Evaluating outcomes of one time and personalized Extension contacts:
An example using landscape programming

In-Service Training 2014
(IST#30807)

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Group Input!

What is your main area of focus?

Extension Program

A collection of educational activities that seek to achieve some specified outcomes among a particular audience (Israel, Harder, & Brodeur, 2012)

- ~ 40 days / year

- Planned activities and results communicated through an annual Report of Accomplishments (ROA) and a Plan of Work (POW), "the only official report that encompasses [one's] complete annual body of work" (University of Florida, 2011)

Personalized, educational opportunities: site visits, consultations

- *Individual contact teaching methods* (ICTM) (Seevers & Graham, 2012)

- Tailored to client needs

- Learner: seeks clarification, incorporates new material, develops deeper understanding of information (Guion, 2006)

- Learner: may acquire new capabilities, skills, or goals

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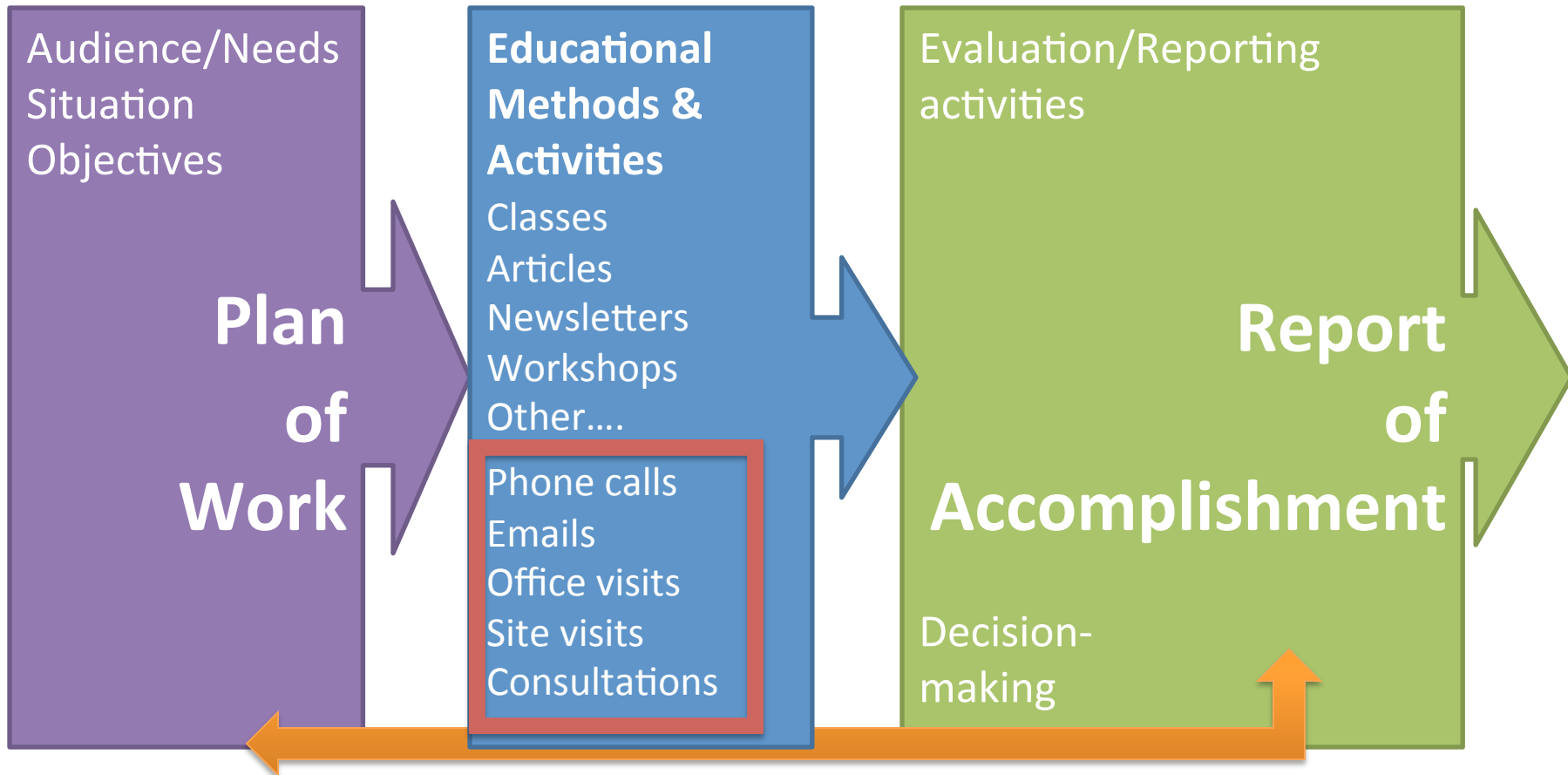Conservation & Ecology

Group Input!

