

DOCUMENT RESUME

ED 135 655

SE 022 146

AUTHOR Horn, Jerry G.  
 TITLE The Efficacy of Part-Time Consultants to Support Curriculum Dissemination.  
 PUB DATE Mar 77  
 NOTE 15p.; Paper presented at the annual meeting of the National Association for Research in Science Teaching (50th, Cincinnati, Ohio, March 22-24, 1977)

EDRS PRICE MF-\$0.83 HC-\$1.67 Plus Postage.  
 DESCRIPTORS \*Curriculum Development; Elementary Education; \*Elementary School Science; \*Evaluation; \*Inservice Education; \*Science Consultants  
 IDENTIFIERS Elementary Science Study; Science A Process Approach II; Science Curriculum Improvement Study

ABSTRACT

In the sparsely populated 100,000 square miles of South Dakota and adjacent areas in Iowa, Nebraska, and Minnesota, a program (Project TAFE: Tactics for Applying Programs in Education) for disseminating information about elementary science curricula was funded by the National Science Foundation. Six part-time regional consultants were selected to be field representatives of the project. Regional consultants responded to requests for consultation from school districts and other responsible groups and individuals. The efficacy of using part-time regional consultants was measured in two dimensions, cost effectiveness and reception and perceived effectiveness by users. The cost for using part-time consultants that are strategically located was found to be one-half that of centrally located personnel. Data collected by questionnaire sent to persons requesting services revealed that only 7.2% of the respondents expressed a negative opinion about the assistance provided by the consultants. (CS)

\*\*\*\*\*  
 \* Documents acquired by ERIC include many informal unpublished \*  
 \* materials not available from other sources. ERIC makes every effort \*  
 \* to obtain the best copy available. Nevertheless, items of marginal \*  
 \* reproducibility are often encountered and this affects the quality \*  
 \* of the microfiche and hardcopy reproductions ERIC makes available \*  
 \* via the ERIC Document Reproduction Service (EDRS). EDRS is not \*  
 \* responsible for the quality of the original document. Reproductions \*  
 \* supplied by EDRS are the best that can be made from the original. \*  
 \*\*\*\*\*

ED135655

U S DEPARTMENT OF HEALTH,  
EDUCATION & WELFARE  
NATIONAL INSTITUTE OF  
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

The Efficacy of Part-Time Consultants  
to Support Curriculum Dissemination

Jerry G. Horn  
School of Education  
The University of South Dakota  
Vermillion, SD 57069

A paper presented at the 50th meeting of the  
National Association for Research in Science Teaching,  
March 22-24, 1977, Cincinnati, Ohio.

022 146

The Efficacy of Part-Time Consultants  
to Support Curriculum Dissemination

Jerry G. Horn  
School of Education  
The University of South Dakota  
Vermillion, SD 57069

Dissemination of information about the availability of science curriculum materials is difficult in any area but particularly so in sparsely populated regions. Project TAPE (Tactics for Applying Programs in Education), a program funded by the National Science Foundation and conducted by The University of South Dakota (USD), was designed to disseminate information about elementary science curricula to South Dakota and the USD service areas in Iowa, Nebraska and Minnesota (See Figure 1). A secondary purpose of this project, but a very important part, was to determine the effectiveness of a delivery system that combined the use of direct mailings, mass media, and on-site consultation. This paper addresses the efficacy of using part-time consultants to provide follow-up and support services to a technologically based system of information services. (Other papers presented in this set will describe efforts to measure the effectiveness of other aspects of the project.)

