A study was designed to identify and examine the relationship between selected characteristics of teacher participation in curriculum planning activities and reported acts of implementation. Subjects were 100 elementary teachers (K-8) who had participated in curriculum planning activities in 27 schools in nine school districts in suburban Chicago. Data on 22 variables (identified through a research review) and the extent of implementation were obtained by administering four instruments: Bowers Teacher Opinion Inventory (BTOI), Johansen Participation Inventory and Implementation Inventory, and a data sheet/questionnaire. Correlation and step-wise multiple correlation procedures were utilized. Findings: Degree of participation is positively correlated with greater number of years of experience, greater number of years in present system, fewer children in family, higher salary, and greater participation in inservice education. A significant correlation exists between the degree of participation and implementation. Teachers most likely to implement the school system's curriculum would be primarily those in self-contained classrooms, holding some hours beyond the B.A. degree, who have small families, prefer the role in curriculum activities as grade consultant and curriculum writers, understand their curriculum responsibilities, receive professional growth points for participation, prefer a combination of school personnel leading curriculum activities, and score high on the BTOI and the Participation Inventory. (JS)
CHARACTERISTICS OF TEACHER PARTICIPATION IN CURRICULUM PLANNING AND REPORTED ACTS OF IMPLEMENTATION*

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and

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Curriculum innovations must be implemented by classroom teachers to assure desired changes in the instructional program. For a number of years, educators have accepted the position that teacher participation in curriculum development will enhance implementation of the curricula through the utilization of curriculum guides.¹

A number of recent studies have had as their major concern the determination of relationships between teacher participation in curriculum planning activities and subsequent implementation of curriculum guides. The results of these studies have indicated a significant positive correlation between teacher participation in curriculum planning and subsequent implementation.²

Participation in and of itself is a complex variable. The differing characteristics of teachers and the administrative policies governing teacher participation require further investigation.

* A paper prepared for the American Educational Research Association Conference, Division B, Minneapolis, Minnesota, March, 1970
Purpose of the Study

Teacher participation in curriculum planning activities is a component made up of numerous characteristics. These characteristics have not been isolated for the purpose of determining a relationship between them and the teacher's subsequent acts of implementation of curriculum guides. This study was designed to identify and examine the relationship between selected characteristics of teacher participation in curriculum planning activities and reported acts of implementation. The study identified 22 characteristics of teacher's participating in curriculum planning activities. These characteristics were derived from the review of small group and educational research literature. These variables were:

1. Sex
2. Years of teaching experience
3. Years in present system
4. Years in present position
5. Grade level
6. Academic subject
7. Age
8. Marital status
9. Number of children
10. Education
11. Area of curriculum planning
12. Salary
13. Number of curriculum courses
14. In-service education
15. Preferred time to participate
16. Preferred leadership
17. Preferred curriculum role
18. Awareness of curriculum planning as terms of employment
19. Professional growth points awarded for service to curriculum committees
20. Arena for curriculum planning activities
21. Measure of teacher satisfaction with teaching as a profession
22. Degree of teacher participation

The purpose of this study was to determine the correlation between the variables purported to be related to the degree of participation, as well as the optimum combination of participation variables for enhancing implementation of curriculum innovation.

Procedure

Instruments

Data on the 22 variables listed above and the extent of implementation were obtained from 4 instruments. Teachers who had participated in curriculum planning activities, and who subsequently implemented curriculum guides, were
administered the Bowers Teacher Opinion Inventory (BTOI), the Johansen Participation Inventory, the Johansen Implementation Inventory, and a combined biographical data sheet and questionnaire.

**Biographical Data Sheet and Questionnaire.** The purpose of the combined data sheet and questionnaire was to collect data on biographical characteristics of teachers and administrative policies governing curriculum planning activities as shown on pages 2 and 3, excluding data for variables 21 and 22.

**Bowers Teacher Opinion Inventory (BTOI).** The Bowers Teacher Opinion Inventory was used to collect data relating to satisfaction with teaching. This inventory has a reported reliability of .958. The research on the BTOI indicated its appropriateness in assessing those professional attitudes that predispose a person to be a permanent member of the teaching profession.

**Johansen's Participation and Implementation Inventories.** The Participation Inventory was designed to measure the degree of participation of each teacher in the curriculum development process. The instrument has a reported reliability of .711. The Implementation Inventory was designed to measure the degree to which each teacher implemented the prepared curriculum. The instrument has a reported reliability of .871.