The Challenge

- Evaluating and planning ICTM
- ✓ Diversity in content
- ✓ "Dearth of user-friendly literature"
- ✓ Need to be very time and effort efficient
- ✓ Sensitive to planning cycles
- ✓ High level of frustration?

(Carr & Clarke, 2002)

Extension Program

Plan of Work

Audience/Needs
Situation
Objectives

Educational Methods & Activities
Classes
Articles
Newsletters
Workshops
Other....

Phone calls
Emails
Office visits
Site visits
Consultations

Report of Accomplishment

Evaluation/Reporting activities

Decision-making

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Individual Contact Teaching Methods and the Plan of Work

The Situation – overview of your program rationale

Sunny County encompasses 9981 square miles and is composed of 56 incorporated municipalities. Within the county there are over 6,100 multi-family communities run by an approximated 7,000 property managers. Many of the HOAs are on Sunny County's excessive water user list.

*Sunny County property managers have a substantial influence on the local environment through their decision-making about horticultural practices and direct contact with the county's residents. Many of these property managers **are responsible for landscape-related decision-making yet have not had substantial training** in this area.*

*The Shady Watershed in Sunny County which is almost entirely made up of 98 multi-family **communities run by 92 property managers, has been historically** impaired by high levels of nitrogen. Excessive nitrogen is **linked to over-fertilization and inappropriate fertilization**. Appropriate education for property management professionals will reduce negative practices such as incorrect chemical applications, overuse of water, and improper fertilization.*
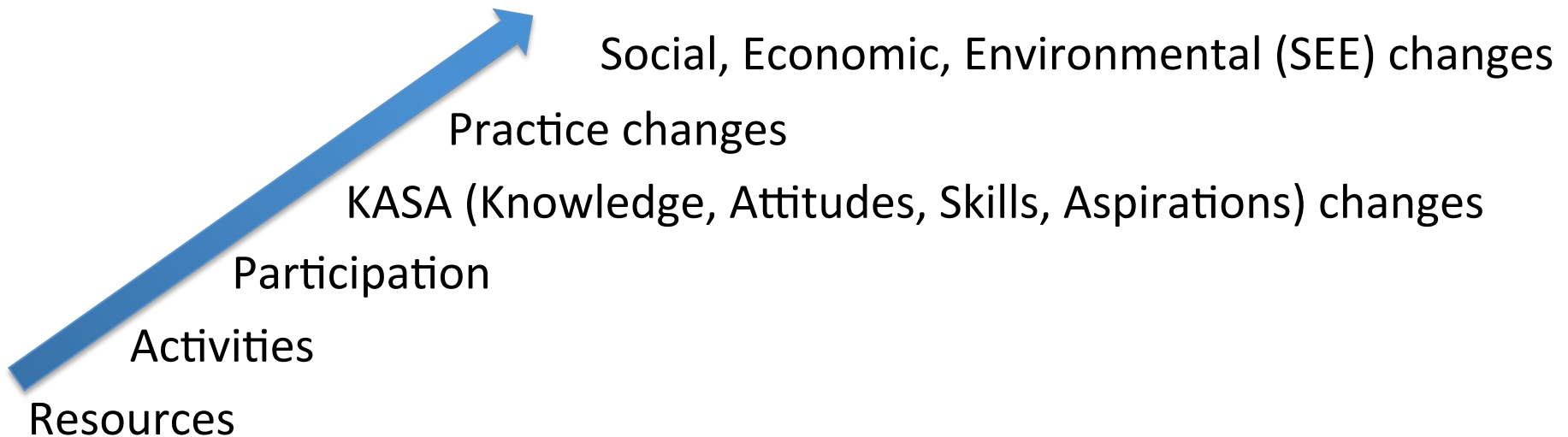
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Individual Contact Teaching Methods and the Plan of Work

