

Some thoughts on collaboration...

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Guy Fipps
*Professor and
Extension Agricultural Engineer*



Types of Collaboration

One possible classification system

- Limited
 - Active
 - Interactive
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Limited Collaboration

Example – RGBI

Submitting a work plan, receiving funding from administrators, and submitting final report and/or deliverables

- Grantor (administrators) set overall objectives, scope, budgets, and approves work plan
- But work is done virtually independently

Active Collaboration

Example

Technical assistance program for irrigation districts (seepage loss tests, flow measurements, GIS mapping, etc)

Both parties must share the same priorities or have a joint need for the data and/or results

Active Collaboration

Characteristics :

- Requires interaction with clientele in planning and delivery
- Collaboration tends to be limited to the specific activity
- Clientele helps collect and assemble data and provides other assistance

Active Collaboration

Leak and Seepage Loss Tests

Our role

Assist in identifying locations for tests, conduct the tests, take measurements, analyze results, and the report

Districts' role

Provide labor and equipment for construction of dams and their removal after testing, close of gates and valves, filling of test segment, etc.

Active Collaboration

Examples for RGBI

For the RGBI, we have collaborated with

- 14 irrigation districts on ~80 seepage/leak loss tests
- All irrigation districts on GIS Mapping
- 12 irrigation districts on other types of technical assistance
- 14 irrigation districts on analysis of the municipal water supply network

Active Collaboration

Examples for RGBI

Technical Assistance Program

For more info and details, see the
Irrigation District Education and
Assistance (IDEA) website:

<http://idea.tamu.edu>

Interactive Collaboration

Examples

- Automatic control, telemetry and SCADA projects with irrigation districts
 - The Irrigation Technology Center
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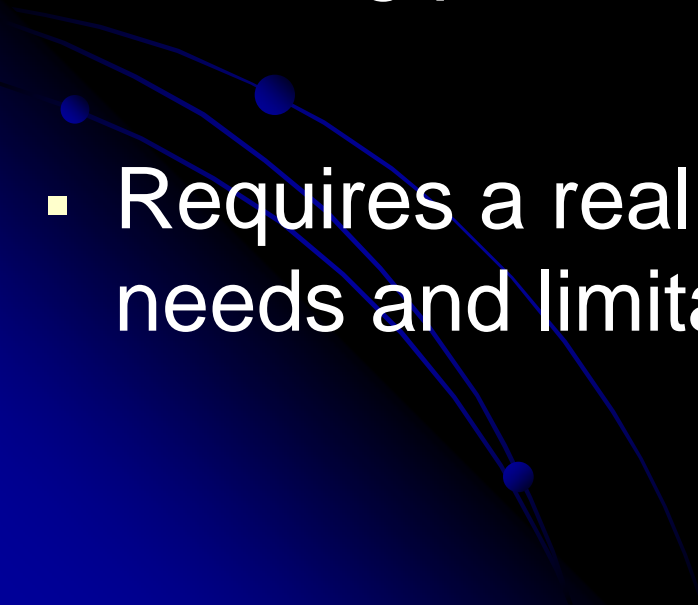
Interactive Collaboration

Characteristics

- Joint definition of problems and solutions
- Joint implementation and conducting of projects and activities
- Often involves cost-sharing and sharing of work/personnel by all

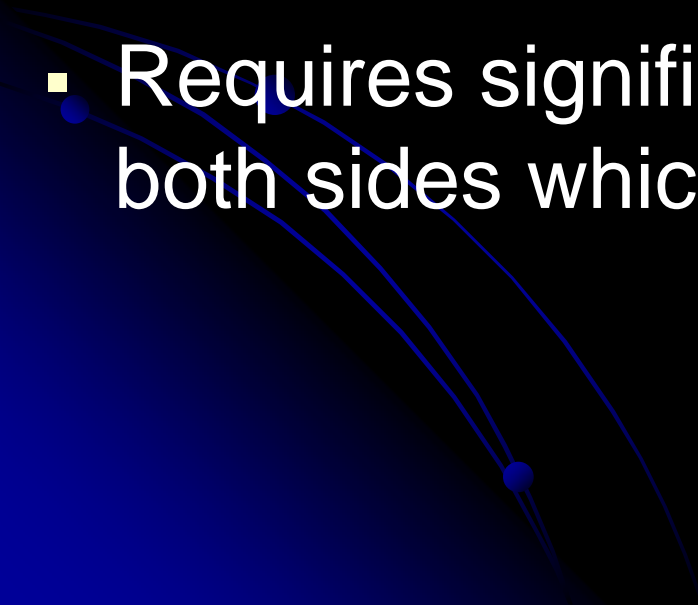
Interactive Collaboration

Characteristics

- Very time consuming
 - Requires establishment of effective working/personal relationships
 - Requires a real understanding of the situation, needs and limitations of clientele
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Interactive Collaboration

Characteristics

- Each side must have a stake in and benefit from the activity/project
 - Requires significant trust and confidence on both sides which may take years to establish
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Interactive Collaboration Irrigation Districts

Obstacles

- Recognizing or understanding of the exact nature of the problem
- Solutions often require significant costs for equipment, training of personnel and changes in behavior
- Usually more than one approach or multiple equipment choices are possible with significant advantages and disadvantages

