A 10-Step Process for Environmental Scanning

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Abstract: This article presents a step-by-step process used in North Carolina Cooperative Extension that provides a practical guide for conducting environmental scans. While easy to use, the methods are grounded in best practices from the current literature and provide a mechanism for gathering triangulated data from both primary and secondary sources that reflects a consensus, if you will, of high priority issues upon which relevant Extension programs can be built. In addition, this process also includes identifying individual and community assets that can be used collectively with Extension efforts to address the issues more comprehensively.

Introduction

This article describes a new 10-step process for conducting environmental scanning in North Carolina Cooperative Extension (NCCE). An environmental scan is a process of studying and analyzing the current and emerging forces that exist within an educational organization's environment (Boone, 1992; Boone, Safrit, & Jones, 2002). It provides comprehensive information on the current conditions in the county and/or state that may represent potential program opportunities.

The keys to successful scanning are active and open exploration of our communities that incorporates diverse sources of information (primary and secondary data) and diverse viewpoints (key stakeholders, volunteers, advisory leaders, clientele groups, general public). In essence, scanning is our opportunity to take a fresh, objective look at issues that fit within our Extension mission and goals, and lend themselves to educational solutions.

Description of the 10-Step Process for Environmental Scanning

This 10-step method is focused towards environmental scanning conducted at the county level. It is critical that all Extension county personnel are involved. It is also important that the County Extension Director lead the county team and involve the County Advisory Leadership Committee throughout the process. The steps outlined below provide a guide for a systematic, research-based process.
Step 1: County Team Conduct Situational Analysis Using Secondary Data

An in-depth situational analysis provides the basis for identifying key issues and setting program priorities (Caravella, 2006). Data collected is referred to as secondary data because it was collected by other organizations for their purposes, but proves useful to Extension. This first step involved accessing and examining common databases to obtain data/statistics on issues related to NCCE’s three strategic priority areas (focus areas). To implement this step, the county teams were provided links to state agency databases that provided data for each county. Some of these included the Department of Health and Human Services, Department of the Environment and Natural Resources, and the Department of Agriculture. The county teams also examined current data, such as their County Government Strategic Plan, community-wide needs assessments performed by non-profit organizations (e.g. United Way), and planning documents such as Health Departments’ Community Diagnosis.

Step 2: List Issues that Are Important Based on Secondary Data

In the programming literature, this step refers to determining analyzed needs (Boone, 1992; Boone, Safrit, & Jones, 2002). To conduct this step, county teams were provided a County Profile Template to assist them in organizing and comparing their data to determine what emerged as areas of concern. County teams were able to collect key data and compare the situation in their county with the state as well as with neighboring counties. Those data items where their county was worse off than the state and/or neighboring counties were highlighted for further examination later in the scanning process. Table 1 provides a few items from the county profile for illustrative purposes.

Table 1.
Sample Items from the County Profile Template

<table>
<thead>
<tr>
<th>AGRICULTURE AND NATURAL RESOURCES</th>
<th>North Carolina</th>
<th>My County</th>
<th>Neighboring County</th>
<th>Neighboring County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Farms</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Land in Farms (Acres)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average Size of Farm (Acres)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operators Whose Principal Occupation Is Farming</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average Age of Farm Operators (Years)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farm Industry Employment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acres of Harvested Cropland</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Step 3: Conduct Situational Analysis Using Primary Data from Major Stakeholder Groups

For this step of the process, county teams conducted one-on-one interviews or focus groups to get information from their countywide Advisory Leadership Council, program-specific advisory committees, and county government officials. They learned about key stakeholders’ priority issues. This step helps identify the prescribed needs of key stakeholders (Boone, 1992; Boone, Safrit, & Jones, 2002). These stakeholders are instrumental to the survival of an organization and can play a vital role in securing support for programmatic efforts (Caravella, 2006; Morton, 2002).

### Step 4: Map County to Obtain Primary Data from a Cross Section of the Population

This step is conducted to allow county teams to hear from as many citizens as possible. Mapping is a way of dividing the county into manageable segments to involve a diverse group of citizens representing varying opinions and interests. It is imperative that all segments of the county population be involved, particularly groups that traditionally may not get the opportunity to provide their insights and have their needs reflected in needs assessment processes (Ingram & Syvertsen, 2005). County teams used different mapping techniques, which included dividing their county by either school districts (educational), political districts, voting districts, or geography (Boone, 1992; Boone, Safrit, & Jones, 2002).

### Step 5: Collect Primary Data in Each of the Mapped Areas

County teams used a mixed method approach to collect data. They used any combination of community forums, focus groups, or surveys (written, telephone, or Web-based). This allowed for methodological triangulation of the data on citizen's expressed needs.

### Step 6: List Issues that Consistently Surfaced as Important in Step 2, Step 3, and Step 5

### Step 7: Conduct External Assets Assessments

County teams were provided tools for identifying and assessing assets of individuals and organizations based upon the work of Kretzmann and McKnight (1993). This assessment served as a way to identify untapped individual skills and talents, as well as agencies or organizations (formal and non-formal) that are already addressing (or desire to address) some aspect of the issue (Caravella, 2006). Essentially, this step makes communities a part of the solution as they partner with Extension to address their own issues using various community assets coupled with the expertise and resources from Extension.
Step 8: Prioritize Issues

Issues receiving the highest priority were those that were consistently deemed as most important by the most people (i.e., frequency/mode scores). Of those important issues, “priority issues” were those that linked most closely to NCCE strategic priorities and county government plans and those for which Extension and its network of partners have the expertise to address (DeBord, 2007). Among the priority issues, those receiving top priority were those that were more urgent in nature. To a lesser extent, other considerations were made in the prioritization process, such as those for which community assets can be mobilized (Step 7).

Step 9: Examine the Complexity and Interdisciplinary Nature of Priority Issues

County teams must develop program strategies to address the priority issues in a comprehensive and holistic way. Thus, it is essential to understand the complexity and interdisciplinary nature of priority issues so that effective programs can be planned. It is important that integrated county teams dissect complex issues by identifying the: 1) primary and secondary target audiences, 2) causal and contributing factors (i.e., root causes), 3) opportunities and threats to addressing and/or improving the issue, 4) interdisciplinary program components to build in, and 5) resources to implement/carry out the different program components (Guion, 2009). A tool to guide educators during this step in the process is presented in "A Tool for Focusing Integrated Team Efforts on Complex Issues" (Guion, 2009).

Step 10: Each County Enter Priority Issues, Internal and External Assets, and the Integrated Programming Strategies to Address the Issues into the Web-Based NCCE County Priority Issues Database

Information from the database can be sorted to generate reports to share top priority issues, assets, and subsequent strategies for each county, by Extension district (priorities shared by a group of counties), and by issue type/category (types of issues with highest frequency statewide). This helps facilitate collaborative programming across county lines, within districts and statewide.

Conclusion

In conclusion, this step-by-step process used in NCCE provides a practical, straightforward guide for conducting environmental scans at the county level. While easy to use, the methods are grounded in best practices from the current literature.

References