- Program Objectives – SMART

☐ Specific

☐ Measurable

☐ Achievable

☐ Relevant

☐ Time-Bound

Individual Contact Teaching Methods and the Plan of Work

- Program Objectives

Social, Economic, Environmental (SEE) changes

Practice changes

KASA (Knowledge, Attitudes, Skills, Aspirations) changes

Participation

Activities

Resources

Individual Contact Teaching Methods and the Plan of Work

Participation

- 45 people will participate in individual contact teaching annually as measured by extension contact record sheets.

❑ Specific
❑ Measurable
❑ Achievable
❑ Relevant
❑ Time-Bound

Individual Contact Teaching Methods and the Plan of Work

KASA (Knowledge, Attitudes, Skills, Aspirations) changes

- Annually, 80% of property managers participating in Individual Contact Teaching education will report plans to adopt one new best management practice, as measured by an exit survey taken at the conclusion of the consultation.

☐ Specific
☐ Measurable
☐ Achievable
☐ Relevant
☐ Time-Bound

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Individual Contact Teaching Methods and the Plan of Work

Practice Changes

- Annually, 50% of property management professionals participating in Individual Contact Teaching education will report the adoption of a new best management practice, as measured by taking a six-month follow-up survey.

❑ Specific

❑ Measurable

❑ Achievable

❑ Relevant

❑ Time-Bound

Individual Contact Teaching Methods and the Plan of Work

SEE changes

- Annually, 25% of homeowners association board members participating in Individual Contact Teaching education will report a reduction in fertilizer or pesticide costs as a result of the consultation, as measured by a nine-month, follow-up survey.

❑ Specific
❑ Measurable
❑ Achievable
❑ Relevant
❑ Time-Bound

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Individual Contact Teaching Methods and the Plan of Work

Educational Methods and Activities

This Extension program offers many one-on-one consultations through individual contact teaching (ICTM). ICTM includes in-office sessions, landscape-site visits, telephone calls, and e-mails. The agent is often asked to diagnose landscape disorders and make recommendations for management options. Frequently, cryptic turf decline and tree disorders are the reasons for the requested consultation. The agent regularly identifies pests and diseases, but he/she often determines that the cause of a problem derives from inappropriate cultural practices, such as overwatering or over-fertilizing. These cultural practices contribute to runoff and nonpoint source pollution, which affect local ground and surface waters.

Individual Contact Teaching Methods and the Plan of Work

Educational Methods and Activities

In many cases, a change in cultural practices improves the health of the client's landscape and reduces the environmental impact. Individual Contact Teaching Methods support Extension clients' decision-making, while reducing negative cultural practices. Common topics include: 1) troubleshooting and improving fertilization and irrigation plans; 2) identifying disease and recommending cultural management. In 2013, the agent personally conducted site visits, e-mails, phone calls, office consultations, and provided research-based, follow-up documentation and recommendations.

Individual Contact Teaching Methods and the Report of Accomplishment

- Site visit / Diagnosis request form

- Documentation of efforts

- Documentation of observations

- Surveys / Interviews

- Publicly available data

Evaluation Methods – Site Visit or Diagnosis Request Forms

- Paper or electronic
- To initiate ICTM
- Collect: contact information, type of problem, current cultural practices used (irrigation time of day, irrigation frequency and depth, type of fertilizer used, annual pest-control budget, etc.)
- Useful for scheduling, documenting recommendations, guiding follow-ups
- Over time, can provide a detailed picture of the major issues and solutions provided through this service
- Can also be used to estimate impacts: water, fertilizer, or money saved

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Evaluation Methods – Documentation of Efforts

- A written journal or logbook, electronic calendar, or spreadsheet

- A personal documentation system, may include request forms

- Collect: numbers and types of consulting, issues discussed, problems solved, recommendations made, as well as clients' contact information for future evaluation

