DOCUMENT RESUME

ED 452 185   SP 039 926

AUTHOR   Rudy, Dennis W.
TITLE   Connecting Community through Evaluation.
INSTITUTION   HealthWorks! Kids' Museum, South Bend, IN.
PUB DATE   2000-11-02
NOTE   49p.; Paper presented at the Annual Meeting of the AEA
                 (November 2, 2000).
PUB TYPE   Reports - Descriptive (141) -- Speeches/Meeting Papers (150)
EDRS PRICE   MF01/PC02 Plus Postage.
DESCRIPTORS   Community Programs; Creative Teaching; Elementary Secondary
                 Education; *Experiential Learning; *Health Education;
                 *Health Promotion; *Life Style; *Museums; Public Health;
                 Wellness

ABSTRACT
                 This paper describes HealthWorks! Kids' Museum, an education
center designed to help K-8 students understand and make healthy lifestyle
choices. The museum includes an exhibit floor, interactive classrooms, a
teacher resource room, and interactive exhibits for children. These exhibits
include the Main Brain theater, the Skin Crawl Wall, and All About Me
computer sections. The museum works with students and teachers to improve
health education in and out of school. It strives to impact parents and
community members as well as children and to ultimately improve the health of
the community by addressing the public's knowledge, behavior, and attitudes
about health. A longitudinal evaluation is assessing the program. It involves
multiple stakeholders, multiple goals, multiple data sources, and formative
and summative analysis. To date, evaluations indicate that students consider
the museum experience fun; teachers, parents, and community members have
increased awareness and knowledge of health issues through participation; and
the goal of a planned program of interactive, meaningful health education
curricula and instruction has been realized. Next steps include continuing
data collection and formative analysis; beginning summative analysis; and
designing program indicators and benchmarks for longitudinal measures
reflecting overall community health. (SM)

Connecting Community Through Evaluation
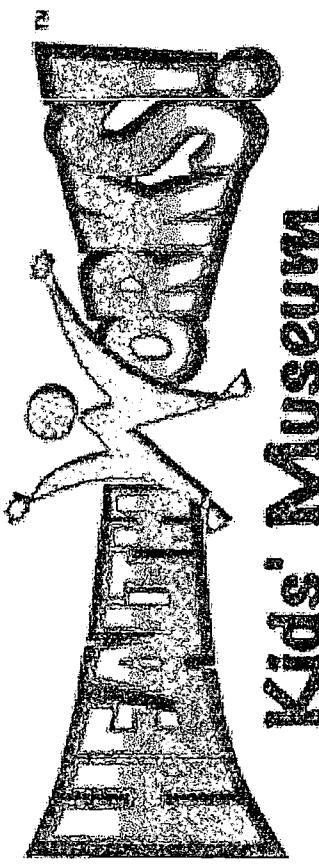
Kids' Museum™

Dennis W. Rudy, Ph.D.,
Indiana University South Bend

AEA Annual Meeting
November 2, 2000

Memorial Hospital & Health System, South Bend, IN

- Our mission is to improve the quality of life for all people of our community.

- Our vision is to become the healthiest community in the nation by 2010.

- We will accomplish this through our health education initiatives.

