ACCOMMODATION IN AN URBAN AGRICULTURAL EDUCATION PROGRAM IN OHIO: A CASE STUDY

DISSERTATION

Presented in Partial Fulfillment of the Requirements for

the Degree Doctor of Philosophy in the Graduate School of The Ohio State University

By

John W. Soloninka, M.S.

* * * * *

The Ohio State University
2003

Dissertation Committee:  Approved by
Professor James J. Connors, Adviser  Adviser
Professor Scott D. Scheer
Professor Peter W. Demerath  Human & Community Resource Development
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2003
ABSTRACT

Urban agricultural education programs lack an adequate teaching and learning model that encompasses the components that contribute to a successful program. The research describes such components. The research also explains how an urban agricultural education teacher accommodates diverse students in the program. The theoretical framework of the study was grounded in Hollins’ (1996) Mediating, Accommodating, and Immersion Models of education, and Phelan, Davidson, and Yu’s (1998) Students’ Multiple Worlds Model.

A small animal care and production program in a metro-urban Ohio school district was chosen as the case for the study based on the program’s record of success, the teacher’s achievements and recognition of teaching excellence, and the program’s accessibility. The case study was conducted during one academic school year (2000-2001) in an Animal Management Technician (AMT) program. Seven students in the program were observed in the classroom, in the laboratory, and at extracurricular events throughout the year. Data were elicited from students, teachers, and administrators through multiple qualitative research methods—observation, interviews, dialogue, and student work. Modified Grounded Theory research methods
allowed for methods to be emergent. Data were analyzed using Erickson’s (1986) and Miles and Huberman’s (1994) proposed methods of establishing evidentiary warrants from the data corpus, sorting and categorizing data by concepts and constructs, and then weaving the concepts and constructs together into a new theoretical model and cultural productions and portrayals that expressed the unique but comprehensive aspects of the urban agricultural education program, its teacher, and students.

The resulting Dynamic Teacher Students Accommodating Model for Urban Agricultural Education and cultural productions and portrayals depict the teacher accommodating diverse students in a traditional classroom and open multi-sectioned laboratory while having the educational program supported by three pillars—school administration and staff, engaged families, and community members. The model also depicts four curriculum catalysts to success—SAEs, FFA, modern and fully equipped facilities, and job placement. The study recommends that the proposed Dynamic Teacher Students Accommodation Model for Urban Agricultural Education and urban student portrayals be further developed through similar research in other urban agricultural education programs and then offered as alternative agricultural education teaching and learning models in agricultural education teacher preparation programs.
Dedication

to “Mrs. Shepherd”
ACKNOWLEDGMENTS

I wish to acknowledge the assistance given by Dr. Janet L. Henderson, who encouraged me to study urban agricultural education students and who gave me the initial entrance introductions that I needed to have access to the teachers and career center where my data were collected.

The students, teachers, administrators, and staff at the career center where my data were collected were very helpful. I acknowledge the assistance that I received from the public school district staff. The Ohio Department of Education, Agricultural Education Service, provided historical data and statistics; numerous faculty and staff at The Ohio State University, including Terri Osterman and Jackie Grueser, helped locate agricultural education historic documents and program directories.

My adviser, Dr. James Connors, along with my committee members, Drs. Scott Scheer and Peter Demerath, were encouraging throughout the data collection and writing process. They were also helpful in revising this document.

Drs. Connors and Robert Birkenholz contributed ideas that were incorporated into the Dynamic Teacher Students Accommodation Model for Urban Agricultural Education. Herb Topping gave technical assistance for developing the Flash program
for the model. Sharon Bierman provided final editorial corrections and formatting assistance.
VITA

1956 ................................................ Born – West Virginia

1978 ................................................ B.S., Agricultural Science
   California State University-Fresno
   Fresno CA

1978-1979 ....................................... Anthropology and Islamic Studies
   University of Minnesota
   Minneapolis/St. Paul MN

1978-1979 ....................................... Luther Northwestern Seminary
   St. Paul MN

1979-1980 ....................................... French Language Instruction
   L’Accueil Fraternal
   Le Chambon sur Lignon, France

1980-1987 ....................................... Agricultural Development Missionary
   American Lutheran Church, Senegal, Africa

1989 ................................................ M.S., Agricultural Education
   West Virginia University, Morgantown WV

1989-1990 ....................................... Visiting Instructor of Agriculture
   Potomac State College, Keyser WV

1990-1996 ....................................... Regional Representative–West Africa
   Lutheran World Relief, Naimey, Niger

1997-2001 ....................................... Graduate Teaching & Research Associate
   The Ohio State University, Columbus OH

2000-2003 ....................................... Instructor, Developmental Math & ESL
   Columbus State Community College, Columbus OH

2002-2003 ....................................... Instructor, Statistics & ESL
   Franklin University, Columbus OH
2003-present.............................. Consultant, Office of Educator Preparation
Ohio Department of Education, Columbus OH

FIELDS OF STUDY

Major Field: Agricultural Education

Studies in: Cultural Studies, Research & Statistics
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CHAPTER 1
INTRODUCTION

The “Reinventing Agricultural Education for the Year 2020 Initiative” was written under the auspices of the National Council for Agricultural Education (1999). This initiative is the national strategic plan and action agenda for agricultural education in the United States. Objective 2 of Goal 2 of the initiative states, “All students in urban, suburban and rural schools, [will] have access to high-quality agricultural education programs” (p. 4). Although a national plan, the initiative encourages “state and local agricultural education personnel ... to develop and/or refine their strategic plans and action agendas to ensure cooperation and coordination with this national plan” (p. 6). The initiative continues that “agricultural education leaders will be required to seek out additional resources and expanded financial support through effective marketing to achieve the goals and objectives outlined in this strategic plan” (p. 9). To attain Objective 2 of Goal 2 by 2020, Ohio’s agricultural education leaders must expand secondary agricultural education programs in urban and suburban school districts.

Historically, secondary agricultural education programs in Ohio have been located in urban, suburban, and rural school districts; however, rural programs far
outnumber urban and suburban programs. Since the early 1900s, secondary agricultural education programs and enrollment have varied. Wolf (1992) reported the history of vocational agriculture education in Ohio:

[In Ohio], there was a steady growth in both vocational agriculture teachers and departments [programs] until the war years in the forties [1940s]. With the scarcity of teachers, enrollment to some extent, and the number of departments, decreased. Beginning in 1949 and 1950 the number of teachers in departments as well as enrollments continued to increase until 1969 when there were 407 instructors and 312 departments.... High school enrollments in vocational agriculture moved upward to 12,827 in 1940-41. They then decreased during the war years [1940s] before gradually increasing to over 15,000 in the late 1960s. With the addition of new program areas such as horticulture and agricultural mechanics, high school enrollments grew to nearly 24,000 before declining to 16,000 in the early 1990s. (pp. 9-10)

By the late 1990s, this declining trend in secondary agricultural education program numbers and student enrollment was reversed; in FY 1999, the number of secondary agricultural programs in Ohio had increased to more than 600 and student enrollment to more than 24,000. Likewise, the number of secondary teachers of these programs had increased to 559 (Office of Career-Technical and Adult Education, 2000). While the number of secondary agricultural programs has risen over the past 10 years, this increase has not kept pace with the increase in Ohio’s population.

While the population of Ohio increased by roughly 1.5 million people between 1960 and 1998 (Table 1), the percentage of the total population living in metro-urban (urban and suburban) and non-metro-urban (rural) areas remained relatively stable. Metro-urban or urbanized areas are defined by the U.S. Census Bureau as geographical areas encompassing a population of more than 50,000 people; all other
geographical areas are considered non-metro-urban areas (U.S. Department of Commerce, 2000). The metro-urban population in Ohio decreased slightly from 81.9% in 1960 to 81.0% in 1998. Sharp and Winland (1999) noted that population migration trends in Ohio did not always follow a pattern of rural to urban or urban to rural. Rather, “growth in the rural and urban population [of Ohio] has varied by decade since 1950” (Section 2, p. 1). They further noted that “in 1998, [the 13 largest] urbanized or metropolitan areas in Ohio [i.e., Canton-Massillon, Cincinnati-Hamilton, Columbus, Cleveland-Akron, Parkersburg-Marietta (WV-OH), Huntington-Ashland (WV-KY-OH), Mansfield, Lima, Toledo, Dayton-Springfield, Youngstown-Warren, Wheeling (WV-OH), and Steubenville-Weirton (WV-OH)] contained 81.0% of the state’s population and [occupied] 44.8% of the state’s land area” (Section 3, p. 1).

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Metro-Urban</th>
<th>Non-Metro-Urban</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>9,706,406</td>
<td>7,952,234</td>
<td>1,754,163</td>
<td>81.9</td>
</tr>
<tr>
<td>1970</td>
<td>10,652,017</td>
<td>8,820,841</td>
<td>1,831,176</td>
<td>82.8</td>
</tr>
<tr>
<td>1980</td>
<td>10,797,630</td>
<td>8,790,877</td>
<td>2,006,753</td>
<td>81.4</td>
</tr>
<tr>
<td>1990</td>
<td>10,847,115</td>
<td>8,826,069</td>
<td>2,021,046</td>
<td>81.4</td>
</tr>
<tr>
<td>1998</td>
<td>11,209,493</td>
<td>9,074,696</td>
<td>2,134,797</td>
<td>81.0</td>
</tr>
</tbody>
</table>

Sharp & Winland (1999). Adapted and reprinted with permission.