- Can provide a rich picture at the end of each year

Evaluation Methods – Documentation of Observations

- Post-education observations can be useful tools in measuring outcomes

- Written, electronically recorded, and/or photographed

- May be combined with documentation of efforts

- Observation can be especially useful when findings are well-documented

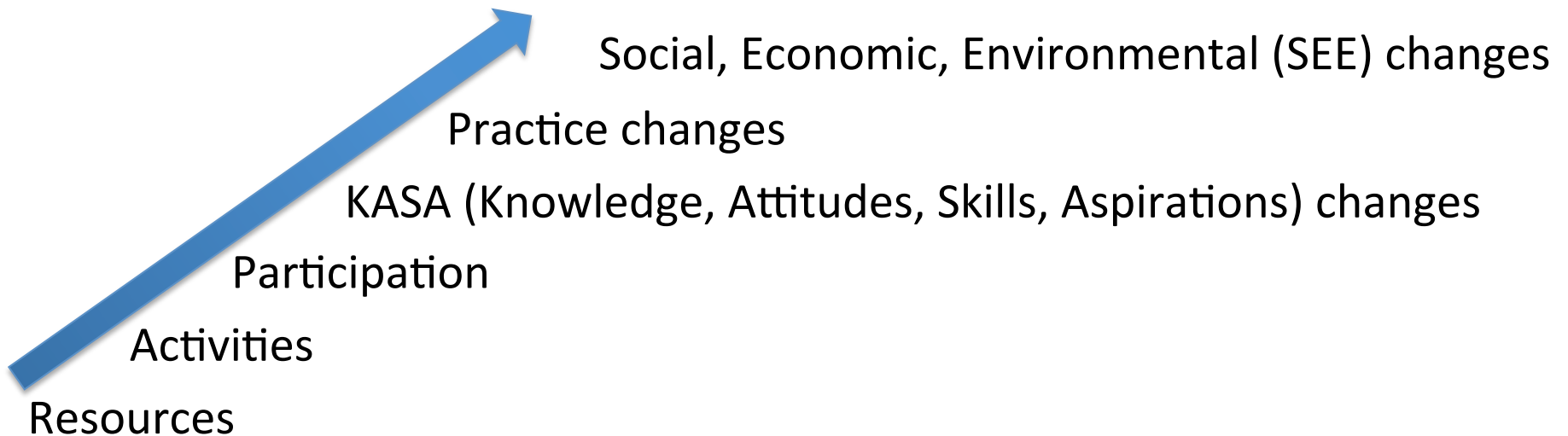# Evaluation Methods – Surveys and Interviews

- Depending on the type of outcome being measured, surveys/interviews can be conducted on the day of or after the consultation (3-6-12 months)

- May be conducted to collect reactions, changes in KASA, practices, and SEE conditions

- Can be done verbally (in person or by telephone), by e-mail, or by postal mail

Evaluation Methods – Publicly Available Data

- May provide an indication of changes in SEE conditions (income or environmental indicators) throughout time (Harder, 2013)

- Example: local water management's water-quality reports used to quantify changes in the local environment

- May be more appropriate to identify what <u>contribution</u> the project has made to larger goal

Individual Contact Teaching Methods and the Report of Accomplishment

- Program Objectives

Social, Economic, Environmental (SEE) changes

Practice changes

KASA (Knowledge, Attitudes, Skills, Aspirations) changes

Participation

Activities

Resources

Adapted from Bennett & Rockwell, 1995

Reporting Outcomes: Participation

Objective: 45 property managers will participate in ICTM annually as measured by extension contact record sheets.

Outcome: 59 property managers participated in ICTM in 2013 as measured by extension contact record sheets.

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Reporting Outcomes: KASA (Knowledge, Attitudes, Skills, Aspirations)

Objective: Annually, 80% of property managers participating in ICTM education will report plans to adopt one new best management practice, as measured by an exit survey taken at the conclusion of the consultation.

Outcome: In 2011, 81.3% of property managers (n=48) participating in ICTM education reported plans to adopt one new best management practice, as measured by an exit survey at the conclusion of the consultation.

The most common practices identified included reducing amount of water applied through irrigation (n=34) and installing plant material appropriate for specific locations (n=12).

Reporting Outcomes: Practice Changes

Objective: Annually, 50% of property management professionals participating in ICTM education will report the adoption of a new best management practice, as measured by taking a six-month follow-up survey.

Outcome: In 2013, 66.1% of property management professionals (n=39) who participated in ICTM education reported the adoption of a new best management practice, as measured by a six-month follow-up survey.