4

5

2

dwr
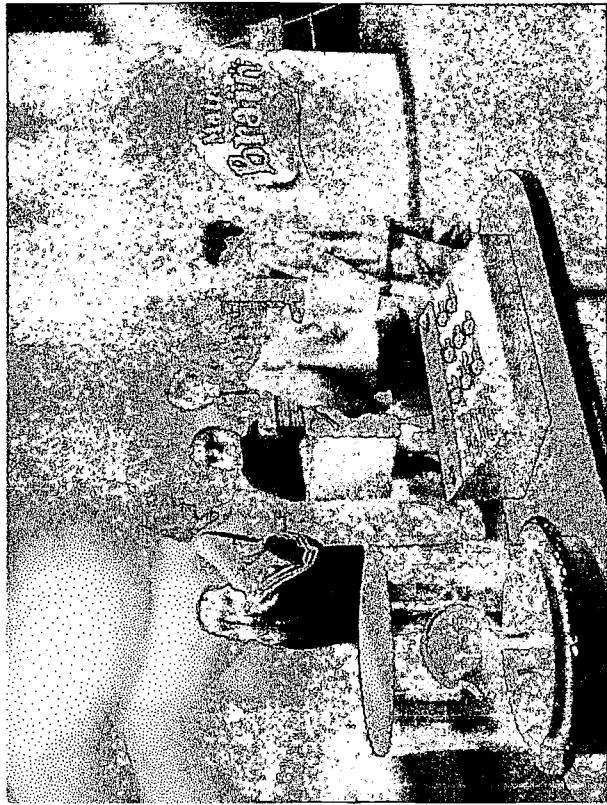
HealthWorks! Kids' Museum, a place where children will:

- Engage in interactive processes of discovery,
- Be intrigued and empowered to explore,
- Appreciate the wonder and complexity of the human body, and
- Extend their visit to the museum with family because it's fun!

6

dwr

73
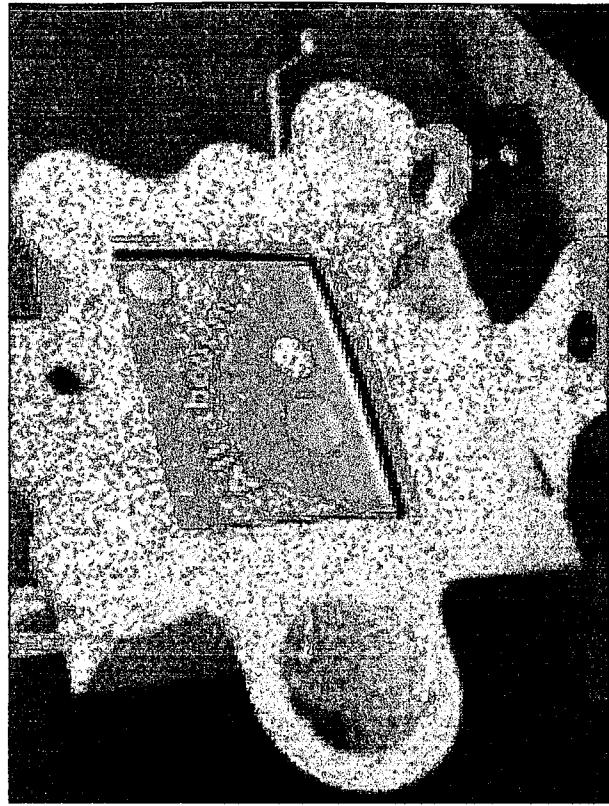
Museum exhibits, programming & curricula designed through a collaboration of:

- Health experts,
- Medical practitioners,
- Local educators, &
- Many, many community members.

dwr

8
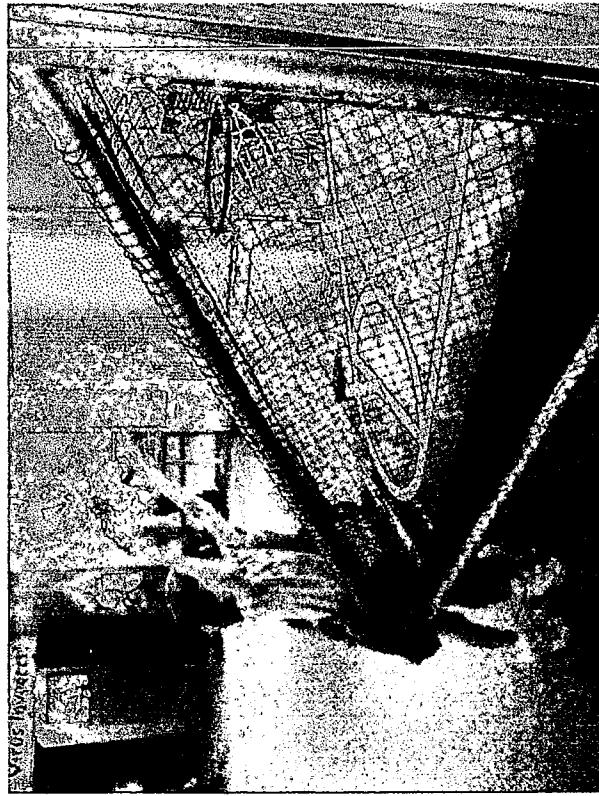
The museum consists of:

