	0	2	2
August 23, 1995	8	2	3	13
August 27, 1995	6	2	4	12
September 4, 1995	5	1	3	9
September 11, 1995	7	1	3	11
September 18, 1995	2	1	3	6
December 14, 1995	2	0	3	5
<b>Totals</b>	<b>111</b>	<b>64</b>	<b>83</b>	<b>258</b>



It was important to determine whether or not Animal Messages are present in Vancouver Aquarium news releases, since news releases cannot transmit educational information to the print media unless such information is present in the news release. This also holds true for Conservation Messages, the other source of educational information considered in this study.

#### Conservation Messages Found in Vancouver Aquarium News Releases

The final content category considered in the news release content analysis was Conservation Messages and the results are presented in Table 6. Such messages were divided into three sub-categories: “concepts/principles”, “proposed action” and “significance to wild population”. Almost half of the news releases (47%) contained information categorized as Conservation Messages (Table 3). Fourteen or 47% of the news releases had information identified as “concepts/principles”. The “proposed action” and “significance to wild population” sub-categories were represented in just 7% of the news releases. There were 27 entries in the Conservation Messages category: 23 items concerning “concepts/principles”, two items regarding “proposed action” and two items under “significance to wild population” Table 6.

Table 6

Number of Conservation Messages Entries for Each News Release

<b>Conservation Messages</b>				
<b>News Release</b>	<b>Concepts/ Principles</b>	<b>Proposed Action</b>	<b>Significance to Wild Pop'n</b>	<b>Totals</b>
July 13, 1993	2	0	0	2
July 19, 1993	0	0	0	
August 4, 1993	0	0	0	
August 19, 1993	0	0	0	
September 20, 1993	0	0	0	
September 21, 1993	2	0	0	2
November 9, 1993	0	0	0	
January 18, 1994	0	0	0	
January 25, 1994	3	0	0	3
May 5, 1994	2	0	0	2
May 20, 1994	3	0	0	3
June 1, 1994	3	0	0	3
June 29, 1994	0	0	0	
July 6, 1994	1	0	0	1
August 12, 1994	1	0	0	1
September 29, 1994	0	0	0	
September 30, 1994	1	0	0	1
October 19, 1994	1	0	0	1
January 13, 1995	1	0	1	1
March 14, 1995	0	0	0	
March 27, 1995	0	0	0	
April 20, 1995	1	1	0	2
May 18, 1995	1	0	1	2
August 11, 1995	1	1	0	2
August 23, 1995	0	0	0	
August 27, 1995	0	0	0	
September 4, 1995	0	0	0	
September 11, 1995	0	0	0	
September 18, 1995	0	0	0	
December 14, 1995	0	0	0	
<b>Totals</b>	23	2	2	27

There were fewer Conservation Messages in the reviewed news releases, than there are Event or Animal Messages. This means that there were fewer Conservation Messages available to be transmitted to the print media via Vancouver Aquarium news releases. Therefore you would expect to see more Event and Animal Messages than Conservation Messages, in the resulting newspaper articles.

#### Newspaper Articles: Descriptive Information

The newspaper articles considered in this study came from daily and community newspapers (published once or twice a week) from across British Columbia and the Yukon. In total, 81 articles were analyzed, 46 from dailies and 35 from community newspapers. Seventeen of the 46 daily newspaper articles were supplied by a news service. The remaining newspaper articles were written by reporters working for the respective newspapers.

### Daily Newspapers

Articles from ten daily newspapers came from Vancouver, Victoria, Nanaimo, Kelowna, Kamloops, Cranbrook, Vernon and Whitehorse as shown in Table 7.

Table 7

#### Number of Articles from British Columbia and Yukon Daily Newspapers

<b>Total Number of Articles from Daily Newspapers (total = 46)</b>	
<b>Daily Newspaper (location)</b>	<b>Number of Articles per Newspaper</b>
The Province (Vancouver)	14
Vancouver Sun (Vancouver)	11
Daily Free Press (Nanaimo)	5
Times-Colonist (Victoria)	4
Daily News (Vernon)	3
Kamloops Daily News (Kamloops)	2
Daily Courier (Kelowna)	2
Daily Townsman (Cranbrook)	1
The Globe and Mail (Vancouver)	1
Whitehorse Star (Whitehorse)	3

The article from *The Globe and Mail* was considered as originating in Vancouver since the clipping was from the Western Region paper. Of the newspaper articles considered for this study, *The Province* newspaper published the most articles (14) and the *Vancouver Sun* published 11 articles. *The Province* and the *Vancouver Sun* newspapers are the two major dailies for the Vancouver area, and are widely read and distributed throughout the province of British Columbia. The remaining daily newspapers published considerably fewer articles (Table 7). This is to be expected since the Vancouver Aquarium is located in Vancouver (where the two major dailies are published).

## News Services

Articles that appeared in dailies other than *The Province* and the *Vancouver Sun* were examined with regard to the origin of the article, whether it was an original piece of writing or from a news service. The articles that came from *The Province* and the *Vancouver Sun* were written by their reporters and not supplied by a news service. As shown in Table 8, with the exception of the *Times-Colonist* (Victoria), all of the other daily newspapers picked up all the stories that were used via a news service. Canadian Press provided 16 articles for dailies on Vancouver Island, the Interior and the Yukon. The Sterling News Service provided one article that was published in the Cranbrook daily newspaper, the *Daily Townsman*. Of the 81 newspaper articles examined in the study, this was the only article provided by the Sterling News Service. Canadian News Service articles originated from the Vancouver bureau, however they could have a Vancouver or a Victoria by-line<sup>10</sup>.

Each of the news service articles was reviewed with regard to content to ensure that the articles were not identical to each other or to articles appearing in the Vancouver dailies. Although many of the articles contained similar information, there were differences in content, length and format (some were articles either with or without photographs, and other items were photographs with extended captions). Given these differences, and the fact that Vancouver Aquarium news releases were routinely sent directly to Canadian Press News Service and the Sterling News Service, these articles were included in the study.

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<sup>10</sup> A by-line appears at the beginning of each news service story. It indicates the service and the city in which the story was filed. For example VANCOUVER (CP) indicates a Canadian Press story filed in Vancouver. News service photographs have a credit at the end of the caption indicating the service, for example CP PHOTO.

Table 8

Sources of Articles from Daily Newspapers Outside Vancouver

<b>Daily Newspaper</b>	<b>Original Articles</b>	<b>News Service and No. of Articles</b>
Times-Colonist, Victoria	3	Canadian Press: 1
Daily Free Press, Nanaimo	0	Canadian Press: 5
Daily News, Vernon	0	Canadian Press: 3
Whitehorse Star	0	Canadian Press: 3
Kamloops Daily News	0	Canadian Press: 2
Daily Courier, Kelowna	0	Canadian Press: 2
Daily Townsman, Cranbrook	0	Sterling News Service: 1

The articles generated by news services could also be grouped with regard to topic (Table 9).

