CORE COMPETENCY FOR EXTENSION EDUCATORS

APPLIED RESEARCH AND EVALUATION

1. In Extension evaluation is used to:
   a. contribute to decisions about program continuation and/or expansion
   b. improve existing procedures, programs, and/or products
   c. discover what impacts the program had on the audience
   d. all of the above

2. Evaluation of local Extension programs is the responsibility of:
   a. the Extension Educator who plans and implements the program
   b. the CED and Regional Director
   c. State Program Leaders who manage the overall program
   d. all of the above

3. An important characteristic of informal evaluation is:
   a. it follows systematic data collection procedures
   b. it is thorough, structured, and objective
   c. it is not structured, choices are based on highly subjective perceptions
   d. it is based on systematic efforts to define criteria and obtain accurate information

4. An evaluation of the Master Gardener Program gathers information on number of people attending, number and hours taught, attendance in different location, etc. Bennett’s "hierarchy of evidence for program evaluation" identifies these data as:
   a. reaction level
   b. people involvement level
   c. practice change level
   d. knowledge, attitude, skills and aspiration changes level

5. A major leadership development program has been conducted for 3 years. To determine if the expected changes has occurred, you should conduct:
   a. a summative evaluation
   b. a formative evaluation
   c. a process evaluation
   d. an informal evaluation

6. A group of 7-10 people are brought together to discuss the depth and nature of their individual points of view about an Extension program. They are concerned with qualitative issues. They participate in a:
   a. nominal group
   b. focus group
   c. board of directors
   d. review group

7. A program is described in detailed narrative. Perceptions of the participants are included. You are working on a:
   a. case study
   b. before-after/pre-post test
   c. survey
   d. participant observation
8. You are running an Integrated Pest Management (IPM) Program. Your objective is "50% of the farmers in the county will adopt IPM practices within 2 years". At the end of two years you should:
   a. compare pest management records kept by farmers before and after the program
   b. conduct a mail survey to find out adoption of IPM practices at the end of 2nd year
   c. conduct intensive interviews to study reactions of farmers
   d. administer a pre-post test about IPM technology

9. An approach to evaluation where the evaluator studies an educational activity as it occurs naturally, (without constraining, manipulating or controlling it) is called:
   a. informal evaluation
   b. naturalistic evaluation
   c. quantitative evaluation
   d. input evaluation

10. It's inappropriate to conduct an evaluation if the evaluation:
    a. would produce trivial information
    b. results will not be used
    c. can not yield useful, valid information
    d. all of the above

11. When identifying appropriate methods and instruments for data collection, the Extension educator should consider:
    a. will the information provide a comprehensive picture?
    b. are the information collection procedures legal or ethical?
    c. will the cost of data collection be worthwhile?
    d. all of the above

12. The objective of an Extension education program is: "All youth attending the program will increase knowledge related to nutrition." An appropriate data collection technique to determine whether there was participant change in knowledge would be:
    a. participant observation
    b. mail survey
    c. telephone survey
    d. pre-test/post-test

13. Evaluation designs that use observation, interviews, and mapping of space, time, energy, and networks could be called:
    a. quantitative
    b. ex-post-facto
    c. qualitative
    d. experimental

14. Evaluation should be developed:
    a. at the time when the program itself is planned
    b. at the middle of the program
    c. just before the end of the program
    d. at the conclusion of the program

15. If an Extension educator is interested in finding out how a program can be improved, it is appropriate to use:
    a. summative evaluation
    b. formative evaluation
    c. cluster evaluation
    d. needs assessment
16. To find out whether program X is worth continuing or expanding, you should conduct:
   a. summative evaluation
   b. formative evaluation
   c. baseline study
   d. survey research

17. A naturalistic and participant-oriented evaluation requires:
   a. a large number of evaluation experts
   b. firsthand experience on site
   c. expertise in survey research
   d. skills in computer data analysis
   e. expert interviewing skills

18. Secondary data can be derived from:
   a. questionnaires
   b. an observation schedule
   c. review of public documents
   d. administering an interview schedule

19. Gathering data should be strongly influenced by:
   a. the type of information desired, time availability, and cost
   b. the ease of using the method
   c. a recommendation from the learners
   d. a recommendation from an advisory committee

20. A study using only data collected at the conclusion of an event is:
   a. ethnography
   b. an ex post facto (after the fact) study
   c. a nominal group process
   d. focus group research

21. Research that attempts to determine the significance or worth of a phenomenon is called:
   a. descriptive research
   b. experimental research
   c. evaluation research
   d. survey research

22. A type of research in which a single case/situation/phenomena/instance is described in detail is called:
   a. a nominal group technique
   b. a case study
   c. naturalistic enquiry
   d. quantitative research

23. The purpose of a nominal group is:
   a. to gather nominal data
   b. to inform the public about an Extension program
   c. to achieve consensus on an issue
   d. to monitor Extension programs

24. When is the appropriate time to collect data for evaluation purposes:
   a. project design stage
   b. in-progress or while the program is in operation
   c. program wrap-up stage
   d. throughout the design & implementation stages
25. One of the major characteristics of formative evaluation is:
   a. data collection is ongoing
   b. the development of formal reports
   c. it is conducted at the end of the program
   d. it looks at macro-level relations of a project/program

26. When developing evaluation instruments, it is important to consider:
   a. the objective(s) of the program being evaluated
   b. economic background of the learners
   c. secretarial support for the evaluator
   d. objectives of the funding agency

27. One of the reasons for conducting participatory evaluation of Extension program is:
   a. it is simple, easy to undertake
   b. it encourages local ownership
   c. it does not require special evaluation skills
   d. it is quantitative in nature

28. A study which gathers data at different times during a program is a:
   a. case study
   b. developmental study
   c. status study
   d. historical study

29. If a data collection instrument/technique measures consistently, it is said to be:
   a. valid
   b. thorough
   c. reliable
   d. selective

30. Field testing of a data collection instrument helps to determine its:
   a. suitability
   b. reliability
   c. validity
   d. all of the above

31. When collecting data after the conclusion of a program, it is important that the data:
   a. is quantitative
   b. is comparable to the pre-test
   c. are accurate
   d. all of the above

32. An appropriate way to report evaluation findings is:
   a. an evaluation report with an executive summary
   b. a journal/newspaper article
   c. a verbal report to a concerned group
   d. all of the above

33. An evaluation report should be written so that:
   a. the readability levels low
   b. language is technically correct
   c. information provided by key informants is highlighted
   d. examples, anecdotes, and illustration are omitted
34. A researcher draws a sample by selecting every 10th name in the telephone directory. This is called:
   a. simple random sampling
   b. stratified sampling
   c. cluster sampling
   d. systematic sampling

35. Which type of sampling is used if the population is divided into groups by certain common characteristics and random sampling is done from each group?
   a. cluster sampling
   b. stratified sampling
   c. proportional sampling
   d. systematic sampling

36. A sample is considered to be random if:
   a. every sub-section of the population is included in the sample.
   b. the possibilities of subjects is infinite.
   c. every element of the population has an equal and independent chance of being included.
   d. it is representative of the population studied.

37. Purposive sampling:
   a. does not rely on random selection of units
   b. makes it very difficult to choose a sample
   c. is appropriate for most social science research
   d. controls for researcher's bias

38. Which of the following correlation coefficients indicates the strongest relationship between variables?
   a. $r=0.1$
   b. $r=0.60$
   c. $r=0.70$
   d. $r=0.99$

39. Which of the following variables is least like the other three?
   a. ethnic group
   b. occupation
   c. marital status
   d. years of teaching experience

40. Which term least belongs with the others?
   a. correlation
   b. relationship
   c. causation
   d. prediction

41. Your county has per capita income that is greater than 62 other Michigan counties. It is in what percentile?
   a. 25th
   b. 50th
   c. 67th
   d. 75th

42. Which of the following term is conceptually least like the others?
   a. mean
   b. variance
   c. standard deviation
   d. range
43. Per capita income for your county is normally distributed with a mean of $15,000 and a standard deviation of $1500. Approximately 95% of the county residents earn on the average between:
   a. $13,500 and $15,000
   b. $12,000 and $18,000
   c. $13,500 and $16,500
   d. $10,000 and $20,000
   e. 65.75 and 65.25

44. When the pre-test and post-test means are compared for a group of 60 EFNEP participants, the appropriate test is:
   a. t test for independent groups.
   b. t test for dependent groups.
   c. chi square test for independence
   d. correlation between pretest and post-test scores.

45. "The youth program in this county has been a success. We have received positive feedback from volunteer leaders. In addition, the program has attracted a good number of youth participants." This description indicates that the agent conducted:
   a. an informal evaluation
   b. a formal evaluation
   c. a needs assessment
   d. a social impact assessment

46. "In 1993, we provided 60 hours of training to 150 commercial and private pesticide applicators. Program topics included integrated pest management and guidelines regarding legal and safe use of pesticides."
The above description suggests that:
   a. pesticide applicator training was poorly organized
   b. the training program was a success
   c. the data do not provide an indication as to program's success
   d. the extension educator should continue the program in 1995

47. "A teen pregnancy prevention program was evaluated through the use of surveys. On a 1 (poor) to 4 (excellent) scale, more than 72% of all teens and 77% of all parents rated the overall program 4.0, and none rated it lower than 3. Many teens indicated their intention to recommend the workshop to their friends."
These findings indicate that:
   a. the program was successful in 1994 but should not be offered in 1995
   b. the program was a success
   c. these data do not provide indication as to program's success
   d. the extension educator should change the program in 1995

48. "An environmental education program was evaluated by each participating class of students, parents, and volunteers through the use of surveys. On a 1 (poor) to 4 (excellent) scale, students, teachers and parents rated the overall program 3.9, 3.7 and 3.8, respectively."
The above description indicates that the Extension educator conducted:
   a. a formal evaluation
   b. an informal evaluation
   c. a pre-post evaluation
   d. an informal observation
Findings from a needs assessment indicated that groundwater was a major concern in the county. Over 75% residents did not know how groundwater gets contaminated. In order to increase the level of awareness about groundwater contamination, an Agricultural Agent plans to conduct a series of educational programs like annual workshops, publication of a newsletter, and a series of radio programs on groundwater contamination for 3 years.

To evaluate the overall effectiveness of the program, the agent could:

a. conduct a readership study of bi-monthly newsletter
b. conduct a follow-up study of workshop participants
c. conduct a listener survey for the radio program
d. compare groundwater contamination knowledge pre and post


The target population for the study appears to be:

a. volunteers
b. all Michigan teachers
c. secondary school teachers in Michigan
d. secondary agricultural education teachers in Michigan