- 12,000 square feet of floor space,

- Two state-of-the-art classrooms,

- Multi-media theater,

- Teacher resource room, and of course,

- Interactive exhibits for kids in grades K-8, and

- We're currently serving over 700 students per week.

dwr

5

11

10
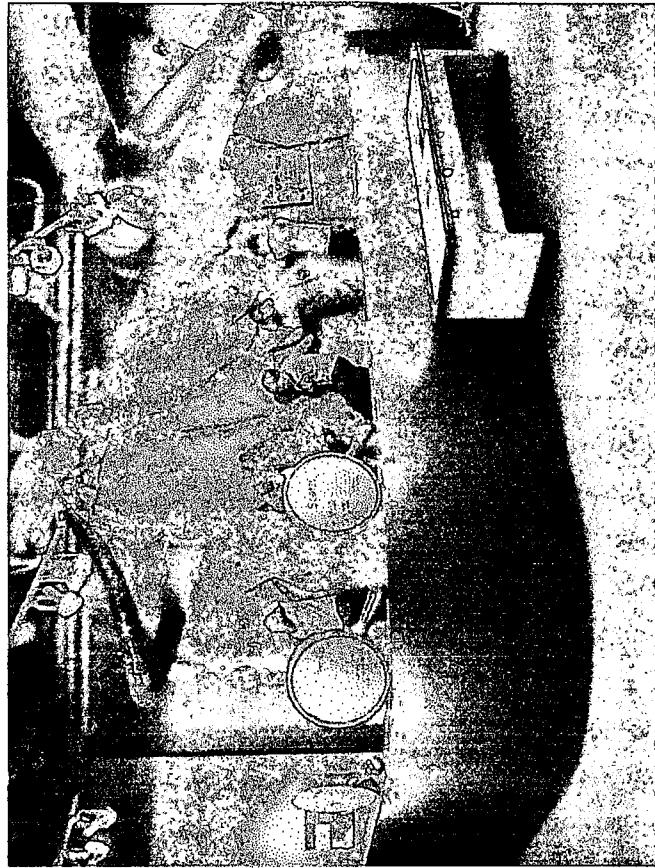
Interactive exhibit floor includes:

- Skin Crawl wall,
- All About Me computer stations,
- Virus Invaders life-size video game,
- The Main Brain theater, &

- Of course, big blue eyeballs.

12

13

6

dwr
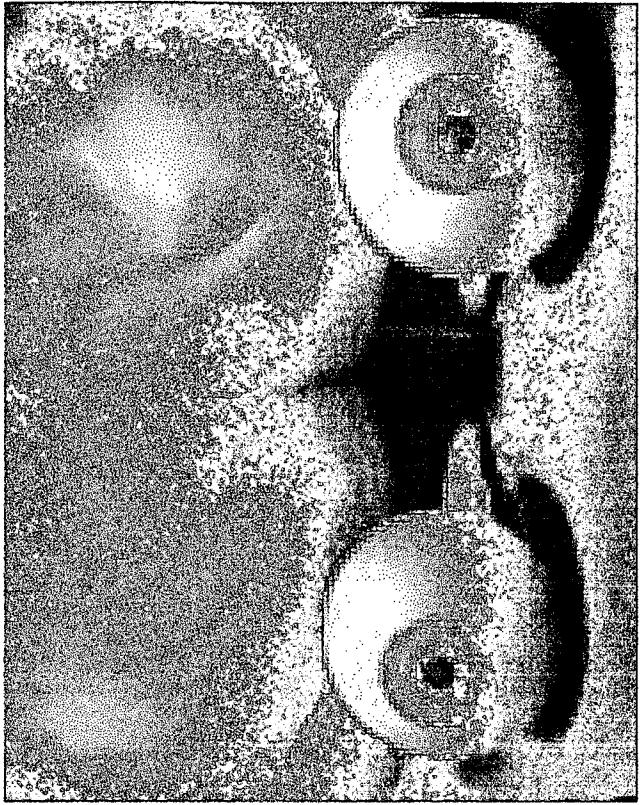
First, we're working with students &
teachers to improve health education
in and out of school:

Museum
experience is just
one of many
community health
initiatives.

14

dwr

15_7
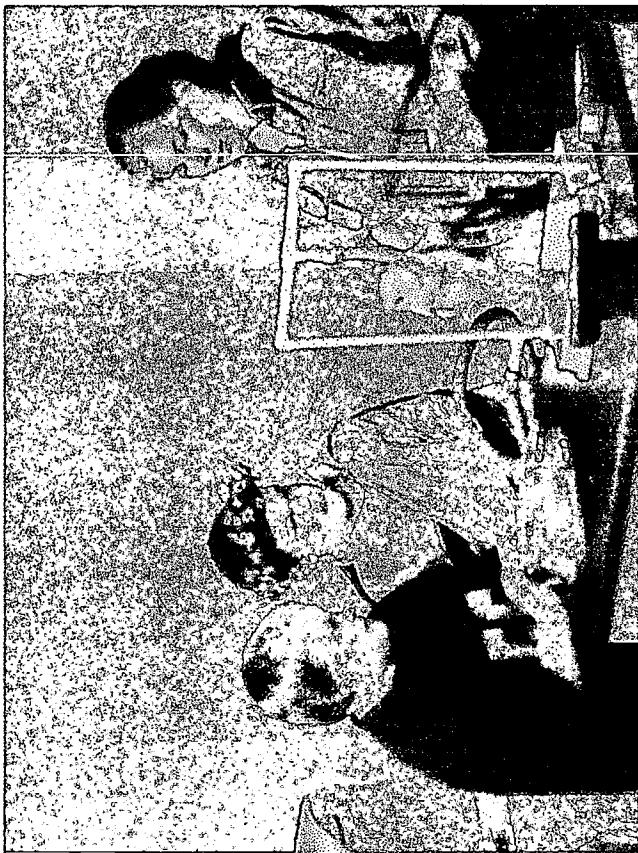
Second, we'd also like to impact parents and community members through:

- Increasing awareness of healthy living,

- Providing cutting edge knowledge about health issues and concerns when and where it's needed, &

- Planning and delivering programming based on our community needs.

17

dwr
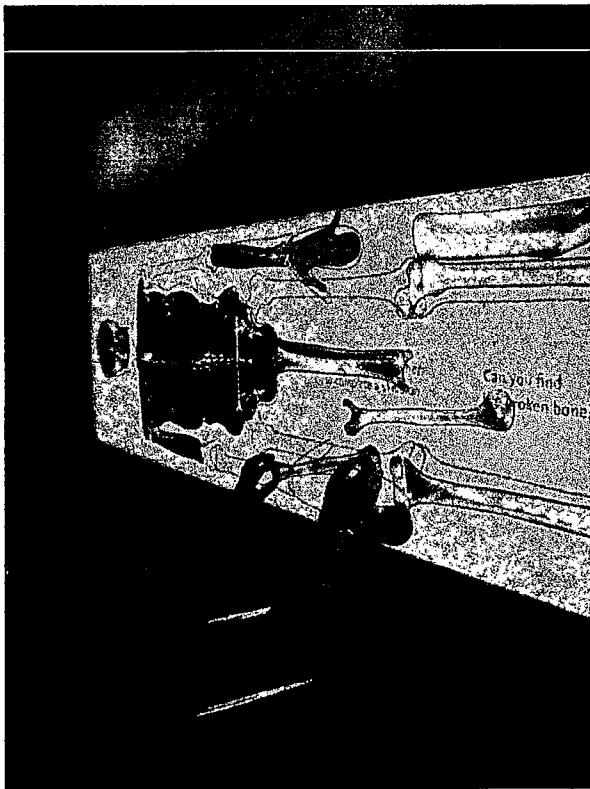
Third, we know to ultimately improve the health of our community, we must address everyone's :

