

NATIONAL HISTORY DAY IN OHIO (NHD-OH)

EVALUATION PROJECT

PILOT STUDY

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Summary

This pilot study aimed at developing and validating an evaluation model to assess the impact of participation in the National History Day in Ohio (NHD-OH) on students' outcomes measured by:

- A) Ohio Graduation test (OGT);
- B) Appreciation of history, and
- C) Development of critical thinking

The study relied on a quasi-experimental approach; one hundred and nine tenth graders from Ohio urban public schools (Columbus and Dayton school districts) were initially enrolled in the evaluation project. Fifty-seven students participated in NHD-OH and fifty-two did not (control group). Participants and controls were matched based on: gender, ethnicity, need for social service benefits, and previous score (Ohio Achievement Test -OAT-) in eighth grade in Reading (previous scores in Social Science and Writing were not available). In all cases, the Social Science teachers had more than five years of experience in teaching. After the match, 24 students participating in NHD-OH and 24 matching controls were selected to proceed in the pilot study.

Results:

Ohio Graduation test (OGT)

The means and standard deviations of the OGT scores were used to calculate the difference between students participating in NHD-OH and controls. The statistical analysis demonstrated that participants in NHD-OH obtained statistically significant higher OGT scores in Social Studies, Reading, and Writing compared to the matching controls (see page 4).

Appreciation of history

Appreciation of history was assessed through a questionnaire that combined open- and close-ended questions. The results demonstrated that participants in NHD-OH showed a better appreciation of history and of learning history compared to the matching controls.

- Overall, participating students felt more connected to history and to the learning of history. Both groups -NHD-OH participants and controls- connected history to the terms, “education” and “the past.” Specific to the control group, history was associated with “I don’t care/I take it because I have to,” “Not that much,” and “Uneasiness.” Next, when talking about learning history, while “It’s important/I like it/Helps me understand/It’s easy” were the prominent themes among the participants, “I feel ‘half and half’/It’s OK” were the prominent themes among the controls. Furthermore, among the controls, themes such as “Boring but necessary” and “Negative Feelings (e.g., I don’t like/waste of time) emerged (see page 5).
- Students participating in NHD-OH more frequently enjoyed working on history-related projects, made connections between history and other subjects, and discussed with teacher and other students (see page 6). Participating students also demonstrated a better ability to use history to complement other subjects/classes as confirmed through a qualitative analysis (see page 7).
- NHD-OH participants better connected historical events to current events. Furthermore, when asked how history affected their everyday life, both groups said “It makes me think.” More specific to the control group was the answer “Not sure/Nothing.” (see page 7).
- Students participating in NHD-OH read history-related books and watched History Channel more frequently than controls. Interestingly, there were no statistically significant differences between participants and controls related to visiting museums or historical sites (see page 8).
- Students participating in NHD-OH discussed history more frequently with family and/or friends (see page 9).

Development of critical thinking

Development of critical thinking was assessed through focus-group-discussions. After showing a photograph depicting child labor in the 1920's, the discussion investigated the ability to observe, define a problem, and explore and integrate new perspectives. The “exploring steps” were measured by: (1) the variety of sources students used; (2) students’ ability to evaluate the credibility of historical sources; and (3) students’ ability to differentiate between primary and secondary sources. After establishing a rubric, two independent evaluators analyzed the results and negotiated the conclusions (see pages 13-14).

Our results showed that there was no real difference between students participating in NHD-OH and controls in terms of ability to observe and define a historical issue. Students participating in NHD-OH showed a deeper ability to explore sources, both in terms of using more and evaluating their credibility. Interestingly, both groups understood the difference between primary and secondary sources. Furthermore, students participating in NHD-OH showed a better ability to support new perspectives with factual information (see page 10).

This pilot study validated the proposed evaluation model. Further studies, with higher number of enrolled students are needed to validate the positive impact of participation in NHD-OH.