In 1997, the seven largest metro-urban areas (also referred to in the literature as metropolitan statistical areas and consolidated metropolitan statistical areas) in Ohio accounted for 79% of the state’s population (Table 2).
<table>
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<th></th>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Cleveland-Akron CMSA</td>
<td>3,098,048</td>
<td>2,938,277</td>
<td>2,859,644</td>
<td>2,908,439</td>
</tr>
<tr>
<td>Cincinnati-Hamilton CMSA</td>
<td>1,668,420</td>
<td>1,726,431</td>
<td>1,817,569</td>
<td>1,934,145</td>
</tr>
<tr>
<td>Columbus MSA</td>
<td>1,125,646</td>
<td>1,214,291</td>
<td>1,345,450</td>
<td>1,460,242</td>
</tr>
<tr>
<td>Dayton-Springfield MSA</td>
<td>974,927</td>
<td>942,083</td>
<td>951,270</td>
<td>944,934</td>
</tr>
<tr>
<td>Toledo MSA</td>
<td>606,344</td>
<td>616,864</td>
<td>614,128</td>
<td>611,805</td>
</tr>
<tr>
<td>Youngstown-Warren MSA</td>
<td>645,434</td>
<td>644,922</td>
<td>600,895</td>
<td>595,215</td>
</tr>
<tr>
<td>Canton-Massillon MSA</td>
<td>393,789</td>
<td>404,421</td>
<td>394,106</td>
<td>402,644</td>
</tr>
<tr>
<td>Total MSA/CMSA Population</td>
<td>7,145,116</td>
<td>8,487,289</td>
<td>8,583,062</td>
<td>8,857,424</td>
</tr>
<tr>
<td>State Population</td>
<td>10,652,017</td>
<td>10,797,630</td>
<td>10,847,115</td>
<td>11,209,493</td>
</tr>
</tbody>
</table>

| Percentage Metro-Urban Area | 67.0% | 78.6% | 79.1% | 79.0% |

Gliem & Bolton (1999). Permission to adapt and use this table was not obtained.

Table 2. Population of the Seven Largest Metro-Urban Areas in Ohio — 1970-1997

These seven metro-urban areas were located in 12 counties (Butler, Clark, Cuyahoga, Franklin, Hamilton, Lake, Lorain, Lucas, Mahoning, Montgomery, Stark, and Summit). In FY 2000, the 20 largest school districts in Ohio were in these same 12 counties and enrolled 449,688 students or 24.8% of all K-12 students in Ohio. Taking into consideration all 180 school districts in these 12 counties, more than one million students or 56% of all public K-12 students in Ohio were enrolled in these 12 counties in FY 2000 (Table 3).
<table>
<thead>
<tr>
<th>Name of School District</th>
<th>K-12 Enrollment by School District</th>
<th>County</th>
<th>K-12 Enrollment by County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cleveland Municipal SD</td>
<td>75,684</td>
<td>Cuyahoga</td>
<td>202,049</td>
</tr>
<tr>
<td>Columbus City SD</td>
<td>64,511</td>
<td>Franklin</td>
<td>169,214</td>
</tr>
<tr>
<td>Cincinnati City SD</td>
<td>46,562</td>
<td>Hamilton</td>
<td>123,218</td>
</tr>
<tr>
<td>Toledo City SD</td>
<td>37,738</td>
<td>Lucas</td>
<td>67,924</td>
</tr>
<tr>
<td>Akron City SD</td>
<td>31,464</td>
<td>Summit</td>
<td>85,083</td>
</tr>
<tr>
<td>Dayton City SD</td>
<td>23,522</td>
<td>Montgomery</td>
<td>82,005</td>
</tr>
<tr>
<td>South-Western City SD</td>
<td>19,216</td>
<td>Franklin</td>
<td>above</td>
</tr>
<tr>
<td>Lakota Local SD</td>
<td>14,659</td>
<td>Butler</td>
<td>54,079</td>
</tr>
<tr>
<td>Westerville City SD</td>
<td>13,571</td>
<td>Franklin</td>
<td>above</td>
</tr>
<tr>
<td>Parma City SD</td>
<td>13,197</td>
<td>Cuyahoga</td>
<td>above</td>
</tr>
<tr>
<td>Canton City SD</td>
<td>13,197</td>
<td>Stark</td>
<td>64,896</td>
</tr>
<tr>
<td>Hilliard City SD</td>
<td>12,423</td>
<td>Franklin</td>
<td>above</td>
</tr>
<tr>
<td>Dublin City SD</td>
<td>11,249</td>
<td>Franklin</td>
<td>above</td>
</tr>
<tr>
<td>Youngstown City SD</td>
<td>10,977</td>
<td>Mahoning</td>
<td>38,538</td>
</tr>
<tr>
<td>Northwest Local SD</td>
<td>10,599</td>
<td>Hamilton</td>
<td>above</td>
</tr>
<tr>
<td>Lorain City SD</td>
<td>10,492</td>
<td>Lorain</td>
<td>45,359</td>
</tr>
<tr>
<td>Worthington City SD</td>
<td>10,464</td>
<td>Franklin</td>
<td>above</td>
</tr>
<tr>
<td>Mentor Ex Village SD</td>
<td>10,342</td>
<td>Lake</td>
<td>34,951</td>
</tr>
<tr>
<td>Springfield City SD</td>
<td>10,092</td>
<td>Clark</td>
<td>24,856</td>
</tr>
<tr>
<td>Hamilton City SD</td>
<td>9,729</td>
<td>Butler</td>
<td>above</td>
</tr>
<tr>
<td><strong>Total K-12 Enrollment, FY 2000</strong></td>
<td><strong>449,688</strong></td>
<td><strong>1,022,172</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Percent of All Ohio Public K-12 Enrollment, FY 2000</strong></td>
<td><strong>24.8%</strong></td>
<td><strong>56.3%</strong></td>
<td></td>
</tr>
</tbody>
</table>

Ohio Department of Education (2001b).

**Table 3. K-12 Enrollment in 20 Largest School Districts and in 12 Ohio Counties — FY 2000**

While the Ohio Department of Education (2001b) reported in FY 2000 that 56% of the K-12 enrollment was located in the 12 largest metro-urban counties of the state, only 19% of all secondary agricultural education teachers taught in these 12 counties in FY 1999. Data collected from annual Ohio agricultural education teacher directories showed that the number (FTEs) of teachers in the 12 largest counties increased from 15 (4%) in FY 1959 to 106.5 (19%) in FY 1999 (Table 4).
<table>
<thead>
<tr>
<th>County</th>
<th>FY 59</th>
<th>FY 70</th>
<th>FY 79</th>
<th>FY 89</th>
<th>FY 99</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butler</td>
<td>1</td>
<td>5</td>
<td>8</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Clark</td>
<td>5</td>
<td>8</td>
<td>10</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Cuyahouga</td>
<td>0</td>
<td>13</td>
<td>35</td>
<td>15</td>
<td>14</td>
</tr>
<tr>
<td>Franklin</td>
<td>6</td>
<td>12</td>
<td>30</td>
<td>16</td>
<td>13</td>
</tr>
<tr>
<td>Hamilton</td>
<td>0</td>
<td>1</td>
<td>26</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>Lake</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1½</td>
</tr>
<tr>
<td>Lorain</td>
<td>1</td>
<td>4</td>
<td>8</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Lucas</td>
<td>1</td>
<td>3</td>
<td>15</td>
<td>15</td>
<td>13½</td>
</tr>
<tr>
<td>Mahoning</td>
<td>0</td>
<td>2</td>
<td>12</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>Montgomery</td>
<td>1</td>
<td>4</td>
<td>18</td>
<td>20</td>
<td>13½</td>
</tr>
<tr>
<td>Stark</td>
<td>0</td>
<td>6</td>
<td>14</td>
<td>14</td>
<td>12</td>
</tr>
<tr>
<td>Summit</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Total Teachers in 12 Counties</td>
<td>15</td>
<td>59</td>
<td>182</td>
<td>124</td>
<td>106½</td>
</tr>
<tr>
<td>Percent</td>
<td>4%</td>
<td>12%</td>
<td>26%</td>
<td>20%</td>
<td>19%</td>
</tr>
<tr>
<td>Total Teachers in all 88 Counties</td>
<td>363</td>
<td>489</td>
<td>707</td>
<td>602</td>
<td>560</td>
</tr>
</tbody>
</table>

Source: Ohio Directory of Agricultural Education Instructors, Selected Years.

**Table 4. Number and Percent of Teachers (FTEs) of Agricultural Education in the 12 Largest Metro-Urban Counties in Ohio — Selected Years**

While there has been a trend indicating an increase in the number of secondary agricultural education teachers in the 12 largest metro-urban counties in Ohio, this trend is not keeping pace with the number of students in these counties. The data suggest that secondary agricultural education programs are proportionally under represented in the largest 12 metro-urban counties compared to the non-metro-urban counties of the state.

The traditional curriculum of agriculture education programs—farm production—may explain the historical and current number of secondary agricultural programs in non-metro-urban or rural school districts and counties. Nevertheless,
curricula changes during the 1970s, 1980s, and 1990s redressed the misconception that agricultural education is only for students with a farm background. The number of non-farm agricultural and environmental program curricula now outnumbers those agricultural programs considered farm-based or farm-related (Table 5).

<table>
<thead>
<tr>
<th>Agricultural &amp; Environmental Science Education</th>
<th>Farm-Based Curricula</th>
<th>Non-Farm–Based Curricula</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production Agriculture</td>
<td>Environmental Management</td>
<td></td>
</tr>
<tr>
<td>Agricultural Science</td>
<td>Equine Science</td>
<td></td>
</tr>
<tr>
<td>Agribusiness</td>
<td>Food Processing/Science</td>
<td></td>
</tr>
<tr>
<td>Agriculture Industrial Equipment</td>
<td>Forestry</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Horticulture</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Natural Resources</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Small Animal Production and Care</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Non-food animals)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Zoo Animals</td>
<td></td>
</tr>
</tbody>
</table>

Ohio Department of Education (2001a).