The Consultant

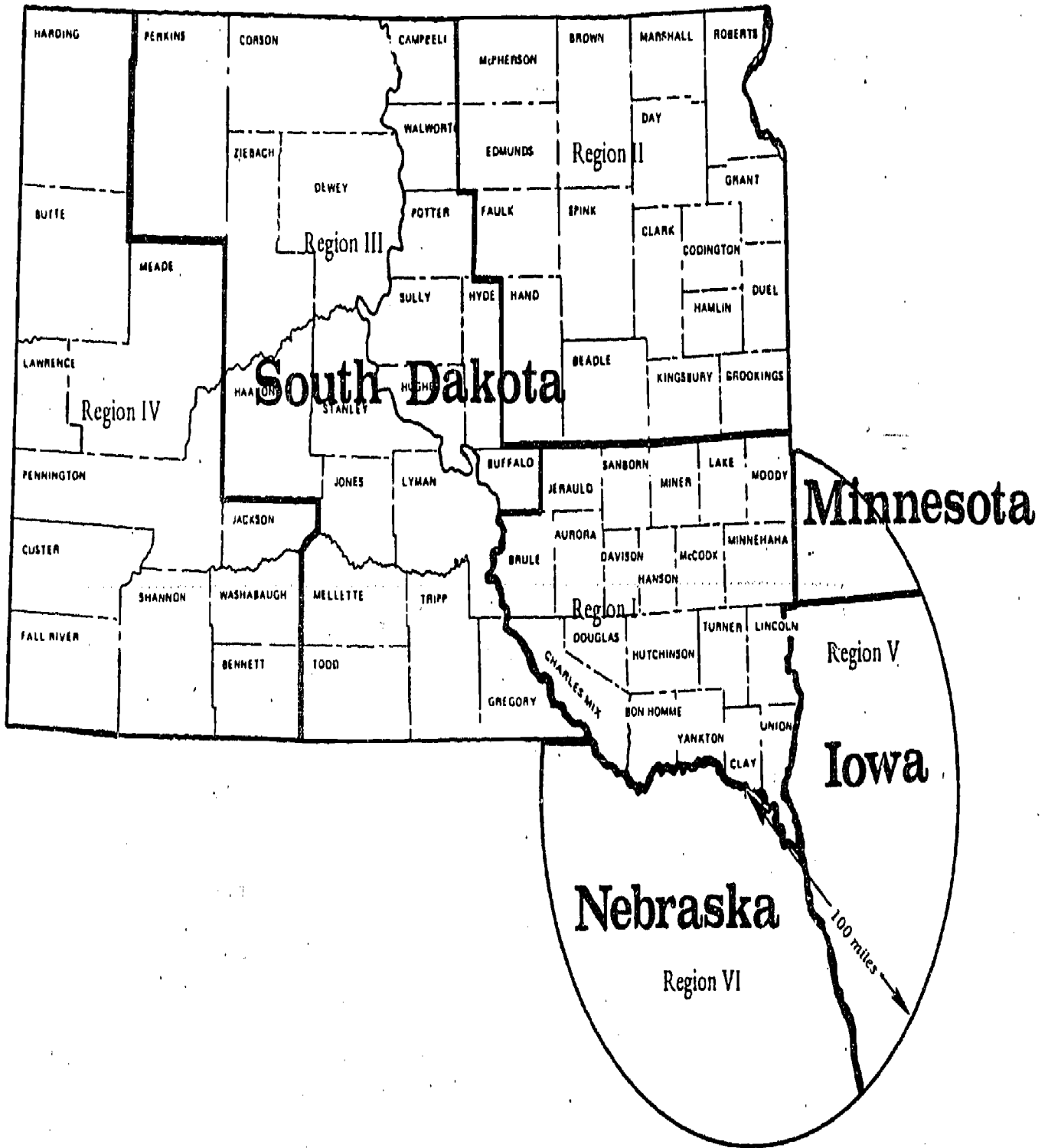
For an area covering more than 100,000 miles<sup>2</sup>, six strategically located persons were identified as part-time consultants and described as "Regional Consultants." A Regional Consultant, as defined in this project, is a person who serves as a field representative of the project and three elementary science curricula, Elementary Science Study (ESS), Science Curriculum Study (SCIS) and Science--A Process Approach II (S-APA II). Specifically, the Regional Consultant responded to requests for consultation from school districts and other responsible groups and individuals. In most cases, the persons

Figure 1

Project TAPE

Regional Consultation Areas  
1974-75

School of Education - University of South Dakota



requesting consultation services had listened to audio tapes and/or read promotional materials about the project and the selected curricula. Requests were received via toll-free WATS lines, and each request was validated as much as possible at the TAPE communication center located at the School of Education at The University of South Dakota.

The following factors were considered in the selection of the Regional Consultants.

1. Training and/or experience in ESS, SCIS and S-APA II curricula.
2. Consulting and/or in-service teaching experience.
3. Knowledge of school administrative organization and ability to effectively communicate with administrative personnel.
4. Ability to effectively communicate with elementary school faculty.
5. Training and experience in developing and conducting needs assessments in a local school.