- Knowledge,
- Behaviors &
- Attitudes of all our 100,000+ residents & neighbors from surrounding states.

dwr

19 [9]

18
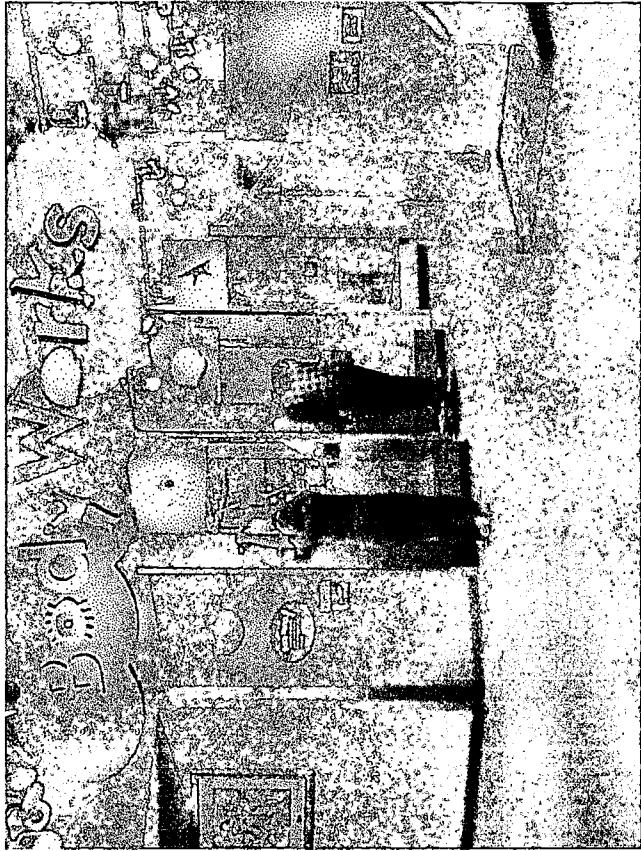
Fourth, to assess our impact we must take a long-term, longitudinal view.

- Become reflective practitioners,

- Involve our diverse community in our evaluation efforts,

- Measure, measure, measure for a period of years, and

- Share our learning history with others.

20

dwr

21

10

In most evaluation projects:

- There's usually a stash of unobtrusive data available (such as: attendance, artifacts, customer satisfaction, feedback),

- Multiple data sources are the norm, &

- There's short-term and long-term data measures to be considered.