Table 5. Approved Agricultural Teaching Fields & Curricula for Licensure in Ohio

School districts with secondary agricultural education programs in metro-urban counties are diversifying their agricultural education programs to include non-farm–based curricula (i.e., environmental management, equine science, food processing/science, forestry, horticulture, natural resources, small animal production and care, and zoo animals). These curricular changes (i.e., from farm-based to non-farm–based curricula) parallel a school district’s or county’s transition from a rural to urban population. An example of one county’s transition from a rural to urban
population and curricular changes in the agriculture education curricula is reported for a specific Ohio county from 1959 to 1999 (Table 6).

<table>
<thead>
<tr>
<th>School Pseudo-Acronyms</th>
<th>Certification</th>
<th>FY 59</th>
<th>FY 70</th>
<th>FY 79</th>
<th>FY 89</th>
<th>FY 99</th>
</tr>
</thead>
<tbody>
<tr>
<td>C.W.</td>
<td>Horticulture (1*)</td>
<td>½</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Production</td>
<td>½</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Agriscience</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Agribusiness</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>D.W.</td>
<td>Horticulture (1*)</td>
<td>½</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Production</td>
<td>½</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>E.</td>
<td>Horticulture</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Agrimechanics</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Agribusiness</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>G.P.</td>
<td>Production (1*)</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>N.E. (Opened 1977)</td>
<td>T. Management</td>
<td>-</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Horticulture</td>
<td>-</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>N.W. (Opened 1977)</td>
<td>Agrimechanics</td>
<td>-</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>P. Production</td>
<td>-</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sm. Animal Care</td>
<td>-</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>F.H.</td>
<td>Horticulture</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>G.C.</td>
<td>Horticulture (1*)</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Production</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>W.L.</td>
<td>Horticulture</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>W.V.</td>
<td>Horticulture (1*)</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Agribusiness</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Production</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>H.</td>
<td>Production (1*)</td>
<td>½</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Horticulture</td>
<td>½</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Total Teachers (FTEs)</td>
<td>Horticulture (6*)</td>
<td>5½</td>
<td>16</td>
<td>8</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>T. Management</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sm. Animal Care</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Production</td>
<td>3½</td>
<td>6</td>
<td>0</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Agriscience</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>½</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Agribusiness</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>½</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Agrimechanics</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Total All Teachers (FTEs)</td>
<td>(6*)</td>
<td>6</td>
<td>12</td>
<td>30</td>
<td>16</td>
<td>13</td>
</tr>
</tbody>
</table>

* Certification area undefined, assumed to be production agriculture.


Table 6. Number of Secondary Agricultural Education Teachers (FTEs) in a Particular County by School, Certification Type, and Year
In 1959, six agricultural education teachers all taught farm-based curriculum programs in this county; by 1999, three agricultural education teachers were teaching farm-based programs, and ten others were teaching non-farm–based curricula. This transition to more non-farm–based agricultural curricula parallels the county’s growth from a predominately rural to predominately urban county.

**Problem Statement**

According to the director of the Ohio Department of Education, Agricultural Education Service, during the past 10 years, the number of secondary agricultural education programs in Ohio has been growing; however, the number of urban agricultural programs has not (I. Kershaw, personal communication, September 5, 2001). In 2000, approximately 70%-75% of all secondary agricultural programs in Ohio were located in non-metro-urban (rural) school districts. Although most of public school students live in metro-urban (urban and suburban) school districts of the state, few new agricultural education programs have been started or existing programs expanded in these metro-urban areas during the past ten years. “Near Toledo, it took three years to start up a new ag-science and ag-management program. Urban ag programs are tough sales to districts to expand” (I. Kershaw, personal communication, September 5, 2001). Consequently, not all students who live in urban and suburban school districts in Ohio have access now nor will they likely have access in the foreseeable future to high-quality agricultural education programs as set forth in
Goal 2 of the strategic plan and action agenda of the National Council for Agricultural Education (1999).

In FY 2000, the 12 largest metro-urban counties in Ohio enrolled 56% of public K-12 students while employing only 19% of the secondary agricultural education teachers. The number of secondary agricultural education programs and teachers in metro-urban counties in Ohio must increase if the National Council’s goal is to be reached by 2020. Before increasing the number of programs and hiring additional agricultural teachers, additional funds are needed to build and equip facilities. “Financial limits hinder program expansion. It costs money to build new facilities” (I. Kershaw, personal communication, September 5, 2001). To obtain funds to expand urban secondary agricultural education programs, state and local school district leaders review research data that support the need for a new program and other research that documents the success of such programs. Unfortunately, only a few research studies have reported on successful metro-urban agricultural education programs in Ohio. The paucity of urban secondary agricultural education research contributes to the lack of planning and expansion of urban secondary agricultural education programs by state and local educational leaders.

**Purpose of the Study**

The purpose of studying a “successful” secondary urban agricultural education program in Ohio was to describe its components and practices. Hollins’ (1996) theory of “Cultural Accommodation in Instruction” and Phelan, Davidson, and Yu’s (1998)
model of “Students’ Multiple Worlds” were used to develop the theoretical framework of this study and to situate the components of an urban secondary agricultural education program in a larger theoretical model. In addition, this study sought to contribute to the literature used for the preservice training of urban agricultural teachers and to the decision making processes of state and local education policy makers in the establishment of additional urban secondary agricultural education programs in Ohio.

Research Questions

Research questions guiding this study were developed at the outset. However, the research questions were modified as the data corpus was gathered and reviewed. Bassey (1999) reported that case study research questions guide the research study and are emergent and dynamic:

A research question is the engine which drives the train of inquiry.... If the ‘engine’ is found to be under-powered, or breaks down, or is pulling the train in the wrong direction, it should be replaced—pronto! It should be expected that [case study] research questions will be modified or replaced as the inquiry develops. (p. 67)

The following five research questions guided the study:

1. What are the components of a successful urban secondary agricultural education program in Ohio, with regard to enrollment, transportation, classroom facilities, students, teachers, administrative support, students’ families, community involvement, Supervised Agricultural Experiences (SAEs), participation in a youth organization (FFA), job placement, and the students’ views of program components?
2. How do students from different cultural perspectives describe and explain their experiences in a diverse urban agricultural education program?

3. How do students articulate and express their ethnic and socioeconomic similarities and differences through “cultural production portrayals” in an urban agricultural education program?

4. How do students negotiate with their peers and teacher? What role does the teacher play in accommodating students’ learning styles?

5. What factors attract and retain urban students in an agricultural education program?

**Assumptions and Limitations of the Study**

The assumptions related to this study were that participants responded truthfully to interview questions and that participants were knowledgeable about the subject area. The case for this study, an urban secondary agricultural education program, was chosen purposively based on the recommendations of state and local agricultural education leaders as being one of the “successful” programs in the state. It is assumed that they correctly identified a “successful” program.

The limitations related to this study resulted as the study progressed. Only seven of the 15 students in the chosen agricultural education program had parental consent to participate in the research study. Two students dropped out of the program three months into the study. Only one parent/guardian agreed to be interviewed, and
employers at job placement sites were dropped from the original research protocol because of logistical constraints of the researcher.

**Definition of Terms**

**Accommodation Without Assimilation** is displayed by students from diverse backgrounds in an educational context by participating in the educational process, even though it is different than their cultural background, to obtain an occupational goal rather than academic success. In this process, students maintain their cultural integrity but make accommodations for the educational setting (Gibson, 1984).

**Culture** is learned and shared among members of the same group. Culture gives a group of individuals their identity and guides their behavior. It is a set of values and beliefs that give meaning to a group’s activities and beliefs. These values and beliefs do not change easily over time, but they are flexible and fluid from generation to generation (Barrett, 1984).

**Cultural Capital** is defined by Bourdieu and Passeron (1990) as learned knowledge transmitted to children by family members or society. West (1999) specifically defined examples of cultural capital as personal characteristics such as self-confidence, discipline, and perseverance that individuals had developed over time to succeed in a given situation. Specifically related to this study, cultural capital is those personal characteristics, language skills, and skills secondary that agricultural education students need and have to be successful in their program and eventual industry related work place.
Cultural Productions, according to Willis (1983), are “the active, collective use and explorations of received symbolic, ideological, and cultural resources to explain, make sense of and positively respond to ‘inherited’ structural and material conditions” (p. 112). A similar construct developed by Piantanida and Garman (1999) is “cultural portrayals”—specifically, the stories and their context that teachers and students relate concerning their educational experiences.

FFA is a formal career-technical student organization for students enrolled in secondary agricultural education programs; membership is not mandatory but encouraged. The FFA (formerly the Future Farmers of America) is a component of secondary agricultural education programs in Ohio. The FFA organization provides support to the development and delivery of curricula related to leadership, organizational, and career skills.

Small Animal Production and Care Program is recognized by the State of Ohio as a certification/licensure program area in agricultural education. Also known as Small Animal (companion) Care and Animal Technician Management (AMT), this program provides secondary educational instruction “in the theories, principles, and practices of producing, caring for, and marketing domesticated, non-food animals” (Agricultural Education Service, 1994, p. 6).

