

# Incorporating Individual Contact Teaching Methods into an Extension Plan of Work and Report of Accomplishment<sup>1</sup>

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## Introduction

Horticultural Extension professionals conduct consulting phone calls, send e-mails, host office visits, research clients' unique situations, and visit landscapes to solve horticultural problems and concerns. Although many Extension professionals are initially unaware that they are educating clients when providing these services, these activities are important educational methods that should also be planned and reported.

Quantifying the impacts of individual education can be challenging, but doing so is important because these services are a valuable component of Extension programming. The purpose of this article is to describe possible uses of individual teaching in an Extension professional's plan of work, provide example programming objectives, and recommend methods of evaluating these educational activities. This document is intended for use by Extension faculty in all disciplines who educate individuals, and those working in horticulture will find the examples especially relevant.

Throughout this article, educational activities such as landscape-site visits, e-mail and phone call consultations, and office visits will be collectively referred to as *Individual Contact Teaching Methods* (Seevers & Graham, 2012). These personalized educational opportunities allow the learner to seek clarification, incorporate new material into their existing knowledge, and develop a deeper understanding of information that is tailored to their needs (Guion, 2006). Beyond knowledge, the learner may acquire new capabilities, skills, or goals. An Extension program refers to a collection of educational activities that seek to achieve some specified outcomes among a particular audience (Israel et al., 2012). As a result of educational programming, an Extension professional will likely see their clients make changes in patterns. Extension professionals working in horticulture may find that the changes include reduction of landscape water overuse, adoption of the "right plant, right place" concept, and increased ability to properly identify pests. When planned thoughtfully, communicated clearly, and evaluated

appropriately, Individual Contact Teaching Methods can become a substantial part of an Extension program.

## Incorporating Individual Contact Teaching into Extension Planning

Objectives can be set and reevaluated regularly to meet the needs of one's programs and clientele. Individual Contact Teaching objectives should be Specific, Measurable, Achievable, Relevant, and Time-Bound (SMART) (Diehl & Galindo-Gonzalez, 2012). Table 1 presents several possible program objectives and their potential corresponding outcomes.

The following is an example of text that can be used to describe Individual Contact Teaching educational methods and activities.

### Individual Contact Teaching Educational Methods and Activities

This Extension program offers many one-on-one consultations through in-office sessions, landscape-site visits, telephone calls, and e-mails. The Extension professional 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 they often determine that the cause of a problem derives from inappropriate cultural practices, such as overwatering. Overwatering contributes to water waste, runoff, and nonpoint source pollution, which affect local ground and surface waters. In many cases, a change in cultural practices improves the health of the client's landscape and reduces negative environmental impacts. 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; and 2) identifying disease and recommending cultural management.

In 2025, the agent personally conducted site visits, e-mails, phone calls, office consultations, and provided research-based follow-up documentation and recommendations.

## Evaluating Individual Contact Teaching Methods

Evaluating outcomes and impacts from Extension programming generates accountability and provides the opportunity to redirect programs to better serve Extension clients (Lamm et al., 2011). There are numerous evaluation levels, and multiple levels should be used to measure an Extension program's outcomes and impacts.

Individual Contact Teaching objectives may address different types of short- to medium-term outcomes, such as participation, Knowledge Attitudes Skills Aspirations (KASA), and reactions (Harder, 2013). They may also include long-term results, such as practices and Social Economic Environmental (SEE) conditions and impacts (Harder, 2013). Extension professionals are encouraged to incorporate practices and SEE conditions, which are the strongest levels of program results, into their evaluation plans (Harder, 2013; Lamm et al., 2011).

The following is an example of objectives and outcomes that can be used to describe Individual Contact Teaching Methods as part of an Extension program.

Evaluation of Individual Contact Teaching Methods can generate qualitative data, such as reasoning to adopt a practice or feelings about a topic, and quantitative data, such as number of participants, gallons of water saved, or knowledge gained. The following are suggested tools that can be used to support the evaluation of Individual Contact Teaching Methods.