dwr

11

23

22
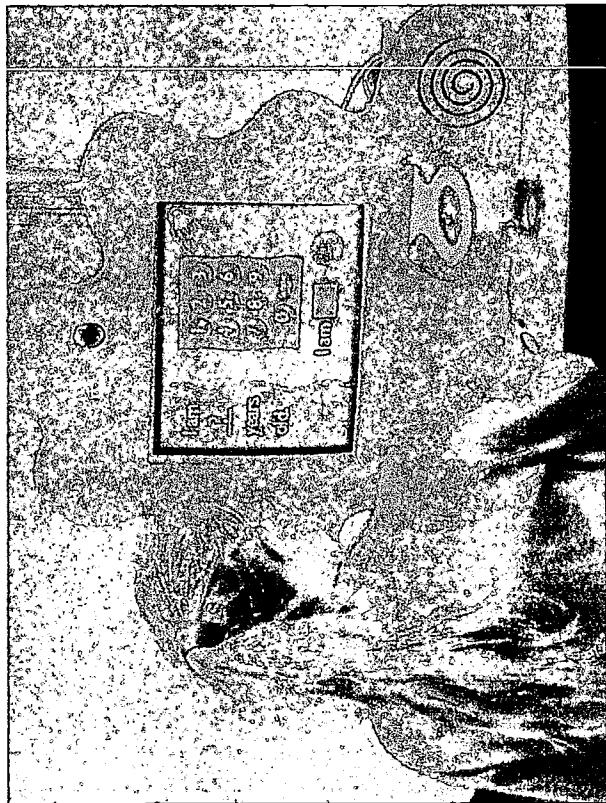
What's this look like in real life?
Well, we have:
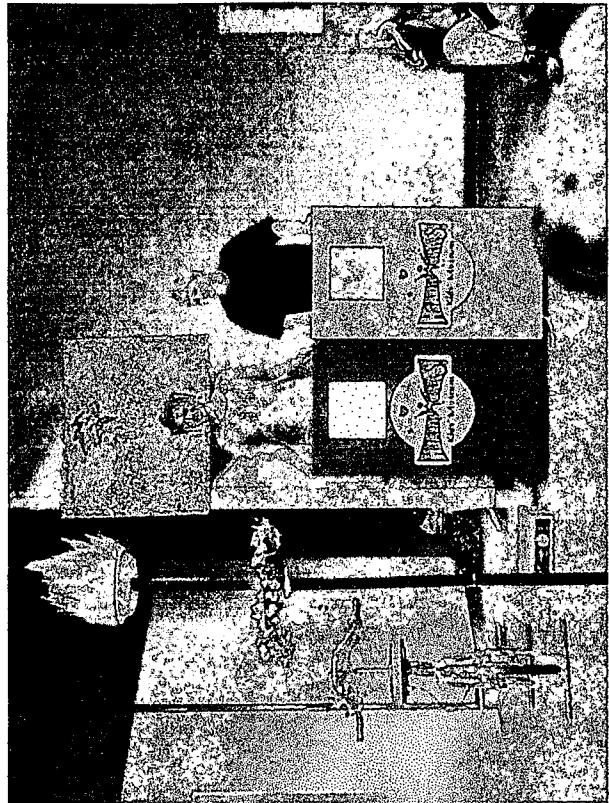
- Multiple stakeholders,
- Multiple goals,
- Multiplicity of data,
- Formative & summative measures analysis.
  - Just messy; messy; messy...

dwr

24

The project fits with gathering evidence of goal attainment, program implementation and overall community impact through:

- Program artifacts,
- Group feedback,
- Field observations, and
- Longitudinal data (e.g. cohort groups).

dwr

26

Of course, we like everyone else wrestle with:

- Internal validity = credibility of findings (corroborate, triangulate, etc.)

- Reliability = auditability of findings (e.g. another team determines agreement; internal & external evaluation team members)

- Bias effects = objectivity of the evaluator (neutrality)

- External validity = applicable to this context and other settings (fit of the findings)

dwr

29 14

28

Address the Standards for Evaluation

- Utility (provides practical information)

- Propriety (legality & ethical standards)

- Feasibility (realistic, doable, cost-effective)

- Accuracy (findings gauge the merit, worth & value of the program)

- Characteristics of a good evaluation (Joint Committee, 1981)

dwr

30

We involve stakeholders in the evaluation, because...

- Participatory evaluation improves the process & the product.

- We're dealing with emerging & planned research questions.

