DOCUMENT RESUME

ED 117 455   CE 006 108

TITLE   Inservice Education: A Method for Organizing and
                 Implementing Inservice Programs Based on
                 Participants' Interest and Needs.
INSTITUTION   Oregon State Dept. of Education, Salem. Career and
                 Vocational Education Section.
PUB DATE   14 Nov 74
NOTE   22p.

EDRS PRICE   MF-$0.83 HC-$1.67 Plus Postage
DESCRIPTORS   Career Education; *Educational Needs; Guidelines;
                 Inservice Education; Inservice Programs; *Inservice
                 Teacher Education; Needs Assessment; *Participant
                 Involvement; *Program Planning; *Questionnaires;
                 Teacher Attitudes; Teacher Improvement

ABSTRACT
         A four-step method that can be utilized to make
inservice education programs more responsive to the interests and
needs of teachers and other educational personnel is presented. The
first step involves assessing teachers' attitudes and changes in
attitudes toward inservice as measured by responses to 34 statements
in an inventory. A copy of the instrument is included and its
purpose, design, and use are described. It is suggested that the
second step, surveying for general inservice needs, be accomplished
by collecting data from the appropriate individuals and notifying
them of the needs determined by consensus. Copies of surveys directed
to teachers, vocational teachers, and administrators are included as
examples. The third step is a survey that identifies participant
strengths and weaknesses, objectives to emphasize, and instructional
procedures to utilize. Two examples of such an instrument are given
along with a list of definitions for learning procedures. The fourth
step involves designing and conducting the planned inservice program
to meet participant needs identified through the data gathered in the
previous steps. Attached is a list of 15 guidelines for effective
inservice in career education based on the results of a nation wide
study. (Author/MS)

State Department of Education
Career Education
November 14, 1974

INSERVICE EDUCATION

A METHOD FOR ORGANIZING AND IMPLEMENTING INSERVICE PROGRAMS BASED ON PARTICIPANTS' INTEREST AND NEEDS

INTRODUCTION

The following is a four step method that can be utilized to make in-
service programs more responsive to the interests and needs of teachers
and other educational personnel.

The need for providing accurate inservice education that addresses it-
self to the identified needs and interests of teachers is becoming a
most crucial factor in providing for professional growth.

Too often, we gather data and fail to interpret and implement it. We
tend to continue to offer the same course again regardless of the eval-
uation input of participants.

The four step process to inservice is an attempt to provide a model by
which staff can participate and learn effectively. It is hoped that by
participating in this type of inservice, teachers will provide similar
experiences for their students in the classroom.

Each of the following steps are given in a sequence to provide a begin-
ning organizational pattern. However, after one has gone through the
process, it will become apparent that a person could start anywhere in
the steps to achieve the desired outcomes of in-service. In brief, the
four step process involves:

STEP I   Assessing teachers' attitudes and changes in attitudes
            toward in-service.

STEP II   Surveying for general in-service needs.

STEP III   Assessing strengths and weaknesses of participants, objectives/
            competencies to emphasize, and the instructional method to
            utilize for the inservice.

STEP IV   Providing an inservice package that meets the identified
            needs of participants.

NOTE: Attached to this package is a list of guidelines for effective inservice
        in career education. The list is the result of a nation wide study to
        identify and varify effective characteristics of inservice programs for
        career education and further confirms the need for such a process as
        described in this package.

Step I involves the use of an instrument designed to assess the climate for in-service. Ideally the instrument should be administered by local school district or building personnel in cooperation with regional personnel. Through cooperative effort, duplication can be avoided and results more widely utilized.

As stated earlier, one does not necessarily need to use this instrument first if he/she is already aware of teacher attitudes. The in-service could be organized and conducted according to Step III. This instrument could then be used to determine present attitudes of teachers upon completion of the inservice.

There is the possibility also of using this instrument as a pre-post survey for those involved in the actual in-service.