**Subjects**

The subjects for this study were 100 elementary-school teachers, (K-8), from Niles Township, Illinois, representing 27 schools from 9 autonomous school districts. Niles Township is a suburban area close to metropolitan Chicago. It has a population of 140,000. The student population of the elementary schools is approximately 17,500. Niles Township High Schools have 80%
of its students admitted to College. It ranks second in the nation for scholarships granted to its students by the National Merit Corporation. The socio-economic range is from lower middle to upper middle.

The elementary schools work jointly in preparing curriculum guides for Niles Township. The reason for the school districts working together on curriculum planning activities is to insure a measure of uniformity in content taught in the 27 schools feeding into a single high-school district. However, there are curriculum development activities going on at the district level and the individual building level.

Characteristics of Curriculum Planning Activities in Niles Township.

1. The school systems used a cooperative committee type curriculum development process to develop curriculum guides. The participants in the cooperative curriculum development process included: (a) administrative staff, (b) classroom teachers, (c) subject-area specialists, and (d) outside consultants.

2. The school systems prepared elementary-curriculum guides in the form of a written document for the purpose of providing teachers with a tool from which to plan educational experiences for students in their classrooms.
**Data Collection**

A letter requesting permission to conduct this study was mailed to each superintendent in Niles Township. This was followed by another letter requesting the names of all teachers who had participated in curriculum planning activities in the past three years. The questionnaires and inventories were submitted to 100 teachers. A cover letter accompanied them, explaining the purpose of the study. A series of communications followed to remind the participants of the completion date and requesting the data to be sent to the district office. A copy of the names and addresses of all the teachers who had not completed the inventories were submitted to building principals, and their cooperation was enlisted to obtain the remainder of the data. One week was set for their completion. All those participants who had not responded were contacted personally by telephone. Eighty-eight percent of the teachers returned the data. Seventy-four percent of the returns were useable.

**Analysis of Data and Results**

To determine the correlations between each of the variables purported to be related to participation and scores obtained from Johansen's Participation Inventory a correlation matrix was obtained. Table I reports significant correlations at the .05, .02, and .01 levels of confidence. Table II shows the significant correlations between the various variables of participation and the degree of participation, and between participation variables and implementation.
TABLE I
SIGNIFICANT CORRELATIONS OBSERVED BETWEEN PARTICIPATION VARIABLES

<table>
<thead>
<tr>
<th>Correlated Participation Variables</th>
<th>r (df=72)</th>
<th>Probability Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Years of teaching / Years in present system</td>
<td>.637</td>
<td>p .01</td>
</tr>
<tr>
<td>Years of teaching / Years in present position</td>
<td>.521</td>
<td>p .01</td>
</tr>
<tr>
<td>Years in present system / Years in present position</td>
<td>.819</td>
<td>p .01</td>
</tr>
<tr>
<td>Grade level / Academic subject</td>
<td>.394</td>
<td>p .01</td>
</tr>
<tr>
<td>Years of teaching experience / Age</td>
<td>.580</td>
<td>p .01</td>
</tr>
<tr>
<td>Years in present system / Age</td>
<td>.339</td>
<td>p .01</td>
</tr>
<tr>
<td>Age / Marital status</td>
<td>.293</td>
<td>p .02</td>
</tr>
<tr>
<td>Grade level / Number of children</td>
<td>.236</td>
<td>p .05</td>
</tr>
<tr>
<td>Age / Number of children</td>
<td>.264</td>
<td>p .05</td>
</tr>
<tr>
<td>Marital status / Number of children</td>
<td>.316</td>
<td>p .02</td>
</tr>
<tr>
<td>Years of teaching experience / Education</td>
<td>.292</td>
<td>p .02</td>
</tr>
<tr>
<td>Number of children / Education</td>
<td>.307</td>
<td>p .02</td>
</tr>
<tr>
<td>Years of teaching experience / Salary</td>
<td>.618</td>
<td>p .01</td>
</tr>
<tr>
<td>Years in present system / Salary</td>
<td>.377</td>
<td>p .01</td>
</tr>
<tr>
<td>Years in present position / Salary</td>
<td>.327</td>
<td>p .01</td>
</tr>
<tr>
<td>Age / Salary</td>
<td>.449</td>
<td>p .01</td>
</tr>
<tr>
<td>Number of children / Salary</td>
<td>.264</td>
<td>p .05</td>
</tr>
</tbody>
</table>
TABLE I (continued)