- We have multiple perceptions of reality across and within our community.

dwr
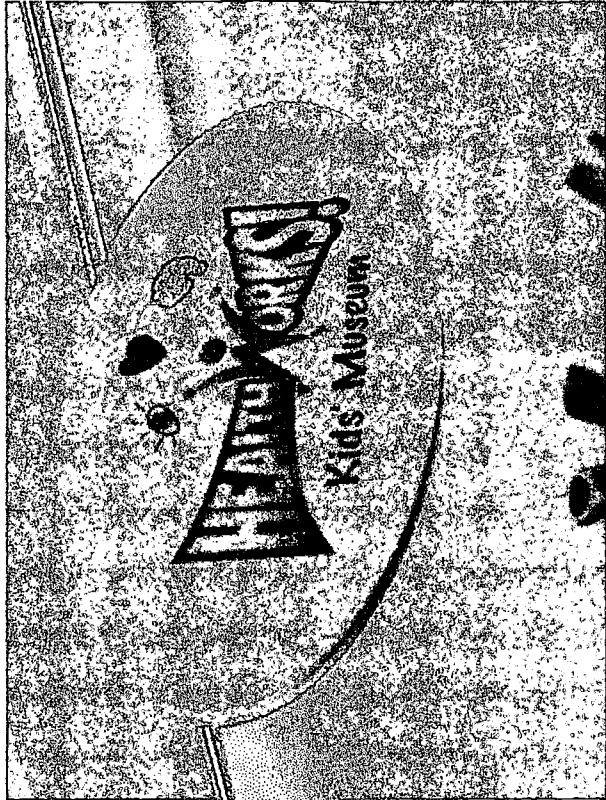
The Confirming Evidence Approach to Program Evaluation

- Uses multiple data sources to verify performance and to gauge completion and/or fulfillment of stated goals,

- Utilizes a mix of qualitative and quantitative measures determined by the scope and defining aspects of the project, and

- Involves the program participants in the evaluation.

34

17
35

dwr

Mixed Method Evaluations make use of both:

- **Qualitative Data Analyses**
  - Trends/patterns
  - Justifying conclusions
  - Triangulation (Patton, 1990; Miles & Huberman, 1994)
  - Verification through confirming evidence (Rudy, 1999)

- **Quantitative Data Analyses**
  - Statistics of choice
  - Central tendencies
  - Clearly established procedures and protocols
  - Charts & graphs
  - Cohort group designs

36

dwr

18

37

We're gathering a wealth of data from multiple sources, analyzing and making judgements, and ultimately forming claim statements that are supported by:

- Confirming evidence
  - verifying positive agreement,
- Disconfirming evidence
  - verifying negative agreement, or
- Mixed evidence
  - Conflicting & confounding data.

dwr

19

39

Evaluation Components/Activities

–Formative

- On-going feedback,
- Focus groups,
- Accomplishments,
- Artifacts, and
- Document review.

–Summative

- Goal attainment,
- Indicators of success,
- Benchmarks &
- Standards (e.g. state proficiencies).

dwr

40

20

41

Some sample claim statements from our formative assessments:

- Students remember the museum experience as a fun experience,

- Teacher, parents & community members have increased awareness and knowledge of health issues through participation, and

- The dream of a planned program of interactive and meaningful health education curricula & instruction has been realized.

42

dwr

Next Steps

- Continue data collection & analyses for formative program improvements,

- Begin summative data analyses (I.e. annual and biennial report of findings), and

- Design program indicators and benchmarks for longitudinal measures that reflect overall community health.