SOEP/SAE Supervised Occupational Experience Project (SOEP or SOE) is a term used in the literature to refer to an “outside the classroom” vocational experience in general. Supervised Agricultural Experience (SAE) is a term used in the literature to refer exclusively to an “outside the classroom” agricultural education experience.
More specifically, Phipps and Osborne (1988) referred to SOE projects in agriculture as experiences consisting “of all the practical agricultural activities of educational value conducted by students outside of the class and laboratory instruction or on school-released time for which systematic instruction and supervision are provided by their teachers, parents, employers, or others” (p. 313). Moreover, these projects or experiences can be either unpaid internships or for remuneration. Presently, SAE is the preferred term in the literature.

**Urban Secondary Agricultural Education Programs** are programs of study in which students receive formal instruction in an agriculturally related subject in an urban cluster or metro-urban area. The literature does not consistently define “urban.” The U.S. Census Bureau (U.S. Department of Commerce, 2000) has defined an urban cluster (i.e., incorporated places, cities, towns, villages or boroughs) as a geographical area encompassing from 2,500 to 50,000 people, while a metro-urban area or urbanized area is a geographical area encompassing over 50,000 people. The U.S. Census Bureau does not differentiate between urban and suburban areas. Urban secondary agricultural education programs are generally focused on non-farm–based curricula; however, rural and urban agricultural programs are not mutually exclusive. Farm-based curricula include production agriculture, agricultural science (ag science), agricultural business (agribusiness), agricultural industrial equipment (agriculture mechanics/ag mechanics), and planned programs in agriculture for special needs students; non-farm–based curricula include environmental management, equine science, food processing/science, forestry, horticulture, natural resources, small animal
production and care (non-food animals), zoo animals, and planned programs in
agriculture for special needs students.

Successful Urban Secondary Agricultural Education Programs are those
programs judged as having superior quality by state and district education leaders,
other agricultural education teachers, teacher organizations, and agricultural education
teacher educators. Successful programs are based on a series of objective and
subjective criteria beyond the scope of this study. The urban secondary agricultural
education program chosen as the case for this study was determined to be “successful”
by the researcher’s advisory committee members.

Vocational Education and Career-Technical Education refer to formal
educational programs that combine academic knowledge and hands-on skills to
prepare students for further education or careers in specific industry related sectors.
These programs include competency-based applied learning, problem-solving skills,
work attitudes, general employability skills, and occupational-specific skills.
Currently, the preferred term in the literature is career-technical education; however,
in this study the two terms are used interchangeably.

Summary
The 1998 U.S. Census reported that 81% of Ohio’s population was located in
13 metro-urban areas of the state, the majority of which were located in 12 counties.
Public schools (K-12) in the 12 largest metro-urban counties of Ohio enrolled 56% of
all public K-12 students in FY 2000. Agricultural education programs in these 12
counties in FY 1999 employed only 19% of all secondary agricultural education teachers in Ohio, resulting in a significant number of secondary students in Ohio having little to no access to an agricultural education program. To redress this situation and meet Objective 2 of Goal 2 of the National Council for Agricultural Education by 2020, more secondary agricultural teachers and programs must be initiated in metro-urban school districts throughout Ohio. Before expanding urban secondary agricultural education programs, state and local education leaders use research data to support the need of adding programs to a school district’s curricula. These leaders use research studies to document the components of successful programs. To make a contribution to the research base of urban secondary agricultural education programs, this study sought to articulate and visually represent the components of a “successful” urban secondary agricultural education program and to describe cultural productions and portrayals by teachers and students in this context. The findings of this study are to be used to inform policy makers, education administrators, and future urban secondary agricultural education teachers in their preservice education programs.
CHAPTER 2
REVIEW OF LITERATURE

This study inquired into the components of a successful urban secondary agricultural education program and how students and teachers experienced this program. The review of literature for this study is divided into two sections. The first section gives an overview of the literature in secondary agricultural education programs in general and then more specifically in urban secondary agricultural education. Devoted to secondary agricultural education programs, it is subdivided into legislation pertinent to secondary agricultural education programs, urban secondary agricultural education programs, and components of secondary agricultural education programs. The second section gives an overview of theoretical models used in this study and addresses educational theoretical models: Hollins’ (1996) Mediating, Accommodating and Immersion Models and Phelan et al.’s (1998) Students’ Multiple Worlds Model.

Secondary Agricultural Education Programs

The State of Ohio has mandated the Ohio Department of Education, Agricultural Education Service Office be responsible for the oversight of all public
funded agricultural education programs in Ohio. Formal public agricultural education programs are available in grades K-12, in college, and for adults. Additionally, there are agricultural education programs in correctional institutions. This study and review of literature focuses only on secondary agricultural education programs in public schools. This section examines the historical legislation related to secondary agricultural education programs, urban secondary agricultural education programs, and the components of a secondary agricultural education program.

**Historical Legislation of Secondary Agricultural Education Programs**

Secondary agricultural education programs, like other career-technical education programs, receive funding and oversight from state, local, and federal sources. According to a report by the Legislative Office of Education Oversight (2002), “In fiscal year 2000, it is estimated that approximately $700 million in state, local, and federal funding was provided for secondary career-technical education [in Ohio]” (p. 10). The report further broke down the career-technical education program budget: 47% came from two line items within the state’s biennial operating budget; 47% came from local district’s charge-off and levies; and only 6% came from federal sources, primarily Carl D. Perkins III funds. The influence and role of these three levels of government (i.e., federal, state, and local) in vocational education policy

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1 For a complete and detailed historical account of career-technical education in Ohio, see the unpublished document, Ohio Career-Technical and Adult Education: A State Vocational Education History.
making and the establishment of education program priorities have changed throughout the years.

This section reviews the history of the federal and state roles in career-technical education to establish a chain of responsibility and accountability for the traditional farm-based curriculum in secondary agricultural education programs. Second, the historical context of vocational agricultural education programs clarifies how and why secondary urban agricultural programs came to be “legislated” into existence, thereby explaining the relatively “new” appearance in vocational agriculture of non-farm–based curricula in urban agricultural programs.

The history of legislation and public policy affecting secondary agricultural education in American public schools is intertwined with the history of vocational education. Beginning with the Smith Hughes Act of 1917 and ending with the Carl D. Perkins Vocational Education Act of 1984, Phipps and Osborne (1988) summarized 14 federal acts and amendments directly related to vocational agriculture education. They explained that vocational agriculture had its roots in rural farming areas of the country that led to the formalization of the farm-based curriculum and programs. The Smith-Hughes Act of 1917 supported by way of legislation the farm-based curriculum that continued largely unchanged until the 1960s. Beginning with the Vocational Education Act of 1963 and then the Vocational Education Amendments of 1968 and 1976, the focus of vocational agriculture education became broader and more encompassing than just the rural farm-based curriculum. These acts sought to support both rural and non-rural, farm and non-farm agriculture education curricula
particularly for those students in and near urban areas who did not own or have access to farms but who were interested in agriculture as a career. This federal support for both farm and non-farm–based curricula in agriculture education continued through the 1980s “the Carl D. Perkins Vocational Education Act of 1984 broadened the objectives of vocational education in agriculture to include ... all agriculturally oriented careers requiring knowledge and skill in agriculture, including but not limited to farming” (Phipps & Osborne, 1988, p. 5). Federal funding of the Perkins Act was renewed in the 1990s and 2000s.

Although formal agricultural education programs existed in many forms before 1917, the organized beginnings and federal public support (funding) of formal secondary agricultural education programs with a farm-based curriculum is credited to the Smith Hughes Act of 1917. This act also funded teacher training for these programs. It provided state and local governments the means to enact and support public agriculture education programs.

By the mid-1900s, the demographics of the United States had shifted from rural to urban and suburban areas. Taking into account this demographic shift and the need for industrial workers, vocational education became a diverse collection of formal education programs to train workers for factories and businesses. During and after World War II, the need for skilled industrial workers expanded formal secondary and post-secondary vocational programs. In the 1960s, federal leaders viewed formal vocational programs as necessary for increased economic prosperity and as a tool in the integration of minorities into the workforce as legislated by various Civil Rights
legislation. Therefore, the Vocational Education Act of 1963 sought to expand vocational education to urban areas and minority populations. A significant milestone, the 1963 act funded the consolidation of many vocational programs into Joint Vocational Schools (JVSs) or Vocational School Districts, extended programs to a number of constituents in and out of high school, and encouraged the development of new programs of vocational education. For agricultural education, this new direction meant the development of agricultural programs beyond a farm production curriculum. Ornamental horticulture was the first non-farm–based curriculum program to benefit from the 1963 act; others followed (McClay, 1964).

As mentioned above, the Civil Rights movement of the 1960s expedited many changes in vocational education. During the mid-1960s, unemployment, especially among minorities, was a problem that the federal government sought to address. President Johnson’s administration and the U.S. Congress looked to vocational education as a means to address some of the issues raised by the Civil Rights movement and took a more hands-on approach to secondary vocational education. With the Vocational Education Amendments of 1968 came additional funding for maintaining, extending, and improving vocational programs. Specifically, these amendments earmarked funds to be used to develop new programs and to provide part-time employment (work-study) opportunities for youth enrolled in these programs. These amendments also directed states to use at least 15% of their increased funding for the economically disadvantaged or physically handicapped, at
least 10% for the mentally disadvantaged, and 15% for post-secondary programs (class notes, EDVT 3000, Dr. L.E. Miller, The Ohio State University).