SIGNIFICANT CORRELATIONS OBSERVED BETWEEN PARTICIPATION VARIABLES

<table>
<thead>
<tr>
<th>Correlated Participation Variables</th>
<th>r</th>
<th>df=72</th>
<th>Probability Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education / Salary</td>
<td>.257</td>
<td></td>
<td>p  .05</td>
</tr>
<tr>
<td>Education / Number of curriculum courses</td>
<td>.315</td>
<td></td>
<td>p  .01</td>
</tr>
<tr>
<td>Preferred leadership / Preferred curriculum role</td>
<td>.256</td>
<td></td>
<td>p  .05</td>
</tr>
<tr>
<td>Preferred curriculum role / Awareness of curriculum planning</td>
<td>.258</td>
<td></td>
<td>p  .05</td>
</tr>
<tr>
<td>Years in present system / Professional growth points awarded for service to curriculum committees</td>
<td>.299</td>
<td></td>
<td>p  .02</td>
</tr>
<tr>
<td>Years in present position / Number of children</td>
<td>.263</td>
<td></td>
<td>p  .05</td>
</tr>
<tr>
<td>Academic subject / Professional growth points awarded for service to curriculum committees</td>
<td>.306</td>
<td></td>
<td>p  .01</td>
</tr>
<tr>
<td>Years in present position / Arena for curriculum planning activities</td>
<td>.300</td>
<td></td>
<td>p  .02</td>
</tr>
</tbody>
</table>
### TABLE II

**SIGNIFICANT CORRELATIONS BETWEEN PARTICIPATION OF VARIABLES AND DEGREE OF PARTICIPATION AND BETWEEN DEGREE OF PARTICIPATION AND IMPLEMENTATION**

<table>
<thead>
<tr>
<th>Correlated Variables</th>
<th>r (df=72)</th>
<th>Probability Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degree of participation / Years of teaching experience</td>
<td>.246</td>
<td>p .05</td>
</tr>
<tr>
<td>Degree of participation / Years in present system</td>
<td>.267</td>
<td>p .05</td>
</tr>
<tr>
<td>Degree of participation / Number of children</td>
<td>.237</td>
<td>p .05</td>
</tr>
<tr>
<td>Degree of participation / Salary</td>
<td>.255</td>
<td>p .05</td>
</tr>
<tr>
<td>Degree of participation / In-service education</td>
<td>.255</td>
<td>p .05</td>
</tr>
<tr>
<td>Degree of participation / Implementation</td>
<td>.335</td>
<td>p .01</td>
</tr>
</tbody>
</table>

As reported in Table I, one could expect significant correlations between these variables. As an example, variables 2 and 12 are significantly correlated at the 1% level of confidence. The greater the number of years in teaching, the higher the salary. Of more interest are the significant correlations reported in Table II. Degree of participation is positively correlated at the 5% level of confidence with greater number of years of experience, with greater number of years in present system, with fewer children in the family, with higher salary, and with greater participation in in-service education. The observed significant correlation at the 1% level of confidence between the degree of participation and implementation supports previous studies in the field.
To further probe the relationship among the participation variables and the degree of implementation (scores on the Implementation Inventory as the dependent variable) the step-wise multiple regression procedure was utilized. Table III reports the combination of participation variables significant at the 1% level of confidence.