The most common practices included reducing amount of water applied through irrigation (n=32) and installing plant material appropriate for specific locations (n=9).

Reporting Impacts: SEE conditions

Objective: Annually, 25% of homeowners association board members participating in ICTM education will report a reduction in fertilizer or pesticide costs as a result of the consultation, as measured by taking a nine-month, follow-up survey.

Outcome: In 2013, 27% of homeowners association board members (n=16) participating in ICTM education reported a reduction in fertilizer or pesticide costs as a result of the consultation, as measured by taking a nine-month, follow-up survey.

Success Stories

- Success stories
  - Statement of problem, Extension program, people served and impact
  - Success should be measured by actual actions taken, (not knowledge or intentions)
  - Describes what was done for clients (social or economic) or on the environment
  - Situation, response, results, evidence (Purdue)
  - (Adapted by Vavrina, C., from Adapted from: Richardson, J.G. & M.A. Corbin. 1998. Writing Program Success Stories. NC Coop. Ext. Serv. AEE 98-02)
- Stems from personal rapport
- Ask clients that you've served

Individual Contact Teaching Methods and the Report of Accomplishment

- Success stories:

Example: The Shady Watershed in Sunny County which is almost entirely made up of 98 multi-family communities run by 92 property managers, has been historically impaired by high levels of Nitrogen. Excessive nitrogen levels are linked to over- and inappropriate fertilization. Many of these property managers in this area are responsible for landscape-related decision-making yet have not had substantial training in this area. Beginning in 2006, Sunny County Extension, along with Sunny State Department of Natural Resources Management, offered the Site-Specific Landscape Troubleshooting (SSLT) program to help property managers to better manage their landscapes by identifying inappropriate cultural practices onsite. 74 property managers have participated in a total of 143 SSLT events since 2006. Participants have been surveyed three months following their individual SSLT visit; 79% reported avoiding fertilizer use when rain is in the forecast and 37% have reported financial savings associated with reduced fertilizer use. Additionally, 2013 water quality reports from the Sunny State Department of Natural Resources Management showed no increase in Nitrogen for the first time in 11 years. As the SSLT program has positively changed behaviors in communities in this watershed, and contributed to positive directions in water quality in the Shady Watershed, it will continue to operate.

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Recommendations for Incorporating Individual Contact Teaching Methods into Extension Planning and Evaluation

- Make time to plan evaluation activities
- **Document** efforts
- Connect what you are doing with why
- Evaluate general outcomes, then provide specifics
- Look for patterns over time
- May be more appropriate to identify what <u>contribution</u> the project has made to larger goal
- Use evaluation data to make decisions

Discussion and Questions

- What can we provide to you to support planning & evaluating your programs?

Resources

- Carr, S., & Clarke, C. (2002). Guiding small scale evaluation: A critical step in developing practice. *Practice Development in Health Care*, *1*(2), 104-117.

- Guion, L. A. (2006). *Educational methods for Extension programs* (FCS6013). Gainesville, Florida. UF/IFAS. Retrieved from http://edis.ifas.ufl.edu/fy399

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- Sanagorski, L. (2013). *Incorporating Individual Teachings (aka Individual Contact Teaching Methods) into a Sustainable Landscaping Extension Plan of Work and Report of Accomplishments* (WC157) http://edis.ifas.ufl.edu/wc157

- Seevers, B., & Graham, D. (2012). *Education through cooperative extension* (3rd ed.). Fayetteville, AR: University of Arkansas.

- University of Florida. (2011). *Policy concerning annual Reports of Accomplishments and Plans of Work (ROA/POW) submission deadline and quality for UF/IFAS Extension county faculty*. Retrieved from: http://ded.ifas.ufl.edu

- Vavrina, C. *Impact Statements & Success Stories: An Exercise in the Planning, Development and Use of Extension Accountability Tools* http://ded.ifas.ufl.edu/Impacts/Impacts_Success_Stories_files/frame.htm (Adapted by from: Richardson, J.G. & M.A. Corbin. 1998. Writing Program Success Stories. NC Coop. Ext. Serv. AEE 98-02)

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Thank you for your participation!

Please complete the post-test for this webinar to help us plan for future educational offerings.

(To credit FL folks for attending this IST, we will verify that a pre-test and post-test have been completed).