dwr

22

45

44
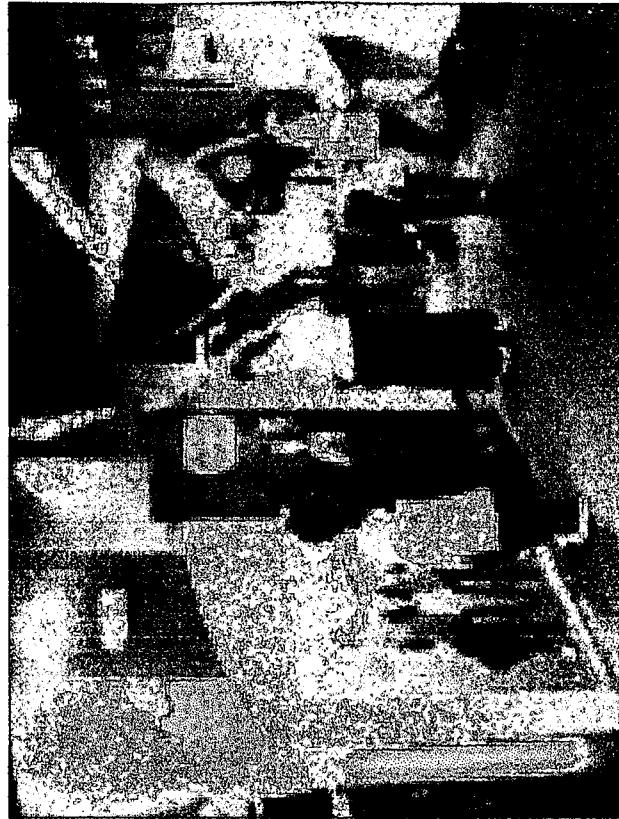
References

- Denzin, N. K. & Lincoln, Y. S. (1994) Handbook of qualitative research. Thousand Oaks, CA: Sage.

- Frechtling, J., & Sharp, L. (Eds.). (1997). User friendly handbook for mixed method evaluation. Washington, D.C.: National Science Foundation.

- Joint Committee on Standards for Educational Evaluation (1981). Standards for evaluation of educational programs, projects, materials. New York: McGraw-Hill.

- Miles, M. B. & Huberman, A. M. (1994) Qualitative data analysis. Thousand Oaks, CA: Sage.

- Rudy, D. W. (1999). Confirming Evidence: making sense of multiple data sources in program evaluation. Paper presented at annual meeting of the Eastern Educational Research Association, Hilton Head, SC.

- Patton, M. Q. (1990) Qualitative evaluation and research methods. Thousand Oaks, CA: Sage.

- Worthen, B. R. & Sanders, J. R. (1987) Educational evaluation: alternative approaches and practical guidelines. New York: Longman

dwr

Additional Information

- Dennis Rudy, External Evaluator
  - drudy@iusb.edu;
  - (219) 237-4200

Kids' Museum

24

dwr

48

49
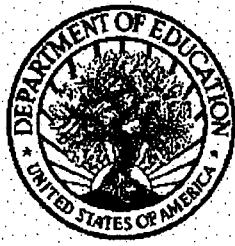
U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

ERIC

REPRODUCTION RELEASE
(Specific Document)

I. DOCUMENT IDENTIFICATION:

Title:
Connecting Community Through Evaluation

Author(s): Dennis W. Rudy, Ph.D.

Corporate Source: Indiana University, South Bend	Publication Date: 11/2/00

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, *Resources in Education* (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please CHECK ONE of the following three options and sign at the bottom of the page.

The sample sticker shown below will be affixed to all Level 1 documents	The sample sticker shown below will be affixed to all Level 2A documents	The sample sticker shown below will be affixed to all Level 2B documents
PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY _____ TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)	PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY _____ TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)	PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY _____ TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
1	2A	2B
Level 1	Level 2A	Level 2B
[✓]	[ ]	[ ]
Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g., electronic) *and* paper copy.	Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only	Check here for Level 2B release, permitting reproduction and dissemination in microfiche only

Documents will be processed as indicated provided reproduction quality permits.
If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Sign here, please

Signature:	Printed Name/Position/Title: Dennis W. Rudy, Ph.D. - Assistant Professor
Organization/Address: 16560 Timber Lane, New Buffalo, MI 49117	Telephone: 616-469-7946 FAX: 616-469-7946

| E-Mail Address: *drudy@iush.edu* | Date: *2/11/01* |

III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, *or*, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:

N/A

Address:

Price:

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:

N/A

Address:

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to:

ERIC Processing and Reference Facility
4483-A Forbes Boulevard
Lanham, Maryland 20706

Telephone: 301-552-4200
Toll Free: 800-799-3742
FAX: 301-552-4700
e-mail: ericfac@inet.ed.gov
WWW: http://ericfac.piccard.csc.com

EFF-088 (Rev. 2/2000)