Other important factors to be considered in the final selection process were geographic location and perceived availability of the person for consultation services. After the selection of consultants was accomplished, two consultant information/training sessions for a total of four days were conducted by the project staff. Each consultant was provided kit materials, teacher's guides, consumable items, and audio visuals (audio-tapes, 16 mm films, transparencies) appropriate to the three curricula. In addition, a packet of suggested activities was provided and identified for large and/or small groups.

The six consultants selected for this project held various positions as listed below.

Region I--elementary school principal and 5-6 science teacher

Region II--elementary school principal\* (former elementary science teacher)

---

\*Due to conflicting time commitments, this person withdrew and was replaced with a former large-city elementary school resource science teacher.

Region III--elementary school science teacher

Region IV--college science educator and earth scientist

Region V--elementary school principal (former middle school science teacher)

Region VI--elementary school science teacher

All of the part-time consultants, with the exception of the college science educator, received their original training and experience with the curricula in previous NSF supported projects at The University of South Dakota.

### Measures of Effectiveness

In this study, the efficacy of using part-time consultants was measured in two dimensions. They are as follows:

1. reception/perceived effectiveness by users
2. cost effectiveness.

One might argue that the real measure of effectiveness would best be measured by the number of school districts that chose to pilot or adopt one of these curricula as a result of this service, but there are many factors affecting this step, some beyond the control of the consultant and unrelated to the primary purpose (dissemination) of Project TAPE.

To measure the perceived effectiveness of the service, a questionnaire (see appendix) was sent to the person that had requested consultation services. The data from this questionnaire were compiled according to specific evaluative areas, as found in Tables 1 and 2. Two other questions dealt with users' recommendation of the consultants' services and an open-ended request for comments and suggestions. A total of thirty-five (83.3%) said they "would recommend our service to a friend," while only two (5.4%) indicated they would not recommend the service. From the total sample of 42, five persons (11.9%) did not respond to the item. A sampling of the open-ended comments and suggestions are listed below.

-I enjoyed meeting your consultant.

-Thank you.

-The consultant was most pleasant and enthusiastic as well as sensitive to the needs of the teachers involved.

-I believe we tried to do too much in a limited time.

-We received very good help in regard to the "action science programs."

-A program like this for social studies would be good.

-The consultant, \_\_\_\_\_, was extremely helpful.

-I stumbled upon the service by accident. I suggest you get yourself better known.

-I had hopes that you would be able to supply me a unit of ideas rather than programs that are not available to me.

-The consultant who was to have contacted us never did. We finally received assistance from another one of your consultants just two weeks ago.

-All good, it's a matter of selling the procedures to one's staff.

Based on the data found in Tables 1 and 2, the percent of users that would recommend the service to a friend, and the tone of the open-ended comments and suggestions, one can conclude that part-time consultants as used in this project, were well received by clients and the services they provided were judged to be beneficial.

The basic question of cost effectiveness may be best considered by observing several examples as found in Table 3. Obviously, there are several hidden expenses that are difficult if not impossible to estimate. Some of these are pre-consultation time, coordination by center staff, etc. The two expense categories that can be reduced by using local consultants are travel and per diem. Other expenses would remain essentially, the same, if the consulting fee was set at the same rate. A full-time consultant employed to deliver similar service to the field would have resulted in a much higher cost for salaries and would have probably had travel expenses of two to

Table 1

Users' Perception of Response Mechanism  
and Value of the Service

Questions	Response		
	Yes (n/%)	No (n/%)	Missing Data (n/%)
Was request for regional consultant processed promptly, i.e., within one week?	37/88.1	4/9.5	1/2.4
Did the consultant come to your school?	35/83.3	5/11.9	2/4.8
Was the consultant pleasant to work with?	34/81.0	1/2.4	7/16.7

	Response (n/%)						$\bar{X}$	S.D.
	1 Harmful	2	3 No Help	4	5 Very Helpful	Missing Data		
How would you rate the consulting assistance that you and your faculty received?	2/4.8	1/2.4	2/4.8	11/26.2	5/52.4	4/9.5	4.3	1.1