With the Vocational Education Act of 1963 and Amendments of 1968, federal funds became available to states to expand secondary agricultural programs in urban areas. Dietz (1980) believed these acts positively impacted the expansion of non-farm–based secondary agricultural programs. “Agricultural education was broadened so students could receive training in all aspects of the agricultural industry. Thus, the movement of more urban or town students enrolling in vocational agriculture classes began” (p. 5). Societal needs at the end of the 1960s, including the Civil Rights movement, coupled with high levels of unemployment in the early 1970s, were reflected in the 1976 Vocational Education Amendments. The amendments consolidated the previous vocational education acts and amendments, exemplifying the federal government’s desire to coordinate a national effort to move the country forward economically and socially. In addition to funding maintenance (i.e., teacher salaries, travel, and supplies) of vocational education programs, these amendments increased the federal government’s role in the direction and policy making of vocational education programs throughout the United States. As in previous legislation, funds were specified for the disadvantaged and handicapped. The 1976 amendments, for the first time, earmarked funds for students with limited English-speaking skills and targeted the elimination of sex discrimination in vocational education (class notes, EDVT 3000, Dr. L.E. Miller, The Ohio State University).
As a consequence of the Vocational Act and Amendments of the mid-1960s through the 1970s, federal agencies were in control of vocational education policy and programs. State and local agencies played supportive roles by identifying new programs and supervising existing programs. During this time, federal funds were being used to expand and maintain vocational programs throughout the United States. Federal agencies were so overwhelmingly in control of vocational education that leaders of vocational education believed this arrangement would continue indefinitely. Warmbrod (1980), writing on the future of vocational agriculture education in the 1980s, concurred with this arrangement:

Policy for public school education in agriculture has been determined by national legislation for vocational education.... The prospects are slim that considerations other than national legislation for vocational education will provide a basis for policy and programs in the 1980’s.... Current national legislation indicates rather clearly that Congress views vocational education, including vocational agriculture, as having an impact on major social problems: for example, youth un-employment, programs for the disadvantaged and handicapped, and the problems of race and sex equity. (p. 8)

Neither Warmbrod (1980) nor his colleagues predicted or foresaw the influence that President Ronald Reagan’s administration would have on vocational agricultural in the 1980s. When the Carl D. Perkins Vocational Education Act of 1984 was signed into law, it marked the beginning of a shift in leadership roles in vocational education. Affected by the Reagan Administration’s desire for a smaller federal government and congressional mandates to downsize the federal government, the Perkins Act of 1984 shifted the primary responsibility for vocational education policy making and programming back to a formula whereby state and local
governments were empowered to administer vocational education programs. The federal government’s role under the Perkins Act was limited to ensuring vocational program quality and access to these programs by protected populations (e.g., racial minorities, language-minorities, handicapped, women). An intrastate funding formula was added to the 1984 Perkins Act to ensure funding of innovative programs in economically depressed areas. Additionally, unlike prior legislation, Perkins’ funds were not to be used for local vocational education maintenance costs (i.e., teacher salaries, travel, and supplies). This loss of federal funds to maintain vocational education programs left some school districts with difficult budgetary decisions, and several “relatively new” vocational programs were closed, summer programs cut, and teacher travel limited. An example of how this expansion and then downsizing of federal funding affected staffing of local agricultural education programs was reflected in the rise and then fall in number of secondary vocational agricultural teachers in an Ohio metro-urban county displayed in Table 4 (p. 6). In addition to readjusting complex vocational funding formulas and eliminating programs, the 1984 Perkins Act required that state and local governments take responsibility for the leadership of vocational education policy making and programming (class notes, EDVT 3000, Dr. L.E. Miller, The Ohio State University).

Subsequent Carl D. Perkins Vocational and Applied Technology Education Act Amendments of 1990 and 1998 continued to acknowledge the states’ leadership role in vocational education policy and program development whereas the federal government’s role was defined in terms of oversight compliance and financial support.
in these acts. Additionally, the 1998 Amendments addressed the federal government’s desire to increase the academic rigor of vocational training (H.R. 1853, 1998).

On the state level, as early as 1989, Ohio enacted House Bill (H.B.) 140 to coordinate and direct state planning of vocational education policy and programs (cited in Peasley, 1990). Particularly, H.B. 140 mandated an urgency to modernize the vocational education programs’ curricula to respond to industry’s needs for skilled workers. In their role as educational policy makers, the State of Ohio legislature mandated the Ohio Department of Education (ODE) reform and modernize Ohio’s vocational programs. Peasley (1990) described H.B. 140’s impact on Ohio’s vocational education programs and summarized the goals for vocational education as set forth in Ohio’s Modernization Plan:

These goals were set to guide the plans and policies to be used in vocational education programs across the State. The goals developed were as follows:
1. Broaden the scope of the vocational education experience for each student.
2. Improve access to enhanced educational opportunities.
3. Emphasize rigorous student and program outcomes.
4. Focus on lifelong individual needs.
5. Provide career focused education for all students.
7. Assure efficient resource use.
8. Accelerate professional development.
9. Extend alliances with business, industry, labor, and governmental agencies.
10. Enhance public support of vocational education.
11. Maintain emphasis on vocational education system improvement and renewal. (p. 18)

By the late 1990s, Ohio’s Modernization Plan had a profound impact on secondary agriculture education programs. Leadership of these programs continued to
be provided by the Ohio Department of Education and local school and planning districts. Under this leadership, rural agriculture programs diversified farm production programs to include additional programs in agriculture science, agriculture business, and agricultural mechanics while urban and suburban programs (including school districts in transition from rural to urban) diversified their agriculture programs to include horticulture, equine science, environmental management, natural resources, and small animal production and care. In addition to preparing students with particular content knowledge and skills in these diverse curricula, all secondary agriculture programs contained a predominate workforce development component.

In summary, the role played by federal, state, and local governments in vocational education, including secondary agricultural education, policy making, program planning, and funding has varied throughout the years since federal support of formal vocational education began in 1917. Initially, the federal government played a limited role in policy making and program support of vocational education, while the states and local school districts assumed the predominate role. However, by the 1960s, education in general and vocational education in particular was seen by the federal government as a means to address societal problems, such as unemployment, civil rights, and sex discrimination; consequently, the federal and state governments exchanged leadership roles in vocational education. During that time, federally mandated legislation effectively expanded and maintained agricultural programs in urban areas and gave handicapped, socioeconomically disadvantaged students, and women greater access to vocational education. By the 1980s, the movement to
downsize the federal government led to a reorganization in leadership roles; the federal government gave the state and local governments once again the responsibility to direct vocational education programs. In 1984, the federal government, seeking a more limited role in vocational education, shifted the responsibility of vocational education leadership and program direction back to the states and local school districts. Presently, the Ohio Department of Education Agricultural Education Service Office oversees the specific policies and programs affecting agricultural education and negotiates these policies and programs with local public school districts.

**Secondary Urban Agricultural Education Programs**

Secondary urban agricultural education programs are not new in agriculture education. However, since the enactment of the 1963 and 1968 Vocational Education Act and Amendments, urban agricultural education programs have been given specific attention in the literature. Unfortunately, most of this literature is based on anecdotal evidence; few research studies on urban agricultural education programs have been reported (Russell, 1999). Only recently has there been an effort to coordinate and facilitate urban agricultural education programs on a national level (Martin, 1995).

In this sub-section, the history of secondary urban agricultural education programs is reviewed with the intention of justifying a definition of what constitutes a secondary urban agricultural education program. As with all educational programs, agriculture education has experienced growth and diversity of its curricula. These changes in curricula will continue into the future and will contribute to the long-term
viability of urban secondary agricultural education programs. Nevertheless, a baseline definition for urban agricultural education programs is needed. Also, the similarities and differences reported between rural and urban (suburban) programs are compared to illustrate identified challenges and opportunities for urban agricultural education programs with intentional emphasis on small animal production and care programs.

**Definition of urban agricultural education.**

Secondary urban agricultural education programs began being reported in the literature shortly after federal funding for vocational programs was established by the Smith Hughes Act of 1917. In his book of secondary agricultural education case studies, Nolan (1927) observed several high school agricultural programs in cities, all of which had a farm-based curriculum:

Case No. 1 is a record of a class exercise conducted with eight high-school boys from an agricultural class in Urbana, Illinois. The students were members of the freshman and sophomore classes and represent the type of country and city boys attending a city high school.... Case No. 14 is a record of a class exercise conducted with nine freshman boys of a class in agriculture in the city high school at Knoxville, Tennessee.... Case No. 19 is a record of a class exercise conducted with twelve boys of the junior and senior years of the agricultural class in Owatonna, Minnesota. This is a prosperous community and although a city, the interest in agriculture is good. (pp. 17, 110, & 142)

In the 1920s, Nolan (1927) defined a secondary urban agricultural program as being located in a city (urban) or near a city (suburban), regardless of program area or population. Even by the late 1950s, agricultural programs in Ohio were not reported by program area (e.g., production agriculture, horticulture); they were simply reported
as agricultural education programs. While most appear to have had a farm-based curriculum, program curricula are not verifiable (Agricultural Education Service, 1959). Not until the Vocational Education Act of 1963 and following Amendments of 1968 did leaders in agricultural education intentionally focus on increasing urban programs and begin reporting on the diversification of agricultural program curricula.

McClay (1964) stated that secondary vocational agriculture programs needed to expand in two areas: urban schools and adult education. Since that time, several urban and suburban agricultural education programs have been established; several have been highlighted in the Agricultural Education Magazine (1982; 1984). Because there has been some ambiguity in defining urban agricultural education programs, what constitutes an urban or suburban agricultural program has not been defined clearly in the literature.

Russell (1999) defined urban secondary agriculture education as “agriculture education programs that serve communities with 50,000 population or more or metropolitan areas (groups of adjacent communities) with a population of 100,000 or more” (p. 7). Although he did not elaborate on how he arrived at this definition, it is assumed that these population numbers were drawn from U.S. Census schedules. The U.S. Census classification of cities, urban, and metro-urban areas has changed though the years; presently, Russell’s definition would apply to urbanized areas as defined by the U.S. Census but not cities having populations between 2,500 and 50,000. Smaller urban areas are referred to as urban clusters by the U.S. Census Bureau; urban clusters are incorporated places, cities, towns, villages, boroughs, or comunidades and
zonas urbana in Puerto Rico. The U.S. Census Bureau does not have a separate designation for suburban areas; they are assumed to fall within the urban cluster or urbanized area classification, depending on population size (U.S. Department of Commerce, 2000).