- Site visit or diagnosis request forms—Site visit or diagnosis request forms can be used by clients to initiate an Individual Contact Teaching event. These forms can collect the client's contact information, the type of problem, and current cultural practices used (irrigation time of day, irrigation frequency and depth, type of fertilizer used, annual pest-control budget, etc.). The form can also be used to assist in scheduling and documenting the recommendations made. It may also collect useful contact information to determine if behavior changes have resulted in the future. Over time, this information can provide a detailed picture of the major issues and solutions provided through this service and can also be used to estimate impacts regarding water, fertilizer, or money saved. For example, if a homeowners' association irrigates three times per week at the time they request a consulting site visit, the Extension professional may recommend reducing the frequency to two times per week. If the Extension professionals confirms the recommendations are being followed in

the future, they can estimate a measurable reduction in landscape water usage as a result of the site visit.

- Documentation of efforts—A personal documentation system that collects numbers and types of Individual Contact Teaching events can provide a rich picture of these occurrences. Types of issues discussed, problems solved, and recommendations made should be recorded, as well as clients' contact information for future evaluation methods. A written journal or logbook, electronic calendar, or spreadsheet may support documentation.
- Documentation of observations—Post-education observations can be useful tools in measuring outcomes, especially when findings are well-documented. For example, an Extension professional may frequently recommend that homeowners' associations manage grass clippings so the clippings remain on the landscape and not reach the streets and storm drains. On future dates, the professional may then conduct drive-by observations to determine whether the recommendations are being followed. Documentation may be written, electronically recorded, and photographed, and it may be combined with documentation of efforts.
- Surveys—Depending on the type of outcome being measured, surveys can be conducted with Individual Contact Teaching participants on the day of or at some time after the consultation. Surveys may be conducted to collect reactions and changes in KASA, practices, and SEE conditions, and they can be done verbally (in person or by telephone), by e-mail, or by postal mail.
- Publicly Available Data—Publicly available data may provide an indication of changes in SEE conditions, such as income or environmental indicators over time (Harder, 2013). For example, focused education related to minimizing environmental impacts through horticultural practices in a particular watershed could result in improving the local water quality. The local water management authority's water-quality reports could be used to quantify changes in the local environment.

## Conclusion

Individual Contact Teaching should be considered major educational methods and activities and should be included in Extension professionals' planning and evaluation processes. Communicating the planned activities and quantifying the impacts made using this educational methodology can be challenging, but doing so is important to both program planning and overall accountability.

## References and Further Reading

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**Table 1. Example Program Objectives and Outcomes for Individual Contact Teaching Methods.**

<p>1. (Example Participation Objective) Annually, 100 green industry professionals will participate in Individual Contact Teaching, as measured by documenting site visits and office consultations.</p> <p>a. (Example Participation Outcome) 122 green industry professionals participated in Individual Contact Teaching in 2025 as measured by activity documentation.</p>
<p>2. (Example Reactions Objective) Annually, 80% of participants in Individual Contact Teaching education will report their satisfaction with the service they receive, as measured by an exit survey taken at the conclusion of the consultation.</p> <p>a. (Example Reactions Outcome) 93% (n=113) of Individual Contact Teaching education participants in 2025 reported satisfaction with the service they received, as measured by an exit survey given at the conclusion of the consultation.</p>
<p>3. (Example KASA Objective) Annually, 75% of residents 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.</p> <p>a. (Example KASA Outcome) In 2025, 89% (n=109) of residents participating in Individual Contact Teaching education reported plans to adopt one new best management practice, as measured by an exit survey taken at the conclusion of the consultation.</p>
<p>4. (Example Practices Objective) Annually, 50% of green industry 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.</p> <p>a. (Example Practices Outcome) In 2025, 61% (n=74) of green industry professionals participating in Individual Contact Teaching education reported the adoption of a new best management practice, as measured by taking a six-month follow-up survey. The most common practices adopted include reducing landscape irrigation usage (n=43) and changing fertilizer products (n=29) to meet UF/IFAS recommendations.</p>
<p>5. (Example SEE Conditions Objective) 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 through a nine-month follow-up survey.</p> <p>a. (Example SEE Conditions Impact) In 2025, 12% (n=15) of homeowners' association board members participating in Individual Contact Teaching education reported a reduction in fertilizer or pesticide costs as a result of the consultation, as measured through a nine-month follow-up survey.</p>

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