OHIO GRADUATION TESTS (OGT)

Twenty-four students participating in NHD-OH and twenty-four matching controls were enrolled in the study. Their tenth grade OGT in Reading, Writing and Social Science were used for the statistical analysis (Student's *t* Test -reported- and Wilcoxon Sign rank test), which showed a statistically significant difference. After completing the propensity match, we achieved no statistically significant difference between the participating and control students' mean scores on the Reading section of the Ohio Achievement Test.

		Mean	N	Std. Deviation	Student's <i>t</i> Test (p)
1	Controls OAT Reading	415.50	24	14.75	
	NHD-OH OAT Reading	419.87	24	11.98	0.139
2	Controls OGT Writing	419.66	24	22.87	
	NHD-OH OGT Writing	441.08	24	10.09	0.000
3	Controls OGT Reading	416.25	24	13.75	
	NHD-OH OGT Reading	427.04	24	14.54	0.018
4	Controls OGT Social Science	400.33	24	25.34	
	NHD-OH OGT Social Science	427.62	24	27.08	0.002

APPRECIATION OF HISTORY¹

What does history mean to you?

Theme	NHD-OH participants	Controls
Education	Prominent	Prominent
The past	Important	Important
I don't care. I take because I have to.	Absent	Present
Not that much/Nothing	Absent	Important
Uneasiness	Absent	Present

Especially among the NHD-OH participants, students connected the educational value of history with the idea that history molds who we are.

How do you feel about learning history?

Theme	NHD-OH participants	Controls
It's important/I like it	Prominent	Important
Helps me understand...	Important	Absent
Easy	Present	Absent
I feel "half and half." It's OK	Important	Prominent
It's boring but necessary	Absent	Present
Negative feelings (I don't like/hate it/waste of time)	Absent	Important

¹ After coding the students' responses to the open-ended questions, themes were reported as "prominent" or "important" or "present" or "absent" ("prominent"=most significant/frequent; "important"= significant/less frequent than "prominent"; "present"= only mentioned; "absent" = not mentioned). The Chi-Square test was used to calculate the statistical significance of the difference in responses to the closed-ended questions between participants and controls.

How often did the following happen while you learning history in this class? (please, check ONE response for each item)										
	Never		Rarely (a few times)		Sometimes (every other week)		Often (once or twice a week)		Always (almost every day)	
I enjoyed working on history projects	CO	29%	CO	25%	CO	42%	CO	4%	CO	0%
	NHD	0%	NHD	29%	NHD	21%	NHD	33%	NHD	17%#
I made connections between history and other subjects that I learned	CO	21%	CO	42%	CO	29%	CO	4%	CO	0%
	NHD	8%	NHD	4%	NHD	33%	NHD	37%	NHD	12%#
I discussed my ideas about the subject with the teacher or other students	CO	37%	CO	17%	CO	25%	CO	12%	CO	4%
	NHD	0%	NHD	4%	NHD	8%	NHD	58%	NHD	29%#

: Chi-square test: p =0.001. (CO=Controls, N= 24; NHD=NHD-OH, N= 24).

How do you use history and/or historical research to complement other subject/classes in your academic life?

Theme	NHD-OH participants	Controls
Full integration Integration within life	Prominent Present	Present Absent
One discipline (arts, English, science, music)	Prominent	Present
Don't	Present	Prominent
When discussing about something, it came about	Present	Present

Please, describe how what you have learned about history/history research is affecting your everyday life.

Theme	NHD-OH participants	Controls
Why things are occurring/ connect (also personal connection)	Prominent	Important
It makes me think/learn	Important	Important
Not sure/Nothing	Present	Prominent