Russell’s definition of urban agricultural education programs did not specify or limit the agricultural curriculum. Although farm-based and non-farm–based curricula are being taught in urban agriculture programs, the trend appears to be toward the evolution of production agriculture to agriscience to non-farm–based curricula. The first non-farm–based curriculum to be reported in secondary urban agricultural programs was ornamental horticulture and allied professions. In 1964, McClay reported on the urban agricultural education curricula:

Vocational education programs in ornamental nursery work, turf management for parks and golf courses, greenhouse work, grounds and estate management and services, garden store management, landscape contractors, flower store management, growing vegetables and small fruits for market, and similar areas represent likely directions of vocational agriculture in urban schools. (p. 60)

In 1982, Parker noted additional urban agricultural education curricula, “other areas of agriculture that affect the quality of life of all urban dwellers ... [include] agricultural mechanics, small animal production and care, agricultural products processing, and environmental management” (pp. 5-6).

Although considered a farm-based curriculum, the agriscience curriculum in urban schools has evolved from its historic roots in production agriculture to a
science- and research-based curriculum. Hagen and Sherman (2000) noted these changes in urban agriscience classrooms:

Today’s urban agri-science students are working with DNA strands, growing plants in test tubes, raising fish in greenhouses, and growing plants hydroponically. While working in laboratory settings the urban student is learning the same concepts as the rural student, but perhaps with more focus on the latest technology.... The trends in the urban market are focusing more on the integration of science and agriculture and using new mediums to learn the same basic concepts related to agriculture and science. (p. 12)

In 2000, the Ohio Department of Education (2001a) recognized 12 curricula or program areas (also referred to as certification/licensure taxonomies) within agricultural education: production agriculture, agriscience, agribusiness, agricultural industrial equipment, equine science, food science, animal production and care, zoo animal production, horticulture, natural resources, environmental management, and other agriculture (i.e., planned experiences in agriculture for special needs students). Although these program areas were never exclusively classified as being either rural or urban, there has been an historical tendency for secondary agricultural programs in rural areas of Ohio to transition from farm-based curricula to either agriscience or agribusiness, while urban programs have been non-farm–based curricula. These curricular changes have been apparent in the agricultural education programs in the Ohio county where this study was conducted.

During the past 25 years, this county has grown in population. Once considered rural, by 1999 this county was one of the largest counties in the state. Although this county has continued to grow in population, the number of secondary
agricultural programs offered in the county has not. In 1970, of the 12 secondary agricultural education teachers in this county, six and a half (FTEs) taught farm-based curricula, production agriculture, agribusiness, and agricultural mechanics; five and a half (FTEs) taught horticulture. By 1999, of the 13 secondary agricultural education teachers in the county, three taught farm-based curricula, eight taught horticulture and two taught small (companion) animal production and care (Table 5, p. 7).

Taking into consideration the historical background of secondary agricultural education programs and the present U.S. Census Bureau classification system of metro-urban areas of the country, a definition of secondary urban agricultural education programs should be based on curricula taught, geographic location, and population density. The definition should be dynamic and change with the development and implementation of new agricultural education curricula and unforeseeable changes in the classification of metro-urban areas by the U.S. Census Bureau. In this study, secondary urban agricultural education programs were operationally defined as programs in which students receive formal instruction in a four-component (i.e., classroom, laboratory, FFA, SAE) agriculturally related curriculum at the secondary level in an urban cluster or metro-urban area, as defined by the U.S. Census Bureau. Furthermore, although some urban agricultural programs offer farm-based agricultural production curricula, the tendency has been to transition these programs into agriscience and non-farm–based agricultural curricula such as but not limited to animal (companion and zoo) production and care, environmental
Components of a Secondary Agricultural Education Program

Phipps and Osborne (1988) recognized four integrated delivery components of a secondary agricultural education program: classroom instruction, laboratory instruction, FFA, and SAE or job placement. In this sub-section, the four components of a secondary agricultural education program are reviewed. The literature discusses successful vocational agricultural programs as those programs that integrate these four delivery components into a seamless program. However, rarely in the literature are classroom and laboratory instruction treated independently; rather, classroom and laboratory instruction are combined as one component, while FFA student participation, and SAE projects or job placements are given separate treatment, albeit with some overlap. Other components of an urban secondary agricultural education program are discussed in Chapter 4.

Teachers in the agricultural classroom and laboratory.

The key individual in empowering students to achieve and develop their skills in the agricultural education classroom is the teacher (Newcomb, 1977; Newcomb, McCracken, & Warmbrod, 1993). Teachers not only deliver educational information, they are also responsible for facilitating the learning opportunities in the classroom and laboratory such as assigning laboratory work stations, presenting problems to be
solved, coordinating team and group assignments, and programming diverse teaching methods (e.g., films, field trips, games, guest speakers). Newcomb et al. (1993) described education as an interaction between teaching and learning, between teacher and student:

[Teaching is] guiding and directing the learning process such that those who are learners acquire new knowledge, skills, or attitudes; increase their enthusiasm for learning; and develop further their skill as learners.... [It is] clear that the learner, as well as the teacher, plays a central role in the teaching-learning process. (p. 21)

Phipps and Osborne (1988) focused on the teacher in the learning process. They listed several characteristics of a successful agricultural teacher, including experience in an agricultural program specialty, character and personality, appreciation of the breadth and diversity of the agricultural industry, leadership, commitment to teaching, commitment to students, creativity and enthusiasm, confidence, neatness, courtesy and manners, correct attitude, willingness to cooperate, professional ethics, willingness to work, intelligence, emotional maturity, health, general education and broad interests. Of all these characteristics, Phipps and Osborne listed commitment to students as the most practically significant characteristic of a successful teacher:

Above all, teachers must remember that their primary role in the public schools is to nurture and contribute to the educational, social, and personal development of people.... Even the most difficult students will respond to teachers who provide encouragement and strive to build positive self-concepts in students. (p. 135)

Researchers have studied the characteristics of effective teachers. Reviewing more than 50 research studies, Rosenshine and Furst (1971) identified 11 variables of
effective teachers that were significantly correlated to student achievement. The five teacher behaviors with the strongest positive correlation with student achievement were clarity of directions, explanations, and concepts; variability in teaching methods, delivery, and assessment; enthusiasm for the subject matter and teaching; task-oriented and/or businesslike behavior; and promotion and encouragement of positive learning opportunities. Rosenshine and Furst cautioned that their findings were based on process-product studies and not experimental studies. Furthermore, they stated that the outcome variable, student achievement, was restrictive; and that future studies should consider “other important outcome variables, such as student attitudes toward self, school, and subject area” (p. 43).

Intermeshing effective teaching with positive student outcomes has been demonstrated in successful agricultural education programs. Newcomb et al. (1993) listed 13 principles of effective teaching and learning. They outlined how agricultural education teachers could put into practice these 13 principles: organization, structure, clarity, meaning, readiness, motivation, success, reward and reinforcement, directed learning, student inquiry, problem solving, practice, and supervision of practice. “Teachers who understand the factors undergirding effective teaching and learning are able to plan, deliver, and evaluate instruction that results in the acquisition of high levels of competence by those who are taught” (Newcomb et al., 1993, p. 26).

Effective teachers, therefore, use a variety of techniques when teaching includes an understanding of how and why students learn. This understanding of the student learning process enables teachers to adjust their teaching style and methods to
their students’ learning styles. Examining both student achievement and student attitude, Flanders (cited in Etuk, 1980) reported that:

... the more committed and successful teachers were better able to range along a continuum of interaction styles which varied from fairly active, dominant support on the one hand to a more reflective discriminating support on the other. Interestingly, those teachers who were not committed and successful were the very ones who were inclined to use the same interaction styles in a more or less rigid fashion. (pp. 27-28)

Reporting on the behavioral profile of vocational agriculture teachers, Rheault (cited in Cook, 1987) concluded that “effective vocational agriculture teachers lecture less than 50 percent of the time and prepare students for learning by providing successful learning activities at each student’s ability level, yet challenge the student to higher scholastic achievement” (p. 3). In the summary of his findings, Cook (1987) discussed how research on effective teaching has changed through the years:

Research has shifted away from the affective domains of learning toward the cognitive domains.... Effective teachers orchestrate many different behaviors while teaching. Researchers must look for these combinations of behaviors and attributes in order to determine what makes one individual teacher more effective than another. (p. 11)

In his systematic classroom observational study of six effective and six less effective vocational agricultural teachers in Ohio, Cook (1987) found successful student achievement correlated with five specific teacher behaviors. He concluded that, compared to less effective teachers, effective teachers, “demonstrated greater enthusiasm in their instruction ... had fewer discipline problems ... were more prepared to teach ... used more discussions and demonstrations ... [and] incorporated their students into the lesson” (p. 73).
**Students in the agricultural classroom and laboratory.**

As reviewed in the studies above, greater teacher-student classroom interaction has correlated to higher student achievement, while student behaviors (e.g., attitude, self-image, career aspirations) have been reported as either descriptive (e.g., group statistics) or anecdotal. Student characteristics (i.e., demographics) and behaviors beyond achievement have recently become of increased interest to educators and researchers as agricultural education programs expand into urban areas attracting a more diverse student make-up. Recent literature on student characteristics and behaviors in secondary agricultural education has focused on protected student groups.