The use of this instrument is determined by the desired data and purposes for surveying. The following only suggests one use for example purposes only.

Purpose/Rationale

The use of the attached inventory is of importance if one wishes to find out the climate for in-services.

The attitude that the staff has about in-services will directly affect the direction and style of the next in-service.

The purpose of the instrument is to begin the process of staff involvement in personnel development. The information will be helpful in making in-service programs more responsive to the needs and interests of teachers.

When the survey has been completed, the results should be published so the staff can become aware of their peer group's feelings.

Design

Teacher opinions are obtained by means of the "Teacher Attitude Toward In-service Education Inventory."[1] The inventory includes a series of 34 statements regarding in-service education programs using a Likert-type scale. Respondents are asked to react to each statement. Response categories are strongly agree, agree, uncertain, disagree, and strongly disagree. Values of 2, 1, 0, -1, and -2 are assigned to their respective categories.

The items are ranked in importance according to the study carried out by Brimm and Follett.[1] One could compare their teacher's attitude to those in the study by ranking their responses compared to the instruments.

[1]Statements taken from: Education Leadership/Research Supplement, "How Do Teachers Feel About In-service Education," by Jack Brimm and Daniel Follett, March 1974, p. 521.

ATTITUDES TOWARD IN-SERVICE INVENTORY

Purpose

The purpose of this inventory is to determine teacher's attitudes toward in-service education. The information will provide valuable input to the planning and coordinating of in-service programs.

Directions

Below are some statements regarding in-service education programs. Would you react to each statement by checking the appropriate column (strongly agree, agree, uncertain, disagree, or strongly disagree).

There are no "right" or "wrong" answers, and no names will be identified with responses. Feel free to make comments.

STATEMENTS	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
1. The teacher should have the opportunity to select the kind of in-service activities which he feels will strengthen his professional competence.					
2. In-service programs should include special orientation activities for the new classroom teacher.					
3. The real test of an in-service program is whether it helps the teacher to cope with his professional tasks more successfully.					
4. In-service programs must include activities which allow for the different interests which exist among individual teachers.					
5. Teachers need to be involved in the developing of purposes, activities, and methods of evaluation for in-service programs.					

	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
6. The primary purpose of in-service education is to upgrade the teacher's classroom performance.					
7. Teachers should receive some release time for in-service education activities.					
8. One of the most important ways to judge the effectiveness of an in-service program is whether the teacher uses the results of the training in his classroom.					
9. One of the most motivating in-service activities is an opportunity to become acquainted with new teaching practices or innovative programs.					
10. A teacher should receive in-service credit for participation in a graduate course at a university.					
11. If more teachers were involved in planning in-service programs, teacher commitment to them would be greater.					
12. Every teacher should be required to participate in some in-service activities designed to build a team spirit within his school.					
13. A teacher should receive in-service credit for research.					
14. We need to have more small group activities at in-service meetings.					
15. Attendance at some system-wide activities should be required of all teachers.					

	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
16. Many in-service activities do not appear relevant to any felt needs of the teacher.					
17. A teacher should receive in-service credit for travel.					
18. The implementation of innovations presented in in-service programs is often a function of the support received from school administrators.					
19. In-service education should relate directly to problems encountered in the classroom.					
20. Most teachers do not like to attend in-service activities.					
21. A teacher should receive in-service credit for professional reading.					
22. Most in-service activities should be carried on within the school in which the teacher works.					
23. A teacher should receive in-service credit for professional writing.					
24. More in-service activities should be scheduled during the school day.					
25. Transfer of concepts presented and skills taught in in-service programs to the problems of daily, classroom life and school operations is minimal.					
26. In-service training seems to be more effective when the total school staff is simultaneously engaged in a given activity.					
27. Most in-service programs do not seem well-planned.					

	Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree
28. Our in-service programs seem to suffer from a lack of financial support needed to carry them out.					
29. Most in-service programs arise from a study of the needs and problems of teachers.					
30. Most in-service programs are virtually useless.					
31. The objectives of in-service programs in my system are always specific.					
32. Orientation activities for the new classroom teacher in our system are adequate.					
33. There is adequate follow-up to determine the effects of in-service activities in my system.					
34. I wish more of our in-service programs were scheduled as three-hour sessions at night.					

Once the decision has been made to carry out an in-service, in this instance, Career Education, a survey of general in-service need areas should be administered. The following three samples are provided for preview to emphasize the need for addressing surveys to the appropriate individuals.

<u>Sample I</u>

Teacher's Self-Assessment Inventory of Career Education Competency[2]

Area II schools have set target goals for implementing first steps of a Career Education program emphasis into our school curriculum. There are a total of 19 target goals for 1973-74 school year and among them are these three:

> No. 7: 40% of staff will participate in staff development programs to improve their understanding of the career education concept, thereby improving implementation ability.
>
> No. 8: 20% of staff will improve and demonstrate competencies in providing career based guidance services for learners.
>
> No. 10: 100% of staff will increase their awareness of their professional career education needs and and have had these needs included in their yearly evaluation.

The attached Self-Assessment Inventory was developed by a teacher committee this summer to assist you in looking at your competency for including a career emphasis in your instructional program. The competencies listed are based upon a research project by Dr. Richard Holloway while at Oregon State University and are the result of his work with teachers in Portland and other Oregon cities.

Four courses have been developed that will provide you with an opportunity to increase your competency at whatever level your needs are. The purpose of this <u>Inventory</u> is for you to identify your strengths as well as any weaknesses and to enable you to determine which of the four courses should provide you with what you need. Each of the courses is a 1 hour credit course provided through 6 two hour meetings in 6 weeks. This will enable you to select 1 or more during the year to meet your individual needs and at a time most convenient to you. Refer to attached chart for course descriptions and meeting dates.

How to use the <u>Inventory</u>:

The <u>Inventory</u> is in two parts. Each teacher will complete the K-12 <u>Inventory</u>. K-6 teachers will complete the K-6 <u>Inventory</u> and 7-12 teachers will complete the 7-12 <u>Inventory</u>. Your scores will provide you with information as to whether you should enroll in a particular course based upon your self-assessment and discussion with your principal.

[2]Leroy E. Wallls, Career Education Specialist
Portland Public Schools
Career Education Area II
8020 N.E. Tillamook Street
Portland, Oregon 97213

TEACHER'S SELF-ASSESSMENT INVENTORY
Career Education Competencies, K-12

Keeping the needs of students in mind, rate yourself on each item on a scale of 1 through 5. A rating of 3 is considered an acceptable level of competency; a rating of 1 is considered no competency; and a rating of 5 is considered a superior competency.

I can demonstrate my competency by:

	1	2	3	4	5
1. explaining the advantages of career planning.					
2. describing the total career education program of the district.					
3. describing my building's long-range plan for career education and identifying my role in implementation.					
4. identifying					
a. national, regional and local manpower trends and needs.					
b. measuring devices that assess interests, attitudes and aptitudes as they relate to future career decisions.					
c. career resource materials (AV, games, briefs, kits, etc.)					
d. community resources available for enriching career programs. (IPAR, agencies, service clubs, etc.)					
e. tests that measure the achievement of career objectives.					
f. classroom guidance skills used in career education programs.					
g. relationship between avocation and occupations.					
5. being able to analyze and explain					
a. the job family concept. (cluster, people-data-things, etc.)					
b. the relationship between competencies developed while in school and those needed in life roles (family, citizen, occupational and avocational)					
c. the interdependence of occupations.					
d. how all work contributes to the well being of society.					
e. how people in various occupations also function in other life roles. (family, citizen and avocational)					

Total your points. A total of 48 or better indicates you have an acceptable level of competency in basic career education teaching skills. You would not need to participate in the Overview course in Career Education but you may have identified certain competencies that you will wish to strengthen. Discuss with your principal as part of your annual evaluation of teacher performance.