Table 9

Topics of Newspaper Articles Produced by News Services

Topic	Daily Newspaper	News Service
rescued northern elephant seals	Times-Colonist, Victoria	Canadian Press
northern elephant seals release	The Daily Courier, Kelowna	Canadian Press
	Times-Colonist, Victoria	Canadian Press
	Daily Free Press, Nanaimo	Canadian Press
green sea turtles	Daily News, Vernon	Canadian Press
sea otter birth	Daily Free Press, Nanaimo	Canadian Press
	Daily News, Vernon	Canadian Press
	Times-Colonist, Victoria	Canadian Press
killer whale pregnancy	Kamloops Daily News	Canadian Press
	The Daily Courier, Kelowna	Canadian Press
	Times-Colonist, Victoria	Canadian Press
Steller sea lions & exhibit	Whitehorse Star	Canadian Press
beluga pregnancy	Daily Free Press, Nanaimo	Canadian Press
	Whitehorse Star	Canadian Press
report on killer whale calf	Daily Free Press, Nanaimo	Canadian Press
beluga birth	Daily Free Press, Nanaimo	Canadian Press
	Whitehorse Star	Canadian Press
	Kamloops Daily News	Canadian Press
	Daily Townsman, Cranbrook	Sterling News Service

Almost all of the articles generated by a news service concerned marine mammals, especially whales. For example, the *Daily Free Press*, *Whitehorse Star*, *Kamloops Daily News*, and the *Daily Townsman* carried Canadian Press and Sterling News Service stories regarding the July 23, 1995 birth of a beluga calf. In half of the cases, if a topic was carried by a news service it was

picked up by more than one daily newspaper. None of the community newspaper articles were attributed to a news service.

### Community Papers

Community papers are usually published in smaller towns or city neighbourhoods. Usually, they are published once or twice a week, feature stories regarding events that occurred within their communities, and often have free circulation. The community papers serving the Vancouver Aquarium's neighbourhood, the West End, are the *Vancouver Courier*, the *West End Times*, the *West Ender* and the *Kitsilano News* as shown in Table 10. These newspapers published most of the community newspaper articles concerning Vancouver Aquarium topics.

Table 10

### Number of Articles from British Columbia Community Newspapers

<b>Total Number of Articles from Community Newspapers (total = 35)</b>	
<b>Community Newspaper (location)</b>	<b>Number of Articles per Newspaper</b>
Vancouver Courier (West & East Side, West End)	13
West End Times (West End, East Side)	11
West Ender (West End)	3
Kitsilano News (West Side)	2
Today's Times (Vancouver)	3
Aldergrove Star (Aldergrove)	1
Sunshine Coast News (Sunshine Coast)	1
The Leader (Gibsons, Sunshine Coast)	1

The *Vancouver Courier* and the *West End Times* published the most articles, 13 and 11 articles respectively. The *Kitsilano News* and the *West Ender* are published by the same publisher and staff, however, there was no duplication in the selected newspaper articles.



The community newspaper articles from the *Sunshine Coast News*, *The Leader* (Gibsons) and the *Aldergrove Star* all covered the same topic, the return of two rescued northern elephant seals to the wild. Since one of the northern elephant seals was rescued from the Sunshine Coast, it was logical that the community newspapers from that area would cover the return of the northern elephant seals to the wild. However, there was no clear reason as to why the *Aldergrove Star* covered the story; especially since the newspaper was not in the Vancouver Aquarium neighbourhood, there was no apparent connection to the rescued northern elephant seals and the paper did not cover any other Vancouver Aquarium story during the study.

#### Vancouver Aquarium News Releases and Newspaper Articles: Descriptive Information

To be included in this study, a news release had to have at least one associated newspaper article.

Table 11 presents the number of newspaper articles per news release.

Table 11

#### Number of Newspaper Articles per News Release

Number of News Releases	Number of Associated Newspaper Articles
5	5 - 10
4	4
3	3
5	2
13	1
<b>Total Number of News Releases = 30</b>	

The data can be broken down into three clear groupings: news releases that had just one associated article, news releases that had two to four associated articles and finally those that had

more than five associated newspaper articles. These groupings are arbitrary since there is no real difference between a news release that resulted in four newspaper articles versus one that resulted in five newspaper articles.

#### Concurrence Between Vancouver Aquarium News Releases and Newspaper Articles

After identifying the Event, Animal, and Conservation Messages in the selected news releases and newspaper articles, the data were compared to determine what information from the news releases actually appeared in the newspaper articles. Matching the content found in newspaper articles with that in the Vancouver Aquarium news releases was possible, but expressing each match, item by item, was too complex to meaningfully report. The percent concurrence between newspaper article content and news release content was a more meaningful reporting method. The percent concurrence was determined by expressing the total number of entries for a newspaper article as a percentage of the total number of entries for the news release. This statistic described the amount of agreement each newspaper article had compared to the originating news release, and therefore how much information was used from the news release<sup>11</sup>. Grouping the percent concurrence findings in increments of ten per cent facilitated analysis (Table 12).

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<sup>11</sup> See Appendix C for a complete table of the total percent concurrence for all content categories for each news release and associated newspaper articles.

Table 12

Concurrence Between Vancouver Aquarium News Releases and Newspaper Articles

<b>Total Percent Concurrence of Newspaper Articles to News Releases (increments of 10%)</b>	<b>Number of Newspaper Articles per Increment Total Number of Newspaper Articles = 81</b>
0 - 10	2
11 - 20	6
21 - 30	15
31 - 40	19
41 - 50	22
51 - 60	7
61 - 70	5
71 - 80	2
81 - 90	1
91 - 100	2

Most of the newspaper articles had between 21% and 50% concurrence. This grouping represents 56 (69%) of the 81 newspaper articles. However, the total percent concurrence for a newspaper article does not reveal what type of information was shared.

To establish what type of information was shared, the percent concurrence for each content category (Event, Animal, and Conservation Messages) was considered. These comparisons revealed the proportionate amounts of the various types of information (Event, Animal or Conservation) from the news releases, that was used in the newspaper articles.

Concurrence between Event Messages in Vancouver Aquarium News Releases and Newspaper Articles

As shown in Table 13, of the 81 newspaper articles reviewed, 53% contained more than 50% of the Event Messages available in the news releases.

Table 13

Concurrence Between Vancouver Aquarium News Releases and Newspaper Articles for the Event Messages Category

Event Messages	
Concurrence of Newspaper Articles to News Releases (increments of 10%)	Number of Newspaper Articles per Increment Total Number of Newspaper Articles = 81
0 - 10	6
11 - 20	4
21 - 30	5
31 - 40	18
41 - 50	5
51 - 60	6
61 - 70	17
71 - 80	5
81 - 90	0
91 - 100	15

Fifteen of the 81 newspaper articles had 100% concurrence with their originating news releases; that is, 19% of the newspaper articles contained all of the Event Messages provided in the originating news releases. Altogether 43 articles contained between 50% and 100% of the content found in the originating news releases.