Protected student groups (e.g., disadvantaged, handicapped, racial) have been of particular interest to vocational educators, perhaps because of the legislative acts and amendments previously discussed. Additionally, vocational educators have recognized that these disadvantaged, handicapped, and racially diverse students comprise a significant percentage of students in urban vocational classrooms, thereby offering teachers unique educational opportunities and challenges.

Students that are disadvantaged either academically or physically must be tested and have a written Individualized Education Plan (IEP) that the agricultural teacher must consider when designing and implementing programs and assessing the individual student. Phipps and Osborne (1988), in addition to specific vocational acts and amendments with regard to these students, also reviewed the essence of the Education for All Handicapped Children Act of 1975 (P.L. 94-142), which requires:
... that students with special needs be placed in the least restrictive educational environment. That is, handicapped students must be ‘mainstreamed’ into regular classes, except in severe cases where special programming is necessary. [The Act also requires] the development of an individualized educational program (IEP) for every handicapped student. The IEP shall be developed annually and be based upon a thorough assessment of student’s educational difficulties and needs. (p. 231)

Clark (cited in Jewel, 1993) summarized the impact of students with special needs on vocational education by noting that “vocational teachers often indicate their programs have become ‘dumping grounds’ for students who can’t succeed in more rigorous academic courses. Statistics validate the fact that today, nearly one-third of our population [enrolled in vocational programs] can be classified as economically, culturally, racially, or ethnically disadvantaged” (p. 10).

The negative connotation of “dumping ground” and negative stereotypic classroom behaviors of disadvantaged and handicapped students are present in the literature. Jewel (1993) reported, “The academically disadvantaged student especially lacks self-confidence and tends to rely on others for support. This increases dependency on others and decreases individual initiative” (p. 12).

However, not all vocational educators have allowed these negative biases toward disadvantaged and handicapped students to deter them in their delivery of quality individualized programs. Downey (1985), based on her personal teaching experiences, confirmed the positive impact of enrolling IEP students into an agricultural education program:

The positive characteristics of the disadvantaged and handicapped students far outweigh the negative. These students have an ability to be
sensitive and caring individuals, an eagerness to please others as well as themselves, and a strong sense of loyalty. They can grow to be responsible, honest citizens who are gainfully employed and form the backbone of our society. (p. 5)

Phipps and Osborne (1998) also noted the positive influence that disadvantaged and handicapped students can have on agricultural programs, on condition that the agricultural education teacher is involved with structuring meaningful and appropriate IEPs for them:

Often, agricultural teachers know students with special needs better than any other teacher in the school. They can provide invaluable insight into the most appropriate activities for these students. Furthermore, participation in the IEP planning process ensures incorporation of activities pertaining to the agricultural classes. (p. 234)

While teachers have mandated administrative support and additional counseling services available to mainstream IEP students into their classrooms, the integration of racial and ethnic minority students is left to individual teachers. Jones and Black (1995), reporting on a national study of secondary agricultural educators, found that “agricultural science teachers, most of whom are white males, have not been adequately prepared to educate students who bring multicultural backgrounds to the classroom” (p. 42).

Talbert and Larke (1995), in their quantitative study of more than 1,000 students in 60 secondary agricultural programs in Texas, found that student perceptions and attitudes toward agriculture impacted their career aspirations. “Minority students [compared to nonminority students] had more negative perceptions regarding agriculture and agriculture education ... and were less likely to see
opportunities for themselves in agricultural careers or to perceive agriculture as
diverse” (p. 38).

Unfortunately, agricultural education programs have not done well in enrolling
and retaining racial and ethnic minority students. However, the literature does suggest
some possibilities to improve this situation. The teacher’s attitude toward integrating
racial and ethnic minority students into the agricultural education program has been
shown to positively impact students. Jones and Bowen (1998), having conducted a
qualitative assessment regarding African-Americans enrolled in agricultural science
courses and their teachers in Mississippi, North Carolina and Virginia, reported that:

Agricultural science teachers’ attitudes toward teaching and students
had a significant impact on African American enrollments in
agricultural science courses. Those teachers who could relate well to
all students and were enthusiastic about their programs had the highest
number of African American students in their courses. In addition,
programs that had big technology, science-based curricula enrolled
more African American students than traditional production oriented
programs. Also, schools with an African American agricultural science
teacher had higher percentages of African American students in the
agricultural science program. (p. 19)

Talbert and Larke (1995) similarly reported that minority students needed
minority teachers:

Most agriscience students had a white teacher (93%). If, as the
literature suggests, students need role models of their own ethnicity to
guide them into educational programs and subsequently into
occupations, then minority students will continue to perceive
agriculture occupations as not desirable for them unless more minority
teachers are employed. (p. 43)

The literature reports that well-prepared teachers are the key to successful
secondary agricultural programs. Teachers who interact with their students and
promote diverse participatory learning opportunities have successful programs. Most secondary agricultural education teachers in the United States are European-American men, while secondary agricultural education students are of diverse academic and ethnic backgrounds.

**Challenges and opportunities for urban agricultural education students and teachers.**

Unlike their rural counterparts, urban students do not have the agricultural background knowledge (cultural capital) of children raised on farms. Farm children see and encounter agricultural and scientific processes day-in and day-out; urban students do not have these types of opportunities. For many urban students, simply learning the agricultural vocabulary is like learning a foreign language (Easter, 1982):

Rural students often enter the agricultural classroom with a vast background of knowledge in both plant and animal areas. Many understand life cycles, the effects of weather on crops, and have an interest in the economics and efficiency of the agricultural industry.... To the urban student, agriculture rarely has an influence on the family lifestyle because their parents probably work in an occupation not related to the agricultural industry. In the urban situation, the family prosperity usually does not depend on whether the trees or plants were pollinated, the weather, or whether the hay has cured.... The greatest difference may likely be in the degree to which each understands the sequence of plant [or animal] development. (pp. 13-14)

An urban agricultural student’s lack of “agricultural literacy” can also be reported as a lack of “linguistic capital” in agriculture. Agricultural literacy is a form of cultural capital that is imparted to students by their family members and experiences. The influence of linguistic capital in agriculture is felt especially when
students are involved with understanding or manipulating complex agricultural problems and during assessment; students with a firm control of agricultural literacy are better at problem solving and test taking in agriculture than are students who lack this knowledge and experience.

Bourdieu and Passeron (1990), in their study of academic literacy and student achievement in higher education, found that linguistic capital is as essential element for students to succeed in school:

Language is not simply an instrument of communication: it also provides, together with a richer or poorer vocabulary, a more or less complex system of categories, so that the capacity to decipher and manipulate complex structures, whether logical or aesthetic, depends partly on the complexity of the language transmitted by the family. It follows logically that the educational mortality rate can only increase as one moves towards the classes [communities] most distant from scholarly [agricultural] language. (p. 73)

Besides this lack of linguistic capital in agriculture or general agricultural knowledge, Gless (1993) listed other major challenges that exist for urban students enrolled in agricultural education programs, including lack of home support, transportation needs, and limited opportunities for FFA competitiveness.

Just like the students in urban America, parents, family, and friends have either a misconception of agriculture or they lack the knowledge and experience that rural parents have. It is very hard for them to support something they do not understand or lack the time to learn about. In many cases they feel agriculture classes are only for those who want to become farmers. They have no idea of the many different areas of employment in the agricultural industry.... Many urban students (especially freshmen and sophomores) have problems with transportation. Many families have both parents working, students come from single parent homes, or families do not own suitable vehicles to transport equipment, supplies, and animals. They become totally dependent on the agriculture department for transportation,
which poses greater demands on the teacher and the program budget.

Urban FFA members find it almost impossible to compete against rural FFA members for proficiency and degree programs. Most award programs center around two factors: quality and quantity. The urban student can develop a quality program, but ... it is very difficult for them to develop a program of sufficient scope. (pp. 13 & 21)

DeLauder (1982), comparing suburban agricultural programs with rural programs, suggested that suburban teachers have more challenges when organizing an agricultural program than rural teachers because:

(1) more ‘selling’ of the [urban] program is required, (2) more emphasis on career possibilities is necessary, (3) additional planning is often required in order for students to have SOE, and (4) FFA activities need to be geared toward the background and needs of the students. (p. 8)

Osborne and Reed (1984) also recognized the urban agricultural teacher’s role in meeting the challenges of an urban program, especially with regard to SOEs:

“Factors such as limited home visitation, little or no travel support, program duration (one or two years), and lack of student identification with the FFA and agriculture all affect the teacher’s ability to make the SOE ... successful” (p. 17).

Another challenge for urban agricultural education teachers is the limited amount of time available to them to spend in community service and with each student’s family. In his editorial “Can Vo-Ag Adapt?” Lee (1982a) suggested that urban agricultural teachers are perceived differently in their communities than rural agricultural education teachers:

Vo-ag teachers in rural areas are often perceived as community and agricultural leaders. There may be considerable visibility among the citizens. In urban areas, teacher visibility is often less. The teacher may be more school-based in program delivery. There may be less
DeLauder (1982) examined the multi-year program design when comparing the continuity of traditional rural agricultural education programs with urban programs. He argued that the traditional four-year agricultural education program, in which each year’s curriculum builds upon the previous year’s education, is not a valid organizational system for urban programs:

Teaching agriculture in a suburban area ... calls for a good deal of variation from the traditional [consecutive] Ag I, II, III, and IV system. [Urban and suburban] students with little or no firsthand agriculture experience are seldom willing to make a four-year commitment to a program.... As a result, every [agricultural] course offering [at this school] is independent of every other course and there are no prerequisites. (p. 6)

In summary, students and teachers in urban agricultural programs, in contrast to their rural counterparts, are confronted with different challenges and opportunities. Rural programs are often programs of three or four consecutive years; urban agricultural education programs generally offer only one- or two-year programs. Additionally, urban students often lack the linguistic or cultural capital associated with agriculture. Urban agricultural students have limited opportunities at home to organize traditional SAEs and long-term FFA projects; therefore, more nontraditional and creative SAEs and FFA projects are appearing in urban programs. Despite these limitations, urban secondary agricultural programs have great potential for growth. There are more professional opportunities to work in urban-based agricultural jobs and careers, and more technically trained people are needed in the industry. Greenhouse
and garden shops, golf courses, veterinary clinics, animal research facilities, zoos, pet shops, and pet grooming salons are a few of the potential job placement sites that are available to graduates of urban agricultural education programs.