Keeping the needs of students in mind, rate yourself on each item on a scale of 1
through 5. A rating of 3 is considered an acceptable level of competency; a rating
of 1 is considered no competency; and a rating of 5 is considered a superior competency.

I can demonstrate my competency by:

	1	2	3	4	5
1. utilizing					
a. vocational literature and data.					
b. individualized instruction material					
c. A.V. material, games, literature, etc.					
d. selected resource people in class to present career information.					
e. developed career awareness teaching guides.					
f. parents of class members in presenting information on their career.					
2. directing students in					
a. classroom projects simulating tasks of real workers.					
b. identifying career opportunities related to units of study.					
c. discussing their career aspirations.					
d. doing research on occupations that are of interest to them.					
*e. using classified ads to identify and describe occupations.					
f. identify careers of their parents.					
g. developing a questionnaire for interviewing parents and others about their jobs.					
h. field trips for career awareness.					
i. studying occupations of day-to-day employees of local school system.					
j. identifying the type of tools, clothes, materials and equipment used in various occupations.					
k. understanding the life roles. (family, citizen, occupational and avocational)					
3. having developed tests that measure the achievement of career awareness.					
4. utilizing commercial tests that measure achievement of career awareness.					

*   May not apply to K-3.

Total your points. A total of 64 for grade K-3 or 67 for grade 4-6 or better indicates
that you have an acceptable level of competency in basic career education teaching skills
for the grade K-6 classroom. You would not need to participate in the Implementing Career
Education at grades K-6 course in career education but you may have identified competencies
that you will wish to strengthen. Discuss with your principal as part of your annual
evaluation of teacher performance.

TEACHER'S SELF-ASSESSMENT INVENTORY
Career Education Competency, 7-12

Keeping the needs of students in mind, rate yourself on each item on a scale of 1 through 5. A rating of 3 is considered an acceptable level of competency; a rating of 1 is considered no competency; and a rating of 5 is considered a superior competency.

I can demonstrate my competency by:

	1	2	3	4	5

1. identifying
   a. tasks performed by people in various occupations.
   b. salary levels and working conditions of occupations.
   c. educational requirements of occupations.
   d. physical and intellectual requirements of occupations.
   e. student interests and abilities with compatable occupations.
   f. vocations that can become avocations and avocations that can become vocations.
   g. life styles associated with occupations.

2. utilizing
   a. activities fostering wholesome attitudes of work.
   b. measuring devices to guide student understanding of self-interests, attitudes, aptitudes.
   c. information on manpower from employment services.

3. having developed and/or utilized
   a. tests that measure achievement of career exploratory objectives.
   b. vocational literature, individualized instructional material, career exploratory teaching guides, community resources.
   c. classroom activities
      1. Field trips for career exploration.
      2. Discuss career aspirations with students.
      3. Identify careers related to subject matter.
      4. Develop a questionnaire to interview workers.
      5. Projects to simulate tasks of real workers.
      6. Make a task analysis of special interest occupations.
      7. Dictionary of Occupational Titles to identify and describe occupations.
      8. Direct students in doing research on occupations using the D.O.T., classified ads, Occupational Outlook Handbook, etc.
   d. job family concept.
   e. guidance skills to assist in career exploration.
   f. the concept of life roles. (family, citizen, occupational and leisure)

Total your points. A total of 69 or better indicates you have an acceptable level of competency in basic career education teaching skills for the grade 7-12 classroom. You would not need to participate in the Implementing Career Education at Grades 7-12 course in career education but you may have identified competencies that you will wish to strengthen. Discuss with your principal as part of your annual evaluation of teacher performance.

CAREER EDUCATION PERSONNEL DEVELOPMENT SURVEY
(FOR VOCATIONAL TEACHERS)

Directions: Please circle the number which indicates the importance of each item in relation to YOUR desire and need for professional development.

PERSONNEL DEVELOPMENT NEEDS	VERY IMPORTANT				NOT IMPORTANT

IMPROVING MY SKILLS AS A VOCATIONAL TEACHER IN:

1. Utilizing cluster curriculum guides in program planning and development.	5	4	3	2	1
2. Organizing and working with vocational student organization.	5	4	3	2	1
3. Updating technical skills in my technical area.	5	4	3	2	1
4. Adapting my program to work with Disadvantaged and Handicapped students.	5	4	3	2	1
5.. Selecting and utilizing advisory committees.	5	4	3	2	1
6. Implementing career exploratory activities.	5	4	3	2	1
7. Developing Individualized Instructional material.	5	4	3	2	1
8. Implementing Individualized Instruction.	5	4	3	2	1
9. Using manpower data for instructional planning.	5	4	3	2	1
10. Implementing cooperative work experience.	5	4	3	2	1
11. Understanding the cluster program.	5	4	3	2	1
12. Providing career guidance to students.	5	4	3	2	1
13. Understanding the concepts and objectives of Career and Vocational education.	5	4	3	2	1
14. Articulating or relating my subject matter with other grade levels.	5	4	3	2	1
15. Working with other teachers in interdisciplinary activities.	5	4	3	2	1
16. Developing student performance objectives.	5	4	3	2	1
17. Evaluating effectiveness of my program.	5	4	3	2	1
18. Curriculum construction.	5	4	3	2	1
19. Others (specify)_____	5	4	3	2	1
20. _____	5	4	3	2	1

Sample III

CAREER EDUCATION INSERVICE NEEDS ASSESSMENT INSTRUMENT

Please take a survey of your school district to determine the inservice
training needs in career education. It may be possible to arrange short
workshops or to have college credit courses offered for individuals,
schools, school districts or on a county-wide basis.

Cost will be based on credit or non-credit and the number of participants.
Time and dates will be determined on the availability of instructors.

(Indicate your priority for inservice needs by ranking the areas below
1 through 10.)

Indicate Potential   Rank
Number of
Participants   1 - 10

_____   _____ A. Career awareness

_____   _____ B. Career Exploration (SUTOE)

_____   _____ C. Career clusters

_____   _____ D. Career education

_____   _____ E. Long range planning

_____   _____ F. Career guidance and counseling

_____   _____ G. Advisory committees, formation and use of

_____   _____ H. Individualized instruction and
                                Behavioral objectives

_____   _____ I. Youth organizations

_____   _____ J. Philosophy of vocational education

_____   _____ K. Career decision making

_____   _____ L. Other_____

                                _____

School_____   Representative_____

PLEASE RETURN TO:

Developed by: Walt Lorence
               Douglas County IED
               Courthouse Annex
               Roseburg, Oregon

(Step II continued)

Obviously, each survey is directed toward collecting certain data and identifying different needs. Sample I is an in-depth attempt to provide overall and specific competencies for teachers. Sample II is directed to Administrators or Supervisors of Career Education programs. Content of the survey is considerably different than those found in Sample I. Sample III is directed to Vocational teachers only. Their competency needs are different than those who teach the basic education curriculum. Sample IV is a survey that only provides broad area interest and will only give an indication of concentration for in-service workshops. Upon completion of the survey, the staff should be notified as to the areas of need that were determined by consensus. The needs should be written into the form of an in-service offering. Provide a selection of workshops based on the top 3-5 identified needs. An application for a workshop should be attached to the survey report. At this point it is imperative that all sheets handed in for application of a workshop carry the name of the applicant. This will allow the workshop organizer an opportunity to use the final instrument for the future in-service.

STEP III

After participants have been identified for a given workshop or course, the third step is a survey that identifies strengths and weaknesses, objectives to emphasize, and instructional procedures to utilize. Two examples of such an instrument are attached. They include:

1. A list of the specific objectives for the in-service.

2. A list of expected teacher competencies.

3. A column for the teacher to indicate the strength or weakness as a self-evaluation to their ability or knowledge.

4. A column that is marked "emphasize" so that a teacher can give direction to the workshop by providing in-put as to areas needing concentration.

5. A column that is titled "Learning Procedures" is provided for the teacher to choose the manner by which the learning will be carried out. This column is provided so that the teacher can decide how learning takes place, with them, best. Each area that was marked as "emphasize" may have one or more of the learning procedures identified.

6. A list of definitions for learning procedures.

CADRE TRAINING

There are competencies that we anticipate will be developed during the two-week workshop. We have listed some of the competencies below.

Based on your knowledge, mark the scale as to how you feel about your ability to perform the competencies. Check the column on the right if you feel we should emphasize a competency and write the method by which you would like to learn a competency by using the attached definition.

If some of your competencies are developed to the point that you would be willing to share your technique with other cadre members, indicate by an asterisk.

Please return to: John Davies, 942 Lancaster Drive, NE, Salem, Oregon 97310.

COMPETENCIES

NAME _____

Each participant will be able to say, write and describe:

CONFIDENT		RICKETY		EMPHASIZE	LEARNING PROCESS
3	2	1			
			The State Department of Education's definition of Career Education		
			The State Department of Education's definition of Career Awareness		
			Their personal philosophy of Career Education		
			Their personal philosophy of Career Awareness		
			The concepts of Career Awareness		
			The objectives of Career Awareness		
			The guidelines of Career Awareness		
			Each participant will be able to: Develop and/or organize materials relevant to Career Awareness concepts		

Cadre Training Competencies (Continued)

CONFIDENT		RICKETY		EMPHASIZE	LEARNING PROCESS
1	2	3			
			Develop an in-service approach that utilizes their teaching style		
			Utilize questioning techniques and strategies to demonstrate Career Awareness concepts and philosophy		
			Recognize attending behavior of in-service participants	✦	
			Identify and demonstrate communication techniques as they relate to the individual's teaching style		
			Each participant will: Identify their personal needs agenda by the third day of the workshop	✦	
			Write their personal philosophy for Career Education and Career Awareness by the end of the first day of the workshop		
			Participate in materials preparation sessions that will conceptualize Career Awareness concepts		
			Demonstrate group processes as they relate to their individual teaching techniques	✦	

LECTURE -- The lecture should last no longer than 30 minutes and there would be 20 minutes allowed for questions and answers.

READING -- A list of books or materials that has the information needed would be provided. The teacher would write a competency measurement test based on the readings completed.

DISCUSSION
GROUPS -- Different sizes of groups would be convened with concise questions and clear objectives. A knowledgable resource person would be assigned to each group to provide direction for the discussion groups.

CONTRACTING -- The teacher can contract with the workshop coordinator the method, procedure and evaluation for gaining knowledge and competencies.

CONSTRUCT
CURRICULUM
MATERIAL: Materials and ideas would be provided for the construction of teaching modules to be used by teachers with children.

PRESENTING
CURRICULUM -- This approach would necessitate constructing or finding material to demonstrate to the class. Demonstration could occur with children live or video or with the in-service class only.

AUDIO-
VISUAL -- The provision of films, slide/tapes, or audio cassette could be utilized in a learning center approach.

CAREER GUIDANCE WORKSHOP
"A SELF ASSESSMENT"

Directions:

Below are the objectives and/or competencies that we anticipate will be covered during the workshop. Based on your knowledge, need, and preference, please respond as follows:

1. __Column I:__ Mark the scale on the left as to how you feel about your ability to perform each item listed.

   __Confident:__ means that you feel very secure in your ability to demonstrate this in or out of the classroom.

   __Rickety:__ means that you are not very secure in your ability to demonstrate this in or out of the classroom.

2. __Column II:__ Check those objectives/competencies that you feel should be emphasized during the workshop.