Concurrence between Animal Messages in Vancouver Aquarium News Releases and Newspaper Articles

Table 14 presents the concurrence of the content of the reviewed newspaper articles with their originating news releases.

Table 14

Concurrence Between Vancouver Aquarium News Releases and Newspaper Articles for the Animal Messages Category

<b>Animal Messages</b>	
<b>Concurrence of Newspaper Articles to News Releases (increments of 10%)</b>	<b>Number of Newspaper Articles per Increment Total Number of Newspaper Articles = 81</b>
0 - 10	3
11 - 20	14
21 - 30	16
31 - 40	18
41 - 50	14
51 - 60	4
61 - 70	4
71 - 80	3
81 - 90	2
91 - 100	3

As can be seen, most of the newspaper articles (62) contained less than 50% of the potential shared information. Seventy-seven percent of the newspaper articles contained between 0 - 50% of the Animal Messages available in the news releases. However, all but one newspaper article contained some Animal Messages found in the originating news releases. This pattern is quite different from that found for Event Messages, where 53% of the newspaper articles reviewed had more than 50% of the Event Messages available in the news releases.

Concurrence Between Conservation Messages in Vancouver Aquarium News Releases and Newspaper Articles

Table 15 shows that the situation for Conservation Messages was very different from that for either Event Messages or Animal Messages, primarily because very few newspaper articles contained any Conservation Messages at all.

Table 15

Concurrence Between Vancouver Aquarium News Releases and Newspaper Articles for the Conservation Messages Category

<b>Conservation Messages</b>	
<b>Concurrence of Newspaper Articles to News Releases (increments of 10 %)</b>	<b>Number of Newspaper Articles per Increment Total Number of Newspaper Articles = 30</b>
0 - 10	22
11 - 20	
21 - 30	
31 - 40	
41 - 50	5
51 - 60	
61 - 70	
71 - 80	
81 - 90	
91 - 100	3

Of the 30 newspaper articles that had the potential to contain Conservation Messages (that is the newspaper article was based on a news release that contained Conservation Messages), only 8 articles had any conservation content that originated with a news release. However, three newspaper articles contained 100% of the potential Conservation Messages.

## Summary

In this chapter, the results of the content analysis of 30 Vancouver Aquarium news releases and 81 corresponding newspaper articles were presented within a framework of comparisons: comparisons among the Vancouver Aquarium news releases, comparisons among the newspaper articles, and comparisons between the news releases and the newspaper articles. Other findings, such as news release word count, readability, and initiating factors were also presented. The content analysis of Event, Animal, and Conservation Messages in news releases revealed that all 30 news releases contained Event and Animal Messages, but only 47% of the news releases contained Conservation Messages. The origin of the newspaper articles was discussed, as well as, whether the articles came from a daily or community newspaper or a news service. The percent concurrence for Event Messages, Animal Messages, and Conservation Messages were also presented.

## **Chapter 4: Discussion**

In this chapter, I review the motivation for this study, propose a model of the communication process, discuss the results of the content analysis that was the basis of this study, and answer the two research questions (a) How does the Vancouver Aquarium use its media relations opportunities to promote educational information? and (b) Do the print media use the educational information conveyed in Vancouver Aquarium news releases?

### **Motivation for the Study**

In 1992, when I became the Communications Manager for the Vancouver Aquarium, it was at a cross road. Paradigm shifts occurred throughout the institution. The Education Department revised its volunteer training, moving towards a learner-centred, constructivist approach. The interpretive and marine mammal staff moved away from scripted and choreographed whale shows (an entertainment paradigm), towards an innovative animal-centred, unscripted, discovery learning approach (a conservation education paradigm) (Kelsey, 1994). Dr. Murray Newman, the Vancouver Aquarium's Founding Director, was preparing to retire after 36 years. The zoo and aquarium industry was pursuing ways and means to extend its commitment to conservation education to all facets of its operations (Hotchkiss, 1993). Finally, in 1993, with the arrival of a new Executive Director, Dr. John Nightingale, the entire Vancouver Aquarium became involved in examining its mission statement and creating new strategic objectives that implemented the institution's commitment to conservation education.

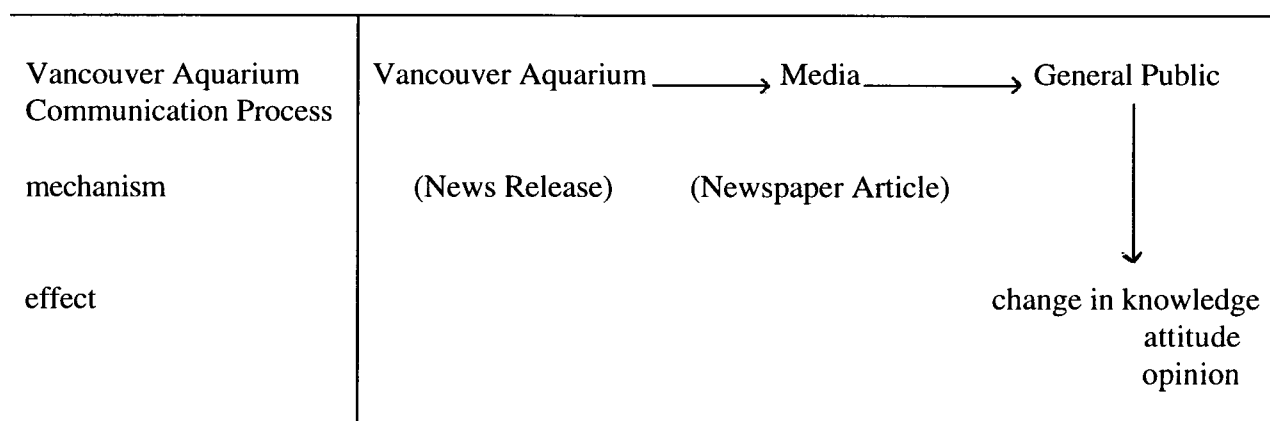


This study came out of these changes within the Vancouver Aquarium, particularly the Marketing and Guest Services department's goal to maximize educational opportunities within its marketing and communications strategies. As Communications Manager, I was responsible for the Vancouver Aquarium's media relations. I identified news releases, a media relations tool, as an opportunity to promote educational messages and so, contribute to the incorporation of conservation education into all aspects of the Vancouver Aquarium's operations. Educational information could be included in Vancouver Aquarium news releases, which were distributed to media contacts (primarily assignment editors, television and radio producers, and reporters). The expectation was that the educational information would then be incorporated into news items (for example, newspaper article, television news piece, radio voice-over) and transmitted to the general public and effect change.

#### A Communication Process Model

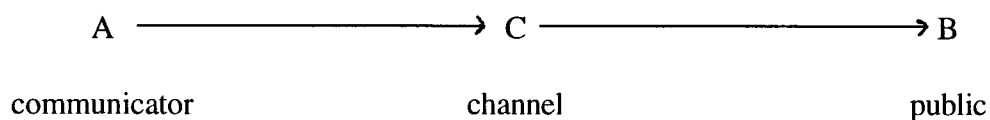
In thinking about the process of utilizing the media to promote the Vancouver Aquarium's educational messages, it became clear that I had to determine the extent to which the media incorporated the educational messages, contained in Vancouver Aquarium news releases, into specific news items, before I could decide whether or not these educational messages were having any effect on the general public's attitudes or opinions. This led me to examine the process by which the Vancouver Aquarium communicated to the general public via the media, and the decision to study a specific transfer of information that occurred between the Vancouver Aquarium and the media, rather than whether the educational messages (from the Vancouver Aquarium and incorporated by the media into newspaper articles) had any effect on the general

public's attitudes or opinions. During the course of this study, I developed a communication process model to describe the particular aspect of the Vancouver Aquarium's media relations strategy that was being investigated. This model is depicted in Figure 3.



**Figure 3.** A Vancouver Aquarium communication process utilizing the media.

This model is similar to Westley and MacLean's (1957) model of the mass communication process (Figure 4), where "A" represents the communicator, "C" represents the channel (the mass media) and "B" represents the public.



**Figure 4.** From Westley and MacLean Mass Communication Process (1957)

In the Vancouver Aquarium communication process model, the Vancouver Aquarium is the communicator, the Media are the channel, and the General Public are the public. In addition, the Vancouver Aquarium model depicts an "effect process" wherein there is a change in the general

public's knowledge, attitude and/or opinion as a result of information received from the communicator (Vancouver Aquarium) via the channel (the media).

Berger's (1995) review of mass communication theory indicates that a great deal of work has been done on the possible effects media have on public attitudes and opinions ("effect process" in Figure 3). However, in my opinion, before one can begin to consider particular media effects (especially whether or not an institution can effect public attitudes), it is essential to determine if an institution's messages are actually utilized by the media (communication process between the communicator and the channel). This study looked at the communications that took place between the Vancouver Aquarium and the media via Vancouver Aquarium news, and examined the resulting newspaper articles to determine if specific information appeared in those news items ("mechanisms" in Figure 3).

The Vancouver Aquarium communication process model can also be considered in terms of Lasswell's (1948) well-known communication model as applied to the Vancouver Aquarium case and presented in Figure 5: Who? Says what?, In which channel?, To whom?, With what effect?.

<b>Lasswell's Communication Model (1948)</b>	<b>Components of Vancouver Aquarium Communication Process</b>
Who?	Vancouver Aquarium
Say What?	Event Messages Animal & Conservation Messages (educational inf.)
In which channel?	Vancouver Aquarium news releases
To whom?	the media (newspaper editors and reporters)
With what effect?	educational information in newspaper articles

**Figure 5.** Lasswell's communication model as it applies to the Vancouver Aquarium communication process with the media.

It is important to note that in this comparison, the “channel” is the Vancouver Aquarium news release (not the mass media as in Figure 3). This is because Figure 5 compares the process by which the Vancouver Aquarium communicates to the media with Lasswell’s model, not the communication process between the Vancouver Aquarium and the general public. Like Lasswell’s model, the communications process I proposed between the Vancouver Aquarium and the media is linear and unidirectional, and does not take feedback or two-way communications into account. This does not mean that feedback and two-way communications did not occur within the media relations at the Vancouver Aquarium, rather, that the mechanism of the process (news release) examined in this study was unidirectional, from the Vancouver Aquarium to the media.

Shoemaker and Reese (1991) note a limitation in both Lasswell’s, and Westley and MacLean’s 1957 communication process models. The models imply that the channel is a conduit, and therefore does not have any effect on the messages being transmitted. I agree with Shoemaker and Reese’s observation, that the media are not passive in the communication process. The results of this study indicate that the media did not merely pass on the information contained in the Vancouver Aquarium news releases. The media selected certain information from the news releases and did not use other information. Further study would be required in order to determine other ways in which the media might be modifying the information in news releases. However, Lasswell’s, and Westley and MacLean’s models are still useful for considering specific portions of the Vancouver Aquarium’s communication process.

These communication models provide the context for considering the first research question, How does the Vancouver Aquarium use its media relations opportunities to promote education messages?

### How Does the Vancouver Aquarium Use its Media Relations Opportunities to Promote Education Messages?

A number of additional questions were asked which help address the first research question: What factors initiate a Vancouver Aquarium news release?, What messages are contained within Vancouver Aquarium news releases?, How readable are Vancouver Aquarium news releases? and How does the media use news releases?. Each of these related questions will be considered before the first research question is answered.

### What Factors Initiate a Vancouver Aquarium News Release?

This study found, in the 30 news releases analyzed, that there were six initiating factors: Animals, Exhibits, Partnerships, Initiatives, Research, and Contests. The most frequent initiator was Animals; 29 out of 30 news releases. Since the Vancouver Aquarium is an institution that specializes in the display of live animals, this is a logical result. The promotion of animals and animal events is key to the Vancouver Aquarium's marketing; people will come to see animals. Animal initiators also provided the opportunity to incorporate biological, natural history, and conservation information into news releases. News releases initiated by Exhibits, Contests, Partnerships, and Research also had Animals as an initiating factor. Only one news release was not initiated by Animals; this news release, concerning a youth volunteer project, was categorized

as an Initiative. The preponderance of news releases categorized as initiated by Animals, suggests that animals are the most important initiating factor for Vancouver Aquarium news releases. However, a different type of study would be required in order to determine the effectiveness of the various initiating factors.

#### What Messages are Available in Vancouver Aquarium News Releases?

Three types of content messages were identified in Vancouver Aquarium news releases: Event Messages, Animal Messages, and Conservation Messages. The Event Messages were typical of any news release, they consisted of “who”, “what”, “where”, and “when” information. All of the Vancouver Aquarium news releases contained Event Messages, but since Event Messages addressed logistical concerns they were not considered as educational information. Animal and Conservation Messages were specific to the Vancouver Aquarium and provided the best opportunity to promote educational information.

If Animal Messages and Conservation Messages were considered together, then all of the news releases contained educational information. However, further examination revealed a discrepancy, 100% of the news releases contained Animal Messages, but less than half (47%) contained Conservation Messages. This meant that while every news release made Animal Message available to the media, only 14 news releases provided Conservation Messages. This resulted in fewer Conservation Messages than Event and Animal Messages in the newspaper articles examined in this study.

### How Readable are Vancouver Aquarium News Releases?

A sample of news releases was rated using the Flesch Reading Ease Scale and the Flesch-Kincaid Grade Level scale, which take into account the number of syllables per word and the average number of words per sentence. The scales revealed that the average reading ease of a Vancouver Aquarium news release was 54.4 which was slightly more difficult than the standard reading ease of 60 to 70. The average grade reading level of a Vancouver Aquarium news release was grade 9.7, or high school level. These results are in keeping with the fact that Vancouver Aquarium news releases often contained scientific terms, names of unusual animals, scientific concepts, and ecological issues not found in everyday language.

The reading ease and reading grade levels of Vancouver Aquarium news releases presented no problem to a literate and articulate media. Indeed, on several occasions I received positive feedback from various members of the media regarding the clarity with which the news releases were written, and the fact that unusual and scientific terms were well explained.

In an interview with a television news producer/reporter, she said that the format of Vancouver Aquarium news releases was eye-catching and easily distinguished from other news releases.

When asked to comment on the Vancouver Aquarium news release format, the producer/reporter responded with "... you look at that [the news release] and you think, these people are thinking creatively and that's what you need for television." (B. Puri, personal communication, June 23, 1997). These comments are important, in that they confirm that the unique format of Vancouver Aquarium news releases helped members of the media identify them, but did not detract from the

news releases being read. The television news producer/reporter stated that the Vancouver Aquarium news releases had good “conversational” tone to the writing, and that, they included essential elements (from the producer’s perspective) such as “what”, “when”, a contact name and number for more information, and were only one page in length. In general, it appears that Vancouver Aquarium news releases are readable and are suited to the target audience (members of the media). Therefore, the present news release format is acceptable and there is no reason to alter the format at this time.

#### How Does the Media Use News Releases?

Several assumptions were made regarding how the media use news releases, these assumptions were based on personal experience and confirmed by numerous discussions with members of the media and a formal interview with a television news producer/reporter. These assumptions include, but are not limited to:

- (a) Media contacts do not have a lot of time, put important information in the first couple of paragraphs;
- (b) Media contacts want to know what the story is, when it is, why is it unique and what is the visual (newspaper, television) or acoustical (radio) opportunity;
- (c) Media contacts’ time should not be wasted, if you cannot say it in one page then you should rethink your message;
- (d) News release format should facilitate ease of reading, and must contain the name of the institution, a contact name and number, and an eye-catching title;
- (e) News release writing should be conversational in tone, any unusual terms or concepts should be explained;
- (f) News releases may include non-essential information, but only after you have provided the essentials (who, what, where, when).



The media use news releases as event notices, as a source of information regarding an unusual topic, and occasionally as the basis for an article or voice-over (commentary by a radio or television announcer). In this study, one news release about the return to the wild of two rescued northern elephant seals, was used verbatim, as a newspaper article by two different community papers, the *West End Times* (August 25, 1993) and the *Aldergrove Star* (August 26, 1993). The order of the news release's paragraphs was changed in each article. Although, it was rare for a news release to be reprinted as a newspaper article, it was not unusual for reporters from print and broadcast media to use the headlines from news releases in their stories. Feedback from media contacts also confirmed that Vancouver Aquarium news releases met the media's requirements.

#### How Does the Vancouver Aquarium Use its Media Relation Opportunities to Promote Educational Information?

The Vancouver Aquarium uses its news releases to attempt to promote educational information via the media. News releases are a fundamental tool of media relations, and by incorporating educational information into news releases, it is possible to utilize this media relations tool to promote the Vancouver Aquarium's education mandate.

All of the 30 news releases in the study contained some form of educational information (100% contained Animal Messages, 47% contained Conservation Messages), and so had the potential to promote educational information via the media. Therefore, in terms of the Vancouver Aquarium communication process model presented earlier (Figure 3), the communications opportunity between the Vancouver Aquarium and the media did occur. The next area to consider is whether or not particular information was incorporated into media stories, specifically newspaper articles;

that is, whether the next communications opportunity in the Vancouver Aquarium Communication Process model occurred.

### Do the Print Media Use the Educational Information Conveyed in Vancouver Aquarium News Releases?

In order to answer this second research question it is useful to consider the following questions:

What types of newspapers utilized Vancouver Aquarium news releases?, Which newspapers had the most articles?, How much of the information in Vancouver Aquarium news releases appeared in subsequent newspaper articles?, and How did Event Messages, Animal Messages, and Conservation Messages compare in terms of newspaper utilization?. Each of these additional questions will be considered before the second research question is answered.

### What Types of Newspapers Utilized Vancouver Aquarium News Releases?

The 81 newspaper articles analyzed in this study appeared in daily and community newspapers in British Columbia and the Yukon. Forty-six articles came from ten daily newspapers, including the two major newspapers for the Vancouver area and British Columbia, *The Province* and the *Vancouver Sun*, and the western region edition of *The Globe and Mail*. The remaining British Columbian dailies were published in the southern interior (Kelowna, Kamloops, Cranbrook, and Vernon) and on Vancouver Island (Victoria and Nanaimo). The Yukon daily newspaper was the *Whitehorse Star*. It can be assumed that the Vancouver dailies, *The Province* and the *Vancouver Sun*, routinely covered Vancouver Aquarium events because it is a major cultural institution in the city of Vancouver. However, there were no obviously apparent reasons for the other British

Columbia and Yukon newspapers to utilize Vancouver Aquarium news releases, other than that the news release topic was of interest. Further study would be required to determine why these other dailies covered Vancouver Aquarium stories, taking into account geographic proximity, news release topic, and publisher relationships within the newspaper community.

Closer study of the newspaper articles, from daily newspapers outside of Vancouver, revealed that many of the articles originated from two news services. Seventeen daily newspaper articles (21% of all newspaper articles studied) came from news services, 16 from Canadian Press and one for the Sterling News Service. The majority of these articles dealt with the pregnancies, births and death of Vancouver Aquarium whales. This is to be expected, since during the 29 month period of the study there was both a pregnant killer whale and a pregnant beluga at the Vancouver Aquarium. When a news service story was used by more than one daily newspaper, the articles were compared one with the other to ensure that they were not identical. No identical articles were discovered amongst the daily newspaper articles in this study.

There were 35 newspaper articles from eight community newspapers. Five of the newspapers were from Vancouver's West Side and West End neighbourhoods. Thirty-two of the newspaper articles in this study came from these five newspapers. The three remaining community newspapers, two from the Sunshine Coast and one from Aldergrove, each contributed a single article. These three articles covered a story regarding the return to the wild of rescued northern elephant seals. Community newspapers covered events and stories that had significance in their neighbourhoods<sup>12</sup>. The *Vancouver Courier*, the *West End Times*, the *West Ender*, the *Kitsilano*

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<sup>12</sup> Personal communication with community newspaper editors and publishers.

*News* and *Today's Times* all publish in the Vancouver Aquarium's neighbourhood. The Sunshine Coast newspapers utilized the news release concerning the northern elephant seals because one of the seals had been rescued from the Sunshine Coast. Reporters from the *Sunshine Coast News* and the *Leader* (Gibsons) contacted me on a regular basis regarding the seal that came from the Sechelt area. When the seal was released I sent a news release directly to the Sechelt newspapers. What is puzzling is why a community newspaper would choose to cover a story that had no apparent significance in their community. Specifically, the *Aldergrove Star* chose to run a story regarding northern elephant seals, and the paper used the news release verbatim for the newspaper article. Perhaps the story intrigued the editor or they may simply have needed to fill space.

In conclusion, both daily and community newspapers utilized Vancouver Aquarium news releases. In all, 46 newspaper articles appeared in dailies and 35 in community newspapers. It is important to note that these were not the only articles concerning the Vancouver Aquarium that appeared in these daily and community newspapers during the time period of the study (July 1993 to December 1995), but the 81 newspaper articles in the study could be linked directly to Vancouver Aquarium news releases and therefore were included in this study.

#### Which Newspapers Had the Most Articles?

Of the ten daily newspapers, two Vancouver newspapers had the most articles of any single newspaper in this study. *The Province* had 14 articles based on Vancouver Aquarium news releases, and the *Vancouver Sun* had 11. Of the eight community newspapers, the *Vancouver Courier* had 13 articles based on Vancouver Aquarium news releases, and the *West End Times*

had 11. All four of these newspapers were published in Vancouver. The fact that the *Vancouver Courier* had the most articles of any community newspaper was an unexpected finding. I would have expected that the *West Ender* or the *Kitsilano News* covered more stories based on Vancouver Aquarium news releases, than the *Vancouver Courier*. This situation is a good example of the value of research; determining what is actually happening versus what one thinks might be happening. This is important to me, as Communications Manager, because knowing which newspapers routinely publish articles based on Vancouver Aquarium news releases may effect how I pitch a story to those newspapers. Understanding which newspapers utilize Vancouver Aquarium news releases, and how many articles they publish about the Vancouver Aquarium is also useful in developing future communications plans.

#### How Much of the Information in Vancouver Aquarium News Releases Appear in Subsequent Newspaper Articles?

Percent concurrence was calculated for each newspaper article. This statistic represented the amount of agreement between the content of the newspaper article and the content of the news release, based on the content analysis. The percent concurrence ranged from a low of 8% to a high of 100%. Most of the newspaper articles (56 or 69%) had between 21% and 50% concurrence. Only 17 or 21% of the newspaper articles had more than 50% concurrence. These results indicate that information (Event Messages, Animal Messages, Conservation Messages) from Vancouver Aquarium news releases was found in all of the associated newspaper articles, but it was very unusual to find all of the information from a news release in the article. When all types of messages are considered together, then most newspaper articles contained less than 50% of the information available in the news releases. No other research used the same methodology as

this study, so it is not possible to compare results and determine whether 50% usage is a high, low, or moderate success rate. In my experience, this seems to a moderate success rate, especially when one considers the content categories individually.

#### How Did Event Messages, Animal Messages and Conservation Messages Compare in Terms of Newspaper Utilization?

All 81 newspaper articles contained Event Messages and Animal Messages. Eight newspaper articles contained Conservation Messages, however only 14 news releases contained Conservation Messages.

It is important to consider the percent concurrence of Conservation Messages in light of the fact that only 47% of the news releases contained such information. Ten of the 30 newspaper articles associated with the 14 news releases that contained Conservation Messages, also contained Conservation Messages. Therefore, there were fewer Conservation Messages than Event Messages or Animal Messages in the newspaper articles in this study. However, one third of the newspaper articles that had the opportunity to include Conservation Messages, did so. This is somewhat encouraging, at least some of the Conservation Messages are being incorporated by the media. It would be useful to take a closer look at what types of Conservation messages are being used by the media. This could determine what types of Conservation Messages are included in future news releases.

An examination of the concurrence between Animal Messages in news releases and associated newspaper articles, revealed 77% of the newspaper articles contained less than 50% of the Animal

Messages available in the originating news releases. Of the 81 newspaper articles that contained Event Messages, 53% had more than 50% of the available Event Messages.

This indicates that there was better utilization of Event Messages relative to Conservation Messages and Animal Messages. Furthermore, Animal Messages were utilized more than Conservation Messages.

#### Do the Print Media Use the Educational Information Conveyed in Vancouver Aquarium News Releases?

In this study both Animal Messages and Conservation Messages were considered to be educational information. Therefore, the answer to the second research question is yes, some of the educational information conveyed in Vancouver Aquarium news releases was conveyed by the print media some of the time. This conclusion is supported by the fact that all 81 newspaper articles contained some portion of the Animal Messages contained within the reviewed news releases, and one third of the newspaper articles that had the opportunity to contain Conservation Messages, did so. Since Vancouver Aquarium news releases have not been analyzed before it is difficult to rate these findings as to how successful are the news releases. However, it is possible to acknowledge that Conservation Messages are the least successful type of educational information, in this case, and that steps could be taken to (a) determine which types of Conservation Messages were successful and (b) incorporate more Conservation Messages into future news releases. The fact that all of newspaper articles contained some portion of the Animal Messages contained within the news releases is very encouraging and indicates that every effort

should be made to continue to incorporate Animal Messages into Vancouver Aquarium news releases.

These findings also indicated that the communications opportunity between the Vancouver Aquarium and the general public via the media in the Vancouver Aquarium Communication Process Model did occur, albeit to varying degrees. That is, information from the Vancouver Aquarium was transmitted to the media to varying degrees, and, sometimes, from the media via newspaper articles to the general public.

As mentioned, only some of the available Animal Messages and Conservation Messages were conveyed. This means that while educational information from the Vancouver Aquarium did appear in the print media, not all of the educational information was used. This finding will be discussed in the next chapter together with other implications and potential areas of future study.



## Conclusion

The results of the content analysis of selected Vancouver Aquarium news releases and their associated newspaper articles indicate that news releases are an effective method of transmitting educational information to the media, however it is not possible to place a value on the effectiveness of this methods based on the results of this study. Furthermore, the media sometimes utilize the some of the educational information in their news items. Therefore, the Vancouver Aquarium can utilize the media to promote its education mandate. However, it must be acknowledged that the media are not conduit that pass on everything provided to them (by the Vancouver Aquarium) to the general public, and therefore this communication process has limitations. This process was summarized in the Vancouver Aquarium Communication Process model.

## **Chapter 5: Untaken Roads and Future Research**

While researching and writing this thesis, I discovered that the hardest task was deciding what to exclude. I read about media effects and communication theory, conservation and environmental education, met with a number of very interesting people who work in communications and public relations, and bored most of my colleagues and family while I “floated” ideas and possible directions for this thesis. In this chapter I discuss some of the ramifications of the content analysis study conducted, look at some of these “untaken” roads, and suggest areas for future research.

### **Ramifications of the Content Analysis**

In this study, content analysis was used to identify and match information in two different communication mechanisms (news releases and newspaper articles). Three content categories were identified: Event Messages, Animal Messages, and Conservation Messages. While all of the newspaper articles contained some Event Messages and Animal Messages, relatively few articles contained Conservation Messages. Animal Messages and Conservation Messages contained educational information, and while educational information from the Vancouver Aquarium news releases did appear in the print media, not all of the educational information was used. That is, the media modified the information provided in Vancouver Aquarium news releases.

This is one of the situations Shoemaker and Reese (1991) referred to when they discussed the “active” versus “passive” role of the media. The fact that not all of the information provided in Vancouver Aquarium news releases were routinely used by the media means that the media were

not acting as a passive channel or conduit, but were active in modifying the information, and therefore, possibly, the message.

It would be interesting to examine the specific sub-categories of Animal Messages and Conservation Messages more closely, and determine whether or not certain sub-categories (individual animal information, species information, concepts/principles, significance to wild population, etc.) were utilized more frequently than others. It would also be useful, in a future study, to examine news releases and newspaper articles for their intent or overall message, and determine whether or not the Vancouver Aquarium was successful in transmitting that intent via the media. The results of such a study could help define future communications strategies for the Vancouver Aquarium.

This study also considered the types of newspapers that utilized Vancouver Aquarium news releases, and identified several daily and community newspapers. Future research might include examining the publishing relationships (who owns what, which newspapers are part of a syndicate, etc.) among the daily newspapers and among the community newspapers, and determining whether these relationships had any influence on coverage of Vancouver Aquarium stories.

#### Linking Education and Communications

One of my biggest challenges in writing this thesis was finding a link between education and communications work in public relations. Particularly because, as an educator and a public relations specialist, I had synthesized these two areas in my everyday work. It was important to acknowledge that link and examine it. Incorporating educational information into the Vancouver

Aquarium news releases was a natural outcome of my having come into the Communications Manager position from the Vancouver Aquarium's Education department. I believe I would have been hard pressed not to include educational information in the news releases because such information was an integral part of my work at the Vancouver Aquarium.

I was fortunate to work at the Vancouver Aquarium during a time of change. The Education and Interpretation departments actively incorporated constructivist approaches into the Vancouver Aquarium's formal and informal educational opportunities. The zoo and aquarium industry trend toward a holistic approach with regard to conservation education was of interest to the Vancouver Aquarium's senior management, and provided impetus for incorporating education into areas such as marketing. The premise of this thesis was that educational information could be presented to the general public via the media, and that making educational information available to the general public would change their attitudes with regard to aquatic life and conservation issues.

The challenge for a self-supporting, non-profit institution like the Vancouver Aquarium was to integrate traditional (exhibits and displays, school programs) and non-traditional opportunities (advertising, media relations) with regard to conservation education; to use a variety of approaches in order to effect change in the general public's attitude toward conservation. Therefore using a non-traditional method (news releases and the media) to present educational information to the general public is valuable as part of an integrated education strategy.

The Vancouver Aquarium had some success in linking education and communications in its media relations, but this is just one component of an integrated approach that utilizes all aspects of the institution's operations. It is very easy to give lip service to the concept of a holistic approach to conservation education. Furthermore, it is important to acknowledge that simply providing information (as was the case in this study) does not effect attitude or behavioural change (Borden & Schettino, 1979). This means the Vancouver Aquarium will have to continue to develop new opportunities to incorporate conservation education into its daily operations, and will have to determine whether these measures are having an effect on the attitudes and behaviours of the general public.

#### Limitations of Utilizing the Media

This study examined one of the many media opportunities and communications processes available to the Vancouver Aquarium (how the print media utilized news releases). The study did not explore the limitations inherent in utilizing the various types of media (print and broadcast) to promote educational information. It would be interesting to consider how different types of media might affect the promotion of educational information. A constant challenge for media relations specialists is to accommodate these limitations, particularly control of the message, the amount of information that can be accommodated by the medium, and the effectiveness of the various media.

Once information is given to the media, the media relations specialist has no control over the information and how it is used. For this reason it is critical that the information provided to the media by the media relations specialist is as accurate and understandable as possible. The media

relations specialist can only control information until it is given to the media. The media will take the information, modify it, and express it in terms of their points of view and their particular medium (print, radio, television). Each medium has its own limitations and considerations that can affect the information. Radio and television are very dependent on time; all of the items have to fit within a specific time frame, and there is no leeway. Television and print media demand strong visual components. Radio is a medium that requires good audio opportunities. All of these media require information that is new, unique, or innovative, and suited to the particular medium.

With regard to the amount of information that can be accommodated within a medium, consideration must be given to each medium. For example, an announcer on an “all news” radio station may have less than 30 seconds to deliver a story, whereas a reporter on a television news program may have three minutes to tell the same story. Obviously, the radio announcer cannot include the same amount of information as can the television news reporter, and this could significantly effect the messages ultimately received by the general public.

An institution may have success in gaining coverage of its stories on a particular television or radio station, but if those stations are specialized and listened to by only a few thousand people in a potential market of tens of thousands, there is limited gain for the institution. It is far more advantageous for the Vancouver Aquarium to have a story covered on BCTV news (the leading news station in the Vancouver market) than it is to have a story covered by the Knowledge Network (British Columbia’s educational television network). However, there may be exceptions. For example, if a story airs seven times on Knowledge Network to an audience of 100,000 people each time (total audience = 700,000), then the potential audience may meet or exceed that of a

BCTV story that only airs once and is seen by 500,000 people. Therefore, a media relations practitioner must be aware of the relative effectiveness of the different media and have a solid grasp of each media's target audience.

It would be very interesting to compare the coverage of Vancouver Aquarium stories in the print media versus broadcast media, or compare television and radio. In examining these areas, it would be very important to consider the types of stories that received coverage, the length and complexity of the coverage, as well as the educational component. Once again, as Communications Manager I could use this information to develop communications strategies, and to improve the Vancouver Aquarium's media relations.

#### What to Study Next

This study and its results suggest many avenues for future study within the context of how the Vancouver Aquarium communicates with the media, as well as, how the media communicates with the general public, and finally whether the Vancouver Aquarium can influence public attitudes and opinions via the media.

It would be interesting to examine the effectiveness of various initiating factors, especially since this study did not examine all of the available news releases with regard to initiating factors. The results of such a study could determine which events or topics are presented to the media via news releases and which are not.

It would be useful to consider all 78 of the Vancouver Aquarium news releases produced between 1993 and 1995 and determine how effective each news release was with the media: how many of

the news releases resulted in newspaper articles, and how many did not result in a newspaper article. Knowing how effective the Vancouver Aquarium's news releases are, in general, and not necessarily with regard to educational information, is once again useful when developing communication strategies. This information, combined with the results of a study regarding the effectiveness of initiating factors, could improve my efficiency as Communication Manager by allowing me to focus on those factors and media that are more likely to result in a news item.

Other future studies could include determining the accuracy of information (provided by the Vancouver Aquarium) as it appears in newspaper articles (or other media). In this study, the content analysis was based on matching information found in the news releases with that found in the associated newspaper articles. However, this meant that only those newspaper articles that accurately repeated the information provided by the Vancouver Aquarium, were included in the study. Examining all of the newspaper articles associated with a news release, or other news items in the broadcast media could be useful in determining whether information is accurately transmitted from the media to the general public, and, therefore, whether the general public is receiving accurate information with which to formulate attitudes and opinions. Comparing the readability of news releases and associated newspaper articles also has significance with regard to how the general public receive information from the Vancouver Aquarium via the media.