In the past 12 months, how often have you? (check ONE response for each item)										
	Never		Rarely (a few times)		Sometimes (every other week)		Often (once or twice a week)		Always (almost every day)	
Visited History Museums	CO	50%	CO	42%	CO	8%	CO	0%	CO	0%
	NHD	37%	NHD	54%	NHD	4%	NHD	0%	NHD	4%
Visited Historical Sites	CO	50%	CO	42%	CO	8%	CO	0%	CO	0%
	NHD	33%	NHD	50%	NHD	12%	NHD	0%	NHD	4%
Seen a history-related movie	CO	8%	CO	25%	CO	37%	CO	17%	CO	0%
	NHD	0%	NHD	25%	NHD	46%	NHD	25%	NHD	4%
Checked out history books from the local library	CO	46%	CO	37%	CO	8%	CO	4%	CO	0%
	NHD	24%	NHD	50%	NHD	17%	NHD	4%	NHD	4%
Checked out history books from your school	CO	67%	CO	25%	CO	4%	CO	0%	CO	0%
	NHD	62%	NHD	25%	NHD	12%	NHD	0%	NHD	0%
Read books related to history (e.g., fiction, novels)	CO	37%	CO	33%	CO	25%	CO (1)	4%	CO (0)	0%
	NHD	4%	NHD	22%	NHD	42%	NHD (5)	21%	NHD (1)	4% *
Searched the Internet for history-related topics	CO	42%	CO	17%	CO	21%	CO	12%	CO	8%
	NHD	0%	NHD	25%	NHD	37%	NHD	21%	NHD	12%
Watched History Channel	CO	29%	CO	42%	CO	12%	CO	4%	CO	8%
	NHD	17%	NHD	21%	NHD	12%	NHD	23%	NHD	25% *

Chi-square test: *= p<0.05. In Bold are the statistically significantly different answers between Controls (CO, N=24) and NHD-OH participants (NHD; N= 24))

Do you talk about or discuss history with family and/or friends?

	YES	NO
Controls	43.4%	56.5%
NHD	83.3%	16.6%

Chi-square: p=0.004

If YES, will you, please provide an example of what you have talked about?

Theme	NHD-OH participants	Controls
Affecting the present/ now and then	Prominent	Prominent
Specific persons/ events	Important	Prominent
Learning together	Prominent	Present
Family connection	Present	Absent

To note that only few controls students answered this question.

CRITICAL THINKING EVALUATION

Participation in NHD-OH	Observation	Defining the problem	Exploring: Variety of sources	Exploring: Students' evaluation of credibility	Exploring: Differentiation between primary and secondary sources	Integrating new Perspectives
NHD-OH 1	Medium	Medium	Medium	Medium/High	Medium (progression to high)	Medium/ some waves of progression to high
NHD-OH 2	Medium	Low	Medium	Medium/High	Medium/High	Medium
CONTROLS	Low/Medium	Low	Low	Low	Medium (progression to high)	Low/Medium

Appendix A.

RUBRIC TO EVALUATE CRITICAL THINKING

Garrison proposed that critical thinking consists of five stages:

- **Identifying a problem**
- **Defining the problem**
- **Exploring ways to deal with it**
- **Applying one of the strategies to the problem**
- **Integrating new perspectives**

For each of the steps, we evaluate the baseline and the progression during the discussion along the below-reported scale (from low to high or vice-versa).

Ohio Academic Content Standards, Social Studies

BENCHMARK A » Evaluate the reliability and credibility of sources.

INDICATOR 1: Determine the credibility of sources by considering the following: The qualifications and reputation of the writer; Agreement with other credible sources; Recognition of stereotypes; Accuracy and consistency of sources; The circumstances in which the author prepared the source

Scale	Steps of Critical Thinking					
	Observation	Defining the problem	Exploring			Integrating new Perspectives
			Variety of sources	Students' evaluation of credibility	Differentiation between primary and secondary sources	
Low	Recognize details of the picture (i.e., boys, no shoes)	Recognize the events without factual information (making up)	Only one	“Sounds right” “A lot of hits”	Little or no understanding	Recognition of connection without factual information
Medium	Defining the scene (i.e., child labor)	Recognize the events with factual information	More than one	My Prof told me because...	Understanding of the differences	Recognition of connection with factual information
High	Extrapolate and put in historical context (i.e., depression era)	Elaborate on the context of the events	Combination and relation among more than two sources.	Reasons behind the selection process	Using both and explain why and how	Historical connection/ taking advantage of learning from the past