Interactive Collaboration Irrigation Districts

Obstacles

- Managers must acquire approval from directors who
 - may have limited understanding,
 - oppose any “unnecessary” expenditure of funds, or
 - believe that *“if it’s worked for 50 years, then it must be OK”*
- Some engineering firms are unqualified for the work or have their own agendas

Interactive Collaboration

Control, Telemetry and SCADA Projects

Currently working with 6 irrigation districts: United, Mission#6, Edenburg, Los Fresnos, Bayview, Delta Lake

- First, we try to understand the exact requirements or needs
- Develop a list of various options and costs levels that meet the operational needs
- Work with districts on understanding options and determining which “fits” the district the best

Interactive Collaboration

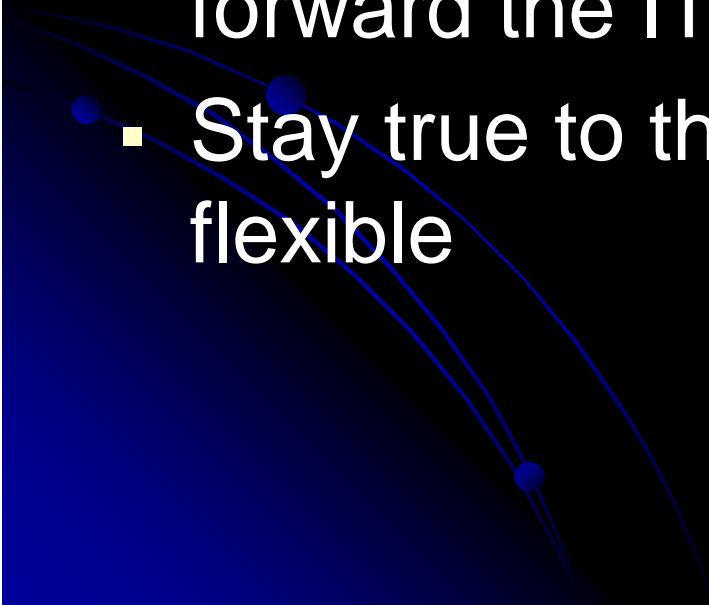
Irrigation Technology Center

- Began with a simple idea
- Met with an ad hoc committee representing water agencies and other stakeholders for two years to flush out ideas and approaches
- Raised \$150,000 from these stakeholders to conduct a feasibility study and business development plan
- Implemented specific projects and activities to demonstrate the capabilities and potential benefits and impacts of an irrigation technology center

Interactive Collaboration

Irrigation Technology Center

Keys to success:

- All parties must have “ownership”
 - Trust stakeholders to promote and move-forward the ITC on their own
 - Stay true to the underlying vision but remain flexible
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Interactive Collaboration

Irrigation Technology Center

Status

- ***14 organizations/agencies have passed resolutions of support***
- ***The ITC will be a part of the new Texas A&M University at San Antonio***
- ***150 acres of the new campus site in South San Antonio will be allocated to the ITC***
- ***The ITC and associated academic programs will be a focus of the new university***

Interactive Collaboration

Irrigation Technology Center

Example of a collaborative effort:

Drought Simulator/60 Turfgrass Drought Recovery Study

Partners

ITC

Texas Cooperative Extension

(Soil and Crop Sciences, Agricultural Engineering)

San Antonio Water System

Turfgrass Producers of Texas (TPT)

Bladerunner Farms, Inc.

City of San Antonio



Interactive Collaboration

Irrigation Technology Center

Example of a collaborative effort:

Drought Simulator/60 Turfgrass Drought Recovery Study

Stakes

- SAWS had a problem that required research and a facility to conduct the research
- ITC needs facilitates in order to build programs upon
- The turfgrass industry has a vested interest in cities continuing to allow turfgrass in landscapes
- Texas Cooperative Extension has the personnel and know-how to meet the objectives
- ITC can provide a mechanism for the continuing support of the simulator and future studies

Interactive Collaboration

Irrigation Technology Center

Example of a collaborative effort:

Drought Simulator - 60 Turfgrass Drought Recovery Study

Process

- First a concept proposal then a full proposal were written and distributed to stake holders
- Conference calls and meetings were held to flush out ideas, approaches and funding
- An agreement on joint funding was arrived at between all parties
- Separate meetings were held between ITC and Soil and the A&M Agronomists to define needs in technical terms

Interactive Collaboration

Irrigation Technology Center

Drought Simulator/60 Turfgrass Drought Recovery Study

Joint Funding Arrangement

Simulator

- SAWS: \$70,000
- RGBI: time and effort of persons employed on RGBI (Braden, Flahive, Leigh, Nazarov, Trimmer)
- ITC: \$15,000 for supplies, materials and time of engineer to design drive system (LePori)
- Texas Cooperative Extension: time of Fipps and Chilek, 40% of indirect costs (10% of total budget)
- City of San Antonio:- land

Interactive Collaboration

Irrigation Technology Center

Drought Simulator/60 Turfgrass Drought Recovery Study

Joint Funding Arrangement

Drought Study

- SAWS: \$45,000
- TSP: \$23,000 for turfgrass study and donation of sod
- Texas Cooperative Extension: 40% of indirect costs
- Bladerunner Farms: in-kind for preparation and maintenance of site/plots
- City of San Antonio: water and electricity
- ITC/RGBI – operation and maintenance of Simulator

Collaboration

Final thoughts

Interactive collaboration is difficult, time consuming, and requires technical and people skills, and significant effort, but is vital in establishing effective and sustainable programs