Table 2

Users' Need for Further Service Categorized  
by Type(s) of Service Needed

<u>Type of Service Needed</u>	<u>n</u>	<u>Need Further Service</u>	
		<u>Column %</u>	<u>Rank of Further Service</u>
Telephone	5	11.1	4
Regional Conference	7	15.6	3
Consultant at your School	12	26.7	1.5
Mailed Information	12	26.7	1.5
Other	3	6.7	5
Missing Data	6	13.3	

Table 3

## Examples of Consultant Expenses

Consultant Trips	Expense Categories					Total
	Travel	Per Diem	Consultant* Fee	Estimated Telephone	Other**	
1	\$17.28	\$ 2.50	\$50.00	\$6.00		\$75.78
2	15.72	4.00	50.00	6.00		75.72
3	26.40	4.00	50.00	6.00		86.40
4	13.92	2.50	50.00	6.00		72.42
5	56.73	24.00	50.00	6.00	\$7.65	136.73
6	3.00	---	25.00	6.00		34.00
7	6.48	---	25.00	6.00		37.48
8	14.52	7.00	50.00	6.00		77.52

\*The consultant's fee was set at \$25 for up to four hours and \$50 for four or more hours.

\*\*Extra baggage fee on commercial air fare.

three times that experienced in this project. Some of the consultation provided by this project was more than 400 miles from the project's primary location.

In conclusion, the two questions that pertain to the efficacy of using part-time consultants have been answered. The services provided by these consultants were well received and their services were judged to be valuable. At the same time, the cost for such services are estimated to be considerably less than at least one option, a full-time field consultant.

The utilization of part-time consultants is not without problems. Specifically, they may not:

- be as knowledgeable about all curricula as you would like.
- be able to arrange the consulting around other commitments.
- be totally supportive of your efforts.
- be as experienced in dealing with local school persons as you would like.

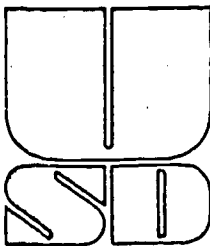
At the same time, one must recognize that this project had the potential for responding to six different requests at the same time. An immediate response to a request is very important. Also, a consultant that is actually using the curriculum in his/her classroom brings a measure of credibility that is difficult to equal by other means.

The procedure of using part-time consultants was effective in Project TAPE. In other localities and with other unique variables, this procedure may be a totally undesirable approach. An administrator of a similar project or service should assess the needs and resources, and develop the most responsive system possible. The utilization of local part-time consultants is one approach that was effective as a follow-up to a technologically based curriculum dissemination project.

## Appendix

13

10



May 9, 1975

Dear Principal or Teacher:

Because of the press of time, I am taking this rather formal means to thank you for contacting us at Resource Services. At the same time may I ask your impressions regarding the service that Resource Services supplied--through its free phone service, a consultant or both.

If you found the service helpful we would appreciate knowing it. More important, however, is learning of any problems which arose. We intend to provide the service again, beginning in September, and we want to make it as helpful as possible to people and schools in our region. For those reasons we would appreciate your completing the questionnaire and adding any suggestions or comments you may have.

Again, thank you for your interest and thank you very much for helping us.

Sincerely,

Arlen R. Gullickson, Project Director  
Resource Services  
School of Education

vh  
E6:5/1

Enclosure

## Resource Services Questionnaire

1. Was your request for a regional consultant processed promptly, i.e., did you receive a call from the regional consultant within approximately one week from the time you called? Yes\_\_\_ No\_\_\_
2. Did the consultant come to your school? Yes\_\_\_ No\_\_\_
3. Was the consultant pleasant to work with? Yes\_\_\_ No\_\_\_
4. How would you rate the consultant's assistance that you and your faculty received?
- |         |   |         |   |              |
|---------|---|---------|---|--------------|
| 1       | 2 | 3       | 4 | 5            |
| harmful |   | no help |   | very helpful |
5. May we be of further service? Yes\_\_\_ No\_\_\_  
 If yes, which of these would be the best way of assisting you?  
 Telephone  
 Regional conference  
 Consultant at your school  
 Mailed information  
 Other \_\_\_\_\_
6. Based on the help you received would you recommend our service to a friend? Yes\_\_\_ No\_\_\_
7. Your comments and suggestions: