One Way of Developing and Delivering an Extension Program

Kai Umeda
AAEA In-Service
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Fitting an extension program into the format of the APR

- Describe the Identification and Planning for this program
- Describe the desired Outcomes (objectives, or expected changes due to program)
- Describe the Inputs (how the program was implemented using curricula, funding, volunteers, staff, technology)
- What are the Outputs (results or accomplishments in terms of delivery, what we do, whom we reach)?
- What are the Outcomes and Impact (changes in knowledge, attitude, skills, awareness, behavior, and/or practice) of this program?
Identification and Planning

Who is the Clientele? (target audience)
- Vegetable crops program
  - growers, crop consultants, agrichemical industry,
  - Master Gardeners, home gardeners
- Turfgrass program
  - Professional turf managers – golf course superintendents, sports turf managers, municipal and school facilities managers, commercial landscape turf professionals
  - Allied industries (agchem, equipment, seed, fertilizer, etc.)
  - Master Gardeners, home gardeners

Identification and Planning

What does the clientele want?
How to determine what the clientele wants?
- Advisory committees
  - Centers of influence, progressive leaders
- Conduct introductory survey
- Evaluation surveys
  - Continuous, current
Identification and Planning

- How to determine what the clientele wants?
  - Conduct introductory survey
    - Priority issues and/or problems
    - Vegetable program
      - Weeds, insects, diseases, water, fertility, marketing
    - Turfgrass program
      - Weeds, insects, diseases, irrigation, fertility
  - Evaluation surveys
    - Solicit inputs at seminars, workshops, field days, etc.

WHAT ELSE WOULD YOU LIKE? Please take this opportunity to assist
us in understanding your needs and desires for your business
operations. I want to be focused in developing and implementing my
research-based extension program and would appreciate your inputs.
You may complete the following survey and return it to me at your
earliest convenience. Simply mail and affix a postage stamp. This
will also serve to update our mailing list.

Thank you for your cooperation.

Name:__________________________
Address:________________________
City:___________________________ state:_________________________
Zip:___________________________ Phone:_________________________

Indicate by numbering the ten subjects: 1 = most important; 10 = lesser importance

Crop
- Variety testing
- New crop evaluations
- Marketing reports
- Fertilizer use and nutrient evaluations

Water
- Irrigation and use
- Quality

 Pest Management
- Weed control (herbicide and tillex seed evaluations)
- Insect/Disease control (insecticides and fungicides)

Safety
- Worker safety

Other

Additional comments:__________________________
__________________________
__________________________
__________________________
Indicate by numbering the ten subjects: 1 - most important; 10 - lesser importance

<table>
<thead>
<tr>
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</tr>
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<td>Insect/disease control (insecticides and fungicides)</td>
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<td>Safety</td>
<td>Worker safety</td>
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<tr>
<td>Other</td>
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</tbody>
</table>

Additional comments:

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**UNIVERSITY OF ARIZONA COOPERATIVE EXTENSION FURFEDUATION SURVEY**

This survey is directed to persons in the Cities and Fruits Economy for your assistance in delimiting educational opportunities for teachers, short courses, and classes that could be offered by the University of Arizona. Please take a few minutes to help us to help you! THANK YOU!

Classes and topics for short courses or seminars that may be offered by the University of Arizona, What topics are most important to you?

- Pest management (arachnids, insects, nematodes, etc.)
- Weed control (herbicide, tillage method evaluations)
- Insect/disease control (insecticides and fungicides)
- Water (irrigation and use)
- Quality

**Pest Management**

- Weed control (herbicide and tillage method evaluations)
- Insect/disease control (insecticides and fungicides)

**Additional comments:**

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- Water (irrigation and use)
- Quality

**Pest Management**

- Weed control (herbicide and tillage method evaluations)
- Insect/disease control (insecticides and fungicides)

**Additional comments:**
Classes and topics for short courses or seminars that may be offered by the University of Arizona. What topics are most important to you?

- Turf management (varieties, transition, overseeding, etc.)
  - very important____ somewhat important____ not important____
- Turf irrigation management (design, scheduling, quality, salinity, fertigation, ET)
  - very important____ somewhat important____ not important____
- Turf insects, diseases, nematodes, vertebrates, and weeds (pesticides, calibration, biology)
  - very important____ somewhat important____ not important____
- Soils (fertilizers, salinity, greens)
  - very important____ somewhat important____ not important____
- Ornamentals (identification, selection, care, pests)
  - very important____ somewhat important____ not important____
- Business management (personnel, budget, equipment, etc.)
  - very important____ somewhat important____ not important____
- Other suggestions________________________

Would you attend a scheduled session or short course to become certified in these subjects listed above or for any selected subject?  Yes No

Would you attend sessions for several weeks (2 to 4 weeks) to obtain certification? Yes No

Would you attend sessions for a few months (2-4 months) to obtain certification? Yes No

Would you attend a short course (up to 1 full week) to obtain certification? Yes No

Would you attend a scheduled session or short course for continuing education unit credits for licenses or professional certification that you hold? Yes No

Would you attend a short course (up to 1 full week) for continuing education unit credits for regulatory licenses or professional certification? Yes No

Would you prefer one-day or shorter length workshops, seminars, or field days for continuing education unit credits for licenses or professional certification? Yes No

How often would you prefer one-day or shorter length workshops, seminars, conferences, or field days for continuing education unit credits for licenses or professional certification?

Monthly____ Quarterly____ Yearly____ More____ Less____

Where would you travel to attend any class or short course?

Tucson Yes No Phoenix Yes No Other suggested locations __________________

What day of the week is preferable to attend any class, seminar, workshop, conference, field day, etc.?

Monday____ Tuesday____ Wednesday____ Thursday____ Friday____

What time of day is preferable to attend any class, seminar, workshop, conference, field day, etc.? Morning (7am-noon)____ Afternoon (noon-5pm)____ Mid-day (10am-2pm)____ All day____
### Identification and Planning

- **Design strategy to address issue/problem**
- **Inputs, Outputs**
  - **Collaborations**
    - Cooperator(s) clientele
    - Colleagues – agents, specialists, agencies, industry
  - **Where**
  - **When (timeline)**
  - **How**

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<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
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<tbody>
<tr>
<td>Do you have a professional certification? (i.e. certified golf course superintendent)</td>
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<tr>
<td>If no, do you plan to obtain professional certification?</td>
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<tr>
<td>Do you have a pesticide applicator license for your job?</td>
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<tr>
<td>If no, do you plan to obtain a pesticide applicator license?</td>
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<tr>
<td>Do you have a qualifying party license for your job?</td>
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<tr>
<td>If no, do you plan to obtain a qualifying party license?</td>
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<tr>
<td>Do you have a 2-year certificate degree from an accredited institution for your job?</td>
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<tr>
<td>Do you have a bachelor’s degree for your job?</td>
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<tr>
<td>What other type of degree or certificate do you need to do your job or to advance your career?</td>
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<tr>
<td>Are you interested in obtaining a bachelor’s degree while working?</td>
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<td></td>
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<tr>
<td>Are you interested in obtaining a 2-year certificate while working?</td>
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<tr>
<td>How long will you attend classes to obtain a certificate or degree?</td>
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<tr>
<td>2 years</td>
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<tr>
<td>4 years</td>
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<tr>
<td>&gt;4 years</td>
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</tr>
<tr>
<td>If more than 2 or 4 years for a certificate or bachelor’s degree, will you attend classes for several years (while working) until you complete requirements for a certificate or degree?</td>
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</tr>
<tr>
<td>For your professional certification or regulatory licensing, do you have continuing education requirements to meet within a certain period?</td>
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</tr>
<tr>
<td>Where do you typically obtain continuing education credits?</td>
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<tr>
<td>Professional organization seminars or workshops (GCSAA, Cactus and Pine)</td>
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<td></td>
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<tr>
<td>In-house or private company seminars</td>
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<tr>
<td>Industry sponsored seminars (dealers, distributors, and manufacturer reps, etc.)</td>
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<td></td>
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<tr>
<td>Government (SPCC meetings)</td>
<td></td>
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<tr>
<td>University (field days and conferences)</td>
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<td></td>
</tr>
<tr>
<td>What is the maximum registration fee that you might pay for a typical one-day seminar?</td>
<td>$10 to $20</td>
<td>$20 to $50</td>
</tr>
</tbody>
</table>
Outcomes
(objectives or expected changes)

- Short-term
  - Weeks, months, 1st year
  - Generate interest
  - Get buy-in
- Mid-term
  - 2 to 3 years
  - Acceptance
- Long-term
  - 5 years and beyond
  - Adoption
  - Reliance
- What you hope might happen

Inputs
(implemented using curricula, funding, volunteers, staff, technology)

- Personnel
  - Colleagues – agents, specialists
  - Cooperators – stakeholders
- Operations
  - Make do with what you have
    - Supplies and equipment
      - Stakes/flags, sprayer
    - In-kind contributions, facilities use
      - Chemicals, cooperator sites
**Inputs**
(implemented using curricula, funding, volunteers, staff, technology)

- Grants and gifts
  - Internal and external
- Generate useful information
  - Do the research

**Outputs**
(results or accomplishments in terms of delivery, what we do, whom we reach)?

- Transfer the technology to the clientele
  - Face to face
    - One on one
    - Seminars, workshops, field days, short course
  - Print and electronic media
    - Newsletter
    - Internet websites
    - Bulletins and extension pubs
    - Summary reports
Outcomes and Impact
(changes in knowledge, attitude, skills, awareness, behavior, and/or practice)

- What is clientele doing differently as a result of your inputs and outputs?
- Measuring changes
  - Now vs then
  - What about the future changes?

WORKSHOP SURVEY

Please complete this questionnaire about our Cooperative Extension Program. Your assistance will enable us to better prioritize our extension education programming so that we may better serve your concerns and needs and that your enterprises may be improved to enhance your competitiveness and profitability.

Date: ____________________________

Overall, how would you rate this location for a meeting? ___________________________

Overall, how would you rate the timing for this event? ___________________________

Suggestions for better date and time of day ________________________________________

Overall, how would you rate the format of this event? ___________________________

Overall, how would you rate the topic(s) presented? ___________________________

Before today, what was your level of knowledge of the topic(s) presented? ________

After the presentation(s), was your level of knowledge of the topic(s) enhanced? ________

How would you rate the timeliness of the topic(s) presented? ______________________

How would you rate the relevance of the topic(s) to your personal businesses? ________

What is the probability that you will incorporate any of the information presented today into future business operations? ________

What was the most important information that you learned from this presentation? ________

Will you share the information that you learned from this presentation? Yes No

If yes, with whom will you share the information? Family Friends Colleagues Educators Community Leaders Other

Is Cooperative Extension addressing your needs? Yes No

If no or yes, what suggestions do you have so that we can improve our programs? __________________________

Will you attend and participate in future Cooperative Extension meetings and field days? Yes No

What topics would you like to have presented at future meetings?

Please provide any additional or specific comments.

Thank you for taking the time to attend this event and to complete this form.
**Impact**

- **Economic**
  - Did the clientele save money? Make money?

- **Environmental**
  - Were non-targets protected or saved?

- **Health**
  - Reduction of unnecessary risks?

- **Numbers game**
  - How many reached?
  - True cost-benefit?

**Impact**

- **Bottomline…**
  - Did your clientele learn anything new?
  - Did your clientele put into practice what you taught?
  - Is your clientele doing business differently?
  - Did the practice improve or enhance your clientele’s business?
  - Is your clientele still in business? still have a job?