**TABLE III**

**SIGNIFICANT RELATIONSHIPS AMONG THE PARTICIPATION VARIABLES AND IMPLEMENTATION**

<table>
<thead>
<tr>
<th>Implementation Correlated with Participation Variables</th>
<th>Multiple R</th>
<th>SE est</th>
<th>df</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>23/22</td>
<td>0.3350</td>
<td>10.2934</td>
<td>1,72</td>
<td>9.104</td>
</tr>
<tr>
<td>23/5, 22</td>
<td>0.4085</td>
<td>10.0419</td>
<td>2,71</td>
<td>7.109</td>
</tr>
<tr>
<td>23/5, 11, 22</td>
<td>0.4589</td>
<td>9.8442</td>
<td>3,70</td>
<td>6.225</td>
</tr>
<tr>
<td>23/22</td>
<td>0.3350</td>
<td>10.2934</td>
<td>1,72</td>
<td>9.104</td>
</tr>
<tr>
<td>23/5, 22</td>
<td>0.4085</td>
<td>10.0419</td>
<td>2,71</td>
<td>7.109</td>
</tr>
<tr>
<td>23/5, 11, 22</td>
<td>0.4589</td>
<td>9.8442</td>
<td>3,70</td>
<td>6.225</td>
</tr>
<tr>
<td>23/5, 11, i9, 22</td>
<td>0.5054</td>
<td>9.6295</td>
<td>4,69</td>
<td>5.918</td>
</tr>
<tr>
<td>23/5, 10, 11, 19, 22</td>
<td>0.5188</td>
<td>9.6102</td>
<td>5,68</td>
<td>5.009</td>
</tr>
<tr>
<td>23/5, 10, 11, 18, 19, 22</td>
<td>0.5309</td>
<td>9.5975</td>
<td>6,67</td>
<td>4.382</td>
</tr>
<tr>
<td>23/5, 9, 10, 11, 18, 19, 22</td>
<td>0.5388</td>
<td>9.6129</td>
<td>7,66</td>
<td>3.856</td>
</tr>
<tr>
<td>23/5, 9, 10, 11, 18, 19, 21, 22</td>
<td>0.5458</td>
<td>9.6341</td>
<td>8,65</td>
<td>3.448</td>
</tr>
</tbody>
</table>
TABLE III (continued)

SIGNIFICANT RELATIONSHIPS AMONG THE PARTICIPATION VARIABLES AND IMPLEMENTATION

<table>
<thead>
<tr>
<th>Implementation Correlated with Participation</th>
<th>Multiple R</th>
<th>SE</th>
<th>df</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>23/5, 9, 10, 11, 16, 18, 19, 21, 22</td>
<td>0.5512</td>
<td>9.6683</td>
<td>9.64</td>
<td>3.103</td>
</tr>
<tr>
<td>23/5, 9, 10, 11, 16, 18, 19, 20, 21, 22</td>
<td>0.5577</td>
<td>9.6941</td>
<td>10.63</td>
<td>2.844</td>
</tr>
<tr>
<td>23/5, 6, 10, 11, 16, 18, 19, 20, 21, 22</td>
<td>0.5611</td>
<td>9.7449</td>
<td>11.62</td>
<td>2.590</td>
</tr>
</tbody>
</table>

The critical combination of participation variables yielding the maximum Multiple-R with F ratio at the 1% level of confidence includes variables: 5, 6, 10, 11, 16, 18, 19, 20, 21 and 22. These variables can be interpreted as shown below.

Variable 5: Grade level - primary.
Variable 6: Subject - generalist (characteristic of those teaching in self-contained classrooms).
Variable 9: Number of children - few children.
Variable 10: Education - some hours beyond the B. A., but not including M. A.
Variable 11: Area of curriculum participation - teacher's role as grade consultant and curriculum writing.
Variable 16: Who should lead curriculum planning activities combination of school personnel.

Variable 18: Was curriculum activity defined in job role - yes.

Variable 19: Professional growth points given for participation - yes.

Variable 20: Arena of curriculum participation - individual school level.

Variable 21: BTOI.

Variable 22: Degree of participation score.

The obtained multiple-R gives us a description of the characteristics of teachers who are most likely to implement the school system's curriculum. They would be primary teachers in self-contained classrooms, holding some hours beyond the B. A. degree, who have small families, prefer the role in curriculum activities as grade consultant and curriculum writers, understand their curriculum responsibilities, receive professional growth points for participation, prefer a combination of school personnel leading curriculum activities, and score high on the BTOI and on the Participation Inventory.

Implications of the Study

Change in the instructional program takes place when teachers use the new curriculum guide as a point of departure for classroom teaching. This study reinforces the findings from previous studies that there is a positive correlation between participation and curriculum implementation.
School districts for various and obvious reasons frequently do not use all there teachers in curriculum planning activities. Selection criteria in the past have been based on willingness of teachers to volunteer and by administrative urging. This study may indicate more meaningful criteria for selecting participants in curriculum planning activities. Perhaps, characteristics that indicate the teacher who is more likely to implement the curriculum are clues to those characteristics that would indicate the teacher who would act as a catalytic agent for the in-service training of other teachers, in regard to the services necessary for implementation.

Footnotes


