

THE EFFECTS OF SUMMER EMPLOYMENT WITH PARKS CANADA ON STUDENTS' AWARENESS OF HERITAGE.

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Abstract: A poll of summer students hired in the summer of 1996 by Parks Canada reveals positive changes in the students' awareness of Canadian identity. The larger improvement came from students who travelled away from home versus those who worked near home and from those who worked in a park rather than at an historic site. An examination of the results on a question by question basis reveals the source of many extreme outliers among the results. Almost all of the outliers resulted from the same small number of questions.

Introduction

In the summer of 1996 the Government of Canada initiated "Young Canada Works", a youth employment program for students aged 16 to 19. Under this program approximately 350 students were hired by Parks Canada to work with a variety of professionals at historic sites and in parks. Parks Canada managers approached Strategic Research and Analysis and requested our assistance with the evaluation

The goals of the program were as follows:

- to provide an employment opportunity for Canadian youth;
- to give students an opportunity to work with a variety of professions in the conservation field; and
- to enhance the students' awareness of Canadian identity.

Managers at Parks Canada felt that working at a heritage site, such as a National Park or a National Historic Site, offered a unique opportunity to increase student's awareness of their heritage and enhance their awareness of Canadian identity. These managers wanted to evaluate the impact under program goal number three, that employment with Parks Canada had on students "to enhance the students' awareness of Canadian identity".

Methodology

We suggested the Parks Canada managers use a two stage survey of all students. The survey was designed to measure the changes in the students' attitude and level of awareness

over the summer by administering two virtually identical questionnaires, one at the start of work and another at the end and comparing individual responses to each question on the first and second questionnaires they would have an indication of their programs impact.

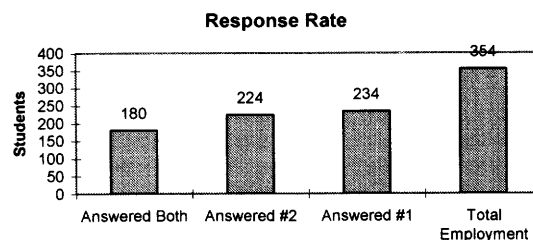
We prepared a dozen questions asking students to indicate their level of agreement with the statement in the question. The students were asked to pick from a ten point scale where one indicated "strongly disagree" and ten indicated "strongly agree". A positive change from most students would indicate that the program had a positive effect on the students' awareness of other Canadians and their heritage.

The Parks Canada managers also drafted a dozen questions. We decided to try both sets of questions and settled on a longer questionnaire with three sections. Section one (Questions 1 -3) gathered data for a brief demographic profile, section two (Questions 4 -14) contained their original questions and section three (Questions 15 -28) contained our suggested questions. In the analysis that follows we have labelled the results of their section of the questionnaire as "Awareness" and the results of our own as "Attitude".

Results

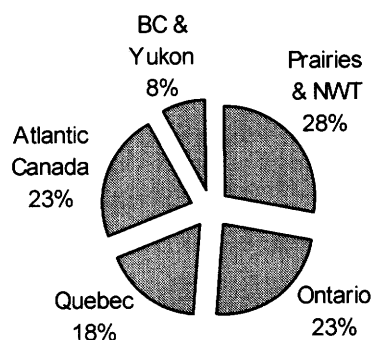
Demographic Profile

A total of 354 students were employed under the program, 234 students responded to the first questionnaire and 224 responded to the second questionnaire. This analysis was performed using only the 180 respondents who answered all questions on both questionnaires.



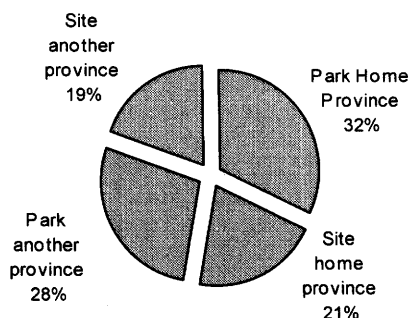
The students were from all across Canada, 23% from Atlantic Canada, 18% from Quebec, 23% from Ontario, 28% from the Prairies & North West Territories and 8% from British Columbia and Yukon.

Where the students live



The programs goal of equal participation from local and out of province youth roughly achieved, 53% worked in their home province and 47% worked away from their home province. Of these respondents 2% worked in a regional office, 38% worked at a historic site and 60% worked in a park.

Where the Students worked



A

wareness and Attitude

The Parks Canada managers had preferred their own questions and they preferred their own initial result.

Section	Average change on the ten point score
Their questions "Awareness"	2.447
Our questions "Attitude"	-0.307

The results of their questions showed an over all improvement of almost two and a half points on a ten point scale while ours showed a decline of almost half a point. The results where very widely distributed and there were some extreme outliers. The results ranged from -27 to +32 for their questions and from -36 to +52 for ours. We wanted to explain the large variance so we examined the demographic profiles. The students home province and mother tongue were not important factors, but where the students worked was important. There were clear differences between those who worked in their home province and those who worked away from home and between those who worked in a park and those who worked at a historic site.

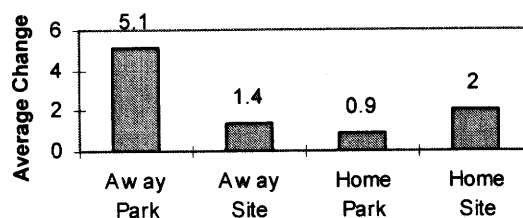
For purposes of further analysis the respondents were divided into the following groups:

- Those who worked at a park away from their home province (50 students);
- Those who worked at a site/regional office away from their home province (35 students);
- Those who worked at a park in their home province (58 students);
- Those who worked at a site/regional office in their home province (37 students).