Finally, this study considered the communication process that occurred between the Vancouver Aquarium and the print media, and proposed a model for the Vancouver Aquarium communication process. While this study determined that educational information from the Vancouver Aquarium can be transmitted to the general public via the print media, the study did



not consider whether or not that information effected a change in the general public's knowledge, attitudes, opinions, or behaviours. It is important to examine the next component of the Vancouver Aquarium Communication Process model (Figure 3), that is, the transmission of educational information via newspaper articles to the general public. Determining whether Vancouver Aquarium educational information produces a media effect in the general public would be the next phase of this study. Such a study would determine whether the Vancouver Aquarium, via the media, really can effect the conservation of aquatic life.

For in the end we will conserve only what we love, we will love only what we understand and we will understand only what we have been taught. Baba Dioum

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### Appendix C: Total Percent Concurrence Table

This table presents the total percent concurrence for the content of each Vancouver Aquarium news release and the content of its associated newspaper articles.

<b>Percent Concurrence between News Releases and Associated Newspaper Articles</b>		
<b>News Release (identified by date) or Newspaper Article (identified by date)</b>	<b>Total Number of Items per News Release</b>	<b>Percent Concurrence of Newspaper Article</b>
<b>News Release July 13, 1993</b>	<b>13</b>	
Vancouver Sun July 14, 1993		15%
Kitsilano News July 21, 1993		62%
West Ender August 8, 1993		62%
<b>News Release July 19, 1993</b>	<b>12</b>	
Times-Colonist July 20, 1993		42%
Vancouver Sun July 21, 1993		42%
The Province July 21, 1993		50%
West End Times July 28, 1993		25%
<b>News Release August 4, 1993</b>	<b>14</b>	
Today's Times November 1, 1993		43%
<b>News Release August 19, 1993</b>	<b>13</b>	
The Province August 20, 1993		46%
Daily Courier August 21, 1993		38%
Times-Colonist August 21, 1993		46%
Daily News August 21, 1993		46%
Daily Free Press August 21, 1993		46%
The Province August 22, 1993		31%
Sunshine Coast News August 23, 1993		77%
West End Times August 25, 1993		100%
Aldergrove Star August 26, 1993		100%
The Leader August 27, 1993		8%
<b>News Release September 20, 1993</b>	<b>12</b>	
The Province October 3, 1993		42%
West End Times October 6, 1993		8%
Kitsilano News October 20, 1993		33%
Today's Times November 1, 1993		58%
<b>News Release September 21, 1993</b>	<b>11</b>	
The Province September 23, 1993		27%
Vancouver Sun September 23, 1993		18%
Daily News September 23, 1993		27%

Vancouver Courier October 3, 1993		73%
Kitsilano News October 20, 1993		36%
<b>News Release November 9, 1993</b>	<b>11</b>	
Daily Free Press November 10, 1993		45%
The Province November 10, 1993		45%
Daily News November 10, 1993		27%
Vancouver Sun November 10, 1993		45%
Times-Colonist November 12, 1993		36%
Vancouver Courier November 14, 1993		55%
<b>News Release January 18, 1994</b>	<b>13</b>	
Vancouver Courier January 30, 1994		38%
<b>News Release January 25, 1994</b>	<b>12</b>	
Vancouver Sun January 28, 1994		17%
The Province January 28, 1994		33%
West End Times February 16, 1994		33%
Today's Times March 1994		42%
<b>News Release May 5, 1994</b>	<b>14</b>	
Vancouver Sun May 6, 1994		50%
Vancouver Courier May 11, 1994		50%
<b>News Release May 20, 1994</b>	<b>15</b>	
Vancouver Courier May 25, 1994		33%
West Ender May 26, 1994		40%
The Province May 27, 1994		20%
<b>News Release June 1, 1994</b>	<b>17</b>	
West End Times June 8, 1994		47%
<b>News Release June 29, 1994</b>	<b>16</b>	
Kamloops Daily News June 30, 1994		38%
Daily Courier June 30, 1994		31%
Times-Colonist July 2, 1994		31%
Vancouver Courier July 3, 1994		56%
West End Times July 6, 1994		44%
<b>News Release July 6, 1994</b>	<b>14</b>	
The Province July 8, 1994		21%
Whitehorse Star July 11, 1994		21%
Vancouver Sun July 14, 1994		29%
<b>News Release September 12, 1994</b>	<b>13</b>	
West End Times September 17, 1994		46%
West Ender September 18, 1994		54%
<b>News Release September 29, 1994</b>	<b>14</b>	
Daily Free Press September 29, 1994		21%
Whitehorse Star September 29, 1994		21%

Vancouver Courier October 2, 1994		21%
West End Times October 5, 1994		57%
<b>News Release September 30, 1994</b>	<b>13</b>	
Vancouver Courier October 5, 1994		38%
<b>News Release October 19, 1994</b>	<b>9</b>	
Vancouver Courier October 20, 1994		56%
<b>News Release January 13, 1995</b>	<b>15</b>	
Vancouver Sun January 18, 1995		27%
The Province January 18, 1995		27%
<b>News Release March 14, 1995</b>	<b>12</b>	
Vancouver Sun March 15, 1995		67%
Daily Free Press March 15, 1995		17%
West End Times March 22, 1995		67%
<b>News Release March 27, 1995</b>	<b>15</b>	
The Province March 29, 1995		53%
<b>News Release April 20, 1995</b>	<b>13</b>	
The Province March 19, 1995		46%
Vancouver Courier March 29, 1995		38%
<b>News Release May 18, 1995</b>	<b>18</b>	
Vancouver Courier May 21, 1995		61%
<b>News Release August 11, 1995</b>	<b>12</b>	
The Province August 27, 1995		50%
<b>News Release August 23, 1995</b>	<b>16</b>	
Vancouver Sun August 24, 1995		44%
The Province August 24, 1995		31%
Kamloops Daily News August 24, 1995		31%
Whitehorse Star August 24, 1995		25%
Daily Free Press August 24, 1995		31%
The Globe and Mail August 25, 1995		38%
Daily Townsman August 25, 1995		44%
<b>News Release August 27, 1995</b>	<b>16</b>	
West End Times September 2, 1995		19%
<b>News Release September 4, 1995</b>	<b>14</b>	
Vancouver Courier September 9, 1995		64%
<b>News Release September 11, 1995</b>	<b>15</b>	
Vancouver Sun September 15, 1995		27%
<b>News Release September 18, 1995</b>	<b>13</b>	
West End Times September 30, 1995		23%
<b>News Release December 14, 1995</b>	<b>8</b>	
Vancouver Courier December 17, 1995		88%