3. __Column III:__ Please indicate the method(s) by which you would like to learn each competency; e.g., __Reading (1)__, __Lecture (2)__, __Group discussion (3)__, __Contracting (4)__, __Developing materials (5)__, __Presentation (6)__, __Audio-visual (7)__, __Other (Specify)__. Write in code number or Instructional method below.

4. Please feel free to add other competencies.

5. If you have developed some of the competencies to the point that you would be willing to share with others, indicate by an asterisk.

Name _____

Confident		Rickety	OBJECTIVE/COMPETENCY	Emphasize	Instructional Method
1	2	3			
			Each participant will be able to: 1. Enable learners to identify personal capabilities and interests in relation to career choices and requirements.		
			2. Develop and implement methods and activities which will help the learners clarify interests, values, and career goals.		
			3. Present examples which demonstrate the relationships between life roles and occupational choices.		
			4. Involve the learners in activities which will show the effects of personal traits, behaviors, values, and life styles on occupational choice.		

Confident		Rickety	OBJECTIVE/COMPETENCY	Emphasize	Instructional Method
1	2	3			
			5. Involve the learners in experiences which will demonstrate the kinds of communication skills associated with different occupations.		
			6. Know and use school and community resources which will improve the learner's career development.		
			7. Provide occupational information for career decision-making.		
			8. Develop and use activities by which the learners will gain and apply decision-making skills.		
			9. Develop and implement with learners methods of involving their parents or responsible agencies in the career development process.		
			10. Demonstrate a knowledge of proper use of standardized and teacher-made tests in assisting the learner in the career development process.		

STEP IV

The fourth step involves designing and conducting the planned
inservice program based on the data gathered in Steps I, II and
III. It should be realized that other data beside that gathered
from participants may need to be considered. The intent here is to
emphasize the importance of participant input in designing and con-
ducting inservices.

GUIDELINES FOR EFFECTIVE INSERVICE IN CAREER EDUCATION

1. Teachers who are beginning career education programs should have a longer period of in-service preparation instead of the usual two hours of characteristic of programs in this study.

2. The attitudes of teachers should be measured by a pretest before the career education in-service programs and by a post-test after its completion to determine if significant attitudinal changes have occurred.

3. Teachers should be involved to a considerable extent in developing and evaluating the in-service program for career education.

4. Ample time should be allotted for open discussion to gain commitment to career education, increase understanding of its concepts, and encourage productive participation in the program.

5. Opportunities should be given teachers from divergent disciplines to interact and relate in a cooperative manner by bringing them together in small mixed groups for in-service activity.

6. Teachers should be encouraged as much as possible to create, innovate, and share ideas for teaching.

7. A considerable number of students, parents, community members, and employers should discuss career experiences and serve in an advisory capacity during the in-service program, thereby increasing involvement with teachers.

8. To gain a true understanding of the career world, teachers should spend considerable time visiting community/employer sites to discuss work, viewing workers of different types, and observing classes where career education is actually being practiced.

9. Teachers in every discipline should be instructed in developing career-related activities, performance objectives, role playing, work simulation, student-directed learning, and individualized instruction.

10. Teachers should have effective instruction in dealing with students who have physical, mental, or emotional problems and with those who are unequal to the "average" student for social or economic reasons.

11. Elementary teachers should have guidance/counseling instruction comprehensive enough to provide insight about career development. Secondary teachers should develop skill in assisting students to assess interests/abilities, obtain work experience, and enter vocational programs, employment, or post-secondary schools for career preparation.

12. A wide variety of career resources materials and the services of an information specialist should be available during the in-service program.

13. Continuing opportunities should be given teachers for planning and choosing in-service activities that meet their needs and desires.

14. Recognition of some type should be given to teachers who increase their effort or improve performance as a result of in-service activity.

15. Teachers should evaluate in-service activities and receive information about program results and teacher performance throughout the year so that effective changes can be made where needed.

Excerpts taken from: Career Education Inservice Guidelines for Educational Administrators by Genevieve D. Smith and Ralph J. Woodin