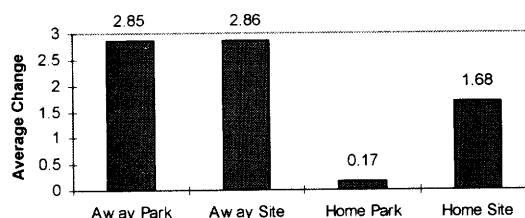
The students who worked away from their home province in a park had an average change of 5.1 on the 10 point Awareness scale and 2.0 on the Attitude scale. The

students who worked away from their home province at a historic site had an average change of 1.4 on the 10 point Awareness scale and -2.6 on the Attitude scale. The students who worked in their home province in a park had an average change of 0.9 on the 10 point Awareness scale and 1.4 on the Attitude scale. The students who worked in their home province at a historic site had an average change of 2.0 on the 10 point Awareness scale and -4. on the Attitude scale. Once again for each group the results where very widely distributed and there were some extreme outliers in every group.

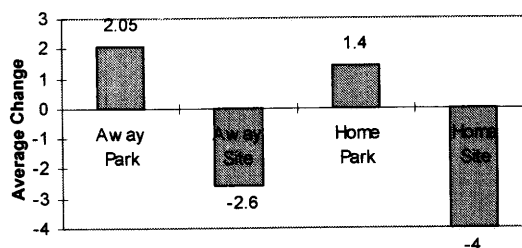
Awareness Raw data



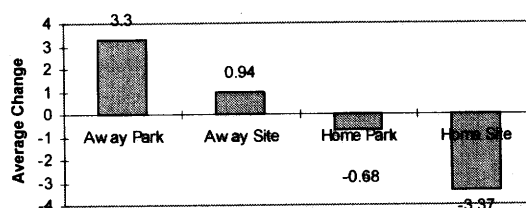
Awareness Clean Data



Attitude Raw Data



Attitude Clean Data



One benefit of a relatively small number of returns is that you can quickly check for data entry errors, there were several cases where a (1) was entered that should have been a (10) and several other small errors, but not enough

to explain the high level of variance. Correcting the data entry errors yielded the following results. The students who worked away from their home province in a park had an average change of 2.5 on the Awareness scale and 3.3 on the Attitude scale. The students who worked away from their home province at a historic site had an average change of 2.86 on the Awareness scale and 0.94 on the Attitude scale. The students who worked in their home province in a park had an average change of 0.17 on the Awareness scale and -0.68 on the Attitude scale. The students who worked in their home province at a historic site had an average change of 1.68 on the 10 point Awareness scale and -3.37 on the Attitude scale. Again for each group the results were very widely distributed and there were still some extreme outliers.

An examination of scores for each question revealed that a lot of the variance was due to a few questions. A look at these questions revealed three basic problems.

Several of the "Awareness" questions such as Question 8 called for an obvious answer many students rated them ten out of ten both times.

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An examination of scores for each question revealed that a lot of the variance was due to a few questions. A look at

these questions revealed three basic problems. Several of the "Awareness" questions such as Question 8 (How important is it to protect Canada's natural heritage (for example national parks)? (1=Not Very, 10=Very)) called for an obvious answer many students rated them ten out of ten both times. The net effect of most students answering strategically and a few perversely was that for questions like Question 8 the overall impact was close to zero. A few students moved either from ten to one or from one to ten and had individual changes of either - 9 or + 9 causing some of the extreme outliers.

Several other "Awareness" questions such as Question 5 (How would you rate your own knowledge of Canada?) are really two questions. In this question either the student's level of knowledge or the student's opinion about their own level of knowledge could change. Eg, the students learned just enough about Canada to realise how little they knew (a negative change of opinion) or they learned a lot about Canada (a positive change of knowledge).

Finally some straight forward questions in both the "Awareness" and the "Attitude" sections appear to have been answered perversely by some students. These outliers were not removed for two reasons: They were not coding mistakes and they tended to cancel each other out.

Conclusions

Under goal number three of the Government Of Canada's Young Canada Works Program, Parks Canada's managers could demonstrate some enhancement of the students' awareness of Canadian identity.

On average students who travelled benefited more than those who worked in their home province and on average students who worked in parks benefited more than those who worked at historic sites. More of the mid range or less extreme outliers were negative and more of these data points represent students who worked in their home province.

The managers at Parks Canada have reviewed these results with site and park superintendents and in their discussions they confirmed these conclusions and offer some explanations:

- out of province students working in parks tended to live communally in bunk houses that offered students more opportunities to socialize with students from other regions of the country;
- students working at historic sites tended to be billeted in private homes that did not offer similar opportunities;
- local students at sites and parks tended to live at home and socialize with their family and friends;
- at some sites and parks certain local students were a source of problems.

Results

Using our analysis of the survey data the Parks Canada managers could demonstrate the benefits of travel as a

result more of the students will be travelling to other provinces and those who do not will be encouraged where possible to share living accommodation with the other students.

Using our analysis of the results for individual questions on the questionnaire, we have persuaded the Parks Canada

managers to substantially redraft the questionnaire for next summer's survey.

Other sectors of our department have heard about the survey results and have approached Strategic Research and Analysis for our assistance in developing similar surveys.