**FFA student participation.**

The third component of secondary agricultural education programs, according to Phipps and Osborne, is FFA. Students enrolled in secondary agricultural education programs have the opportunity to join a national agricultural student organization called the FFA; however, not all agricultural education students join FFA. In some programs membership in FFA is optional, while in other programs teachers make FFA membership mandatory for their students. The FFA is organized on several levels. Besides the local or school FFA chapter, there are district, state, and national levels of the organization. The national FFA organization defines the FFA as (cited in Phipps & Osborne, 1998):

... an educational, nonprofit, nonpolitical youth organization of voluntary membership designed to develop agricultural leadership, character, thrift, scholarship, cooperation, citizenship, and patriotism.... The FFA is an intra-curricular part of vocational education in agriculture in the public school system of America. (p. 8)

Defined as an intracurricular part of an agricultural program, the level of participation and amount of FFA activities in which each local chapter participates is, nonetheless, determined by individual teachers. Participation in leadership training and career development events is both time consuming and expensive. Teachers work closely with local FFA leadership teams (which can be composed of students, alumni,
and advisory committee members) to organize and raise funds for FFA events. Although traveling to in-state and out-of-state events are fun and exciting for secondary students, teachers must ensure that these events are educational and function as an intra-curricular component of an individual student’s overall agricultural educational experience (Phipps & Osborne, 1988):

The diverse programs and activities in FFA chapters are focused primarily toward the development of leadership skills in the individual student.... Communication skills are improved through involvement in meetings, banquets, community presentations, and the like. The broad array of contests in the FFA also serves to refine and reinforce technical skills learned in vocational agriculture.... Democratic principles are taught by student participation in group processes.... Students need to be a part of an active, worthwhile organization that is fun, challenging, rewarding, and of personal value. (p. 371)

DeLauder (1982) reported that FFA membership could be used as an incentive to enroll students in agricultural education programs: “FFA offers many students the opportunity to develop social and leadership skills.... evidence of past successes by judging teams, a classroom full of plaques, banners, and trophies, and the knowledge that winning teams take trips, doesn’t hurt at all!” (pp. 7-8).

In their study in North Carolina on factors influencing an agricultural education student’s perception of the FFA and the decision to join or not join the FFA, Croom and Flowers (2001) found that “students tend to join and participate in the FFA based upon the organization’s ability to meet a student’s need for a sense of belonging... the social aspects of the organization were motivating factors in their desire to be members” (p. 28). Croom and Flowers further concluded that these results supported
Maslow’s Hierarchy of Needs theory in that adolescents have a need to belong to social groups (Croom & Flowers, 2001):

At an age when most students are becoming eligible for FFA membership, they are also entering a period of human growth and development characterized by a need for contact, intimacy, and a sense of belonging. The implications are significant for the FFA and agricultural education in that students tend to join and participate in the FFA based upon the organization’s ability to meet a student’s need for a sense of belonging.... Based upon the responses of members, the social aspects of the organization were motivating factors in their desire to be members. (p. 35)

While these findings would support the use of FFA membership as an enticement to enroll students in agricultural education, other research has found that students view FFA membership as a barrier to their enrolling in agricultural education programs. Scanlon, Yoder, Hoover and Johnson’s study on enrollments in secondary school agricultural education programs and FFA membership presented to the National FFA Board of Directors in 1989, excerpted in Croom and Flowers (2001), reported that non-FFA students believed that “FFA activities were not interesting, take too much time out of school, and interfere with other [extra-curricular] activities” (p. 29).

As one of four components of a secondary agricultural education program, membership in the FFA student organization enables students to participate in leadership development programs and skills events. Teachers value the FFA not only for these opportunities but for the sense of belonging that membership provides students. While FFA membership and winning trophies and awards motivate some students to enroll in agricultural education programs, other potential students see FFA
membership as a deterrent to their enrolling in what they perceive to be a “farmer-type” organization and by extension an undesirable program.

**SAE and job placement.**

The fourth component of a secondary agricultural education program, according to Phipps and Osborne (1988), is SAE. The Supervised Agricultural Experience (SAE), previously referred to in the literature as SOE(P)–Supervised Occupational Experience (Project), is an individualized out-of-class agricultural related student project. In some programs, SAE projects are either summer only or year-long projects; in other programs, SAE projects or job placements occur during the senior year or capstone course of a program; while other programs differentiate the SAE project from job placement. Phipps and Osborne justified the role of SAEs (SOE and SOEPs) in a complete agricultural education program:

SOE programs can “bridge the gap” between school and work by providing opportunities for application and transfer. While classroom experiences develop understanding of principles, genuine understanding and problem solving occur when students are faced with real problem situations that are solved only by application of principles. In general, laboratory experiences provide skill practice under simulated conditions, not transfer and application under real conditions. Thus, SOE programs can fill a significant void in the application of acquired knowledge, skills, and attitudes. (p. 313)

While SAEs are generally short term, one day to two weeks, some agricultural programs include a longer term, two to six months, job placement, or ownership experience under the SAE umbrella. Lee (1998) differentiated four types of SAE

Although students suggest options for their SAE projects or job placement sites and although immediate or daily supervision of students may be done by family members (at home or on the farm), employers (job placement), or other agricultural professionals (internship), the students’ teachers are ultimately responsible for approving appropriate SAEs and job placement sites, overseeing students as they set up or make necessary logistical arrangements, following-up, and assessing each student’s progress. Phipps and Osborne (1988) specified five components of the teacher’s role in SAE (SOE) projects: “planner, facilitator, supporter, evaluator, and diagnostician” (p. 18).

The teacher’s role in SAE projects is crucial to a well implemented and meaningful experience. However, a teacher’s negative attitude toward SAE projects can also influence student participation in SAE experiences. Dyer and Osborne (1995), analyzing research in supervised agricultural experience data, found that “teacher attitudes and expectations strongly influence SAE participation. While teachers claim to support the concept of SAE, many fail to implement the programs fully, resulting in decreased participation by students” (p. 6). Teachers have reported other barriers to effective SAEs. Steele (1997) analyzed the decline in use of supervised agricultural experiences in the state of New York. He reported that teachers viewed “a low level of summer employment, limited release time for SAE supervision during the school day, decreased assistance with transportation costs, and
complicated scheduling problems with competing [extra-curricular] school activities...
...as the most formidable barriers identified” (p. 49).

Foster (cited in Steele, 1997) suggested that a decline in the use of supervised agricultural experiences in Nebraska was because of the “lack of facilities, low student desire, inadequate teacher time for supervision, student participation in other school activities, and various economic factors” (p. 49). Lambreth (cited in Steele, 1997) found a similar decline in the use of SAEs in agricultural education programs in Tennessee: “a lack of agricultural background [of the students], inadequate resources, and large student-teacher ratio [were] inhibiting factors [to SAE participation]” (p. 49).

Arguing in favor of the integration of SAEs into secondary agricultural education programs, McCracken (1984) wrote that the benefits to students of SAEs go beyond the acquisition of new content knowledge and an opportunity to practice this knowledge in real world situation. SAEs also give students an opportunity to begin to develop workforce skills and dispositions:

SOEP programs serve many purposes, only one of which is growth into an agricultural occupation.... Students develop personally in the areas of responsibility, financial independence, managerial ability, work habits, cooperation, self-concept, initiative, and commitment to goals. They develop occupations, participate in financial planning, gain work experience, and develop special areas of expertise. (p. 19)

In summary, SAEs provide students with the opportunity to obtain practical experiences in their program areas though real-world experiential learning. Also, SAEs can afford the opportunity to explore new and different career opportunities in
specific agricultural program areas. Even though SAEs are done outside the classroom/laboratory, teacher involvement with SAE planning and implementation is crucial for SAEs to be successful and effective. Although the benefits of the SAE component are well documented, SAEs are sometimes neglected or minimized in secondary agricultural programs because of the inordinate amount of time and commitment, often uncompensated, necessary on the part of the teacher.

In addition to SAEs, three other components of a secondary agricultural education program are classroom instruction, laboratory instruction, and FFA (Phipps & Osborne, 1988). Although it has been reported that barriers prevent student participation in SAE projects and FFA activities in some agricultural education programs, these barriers are not insurmountable. The agricultural education teacher is the key person, identified by the literature, to surmount these obstacles by establishing meaningful individualized agricultural education experiences for each student in and outside of the formal classroom and laboratory. Furthermore, the teacher has been shown to be the most influential person in a student’s decision to participate or not in an SAE project or job placement and the extent to which FFA activities are integrated into the agricultural education program. Facilitating out-of-class SAE projects, job placement, FFA skills events, and day-to-day classroom and laboratory management demand an organized and supported teacher.
Small animal production and care programs.

Small animal production and care is one of several urban agricultural education programs offered in the state of Ohio. Small animal production and care programs instruct students in the fundamentals necessary for college preparation program in pre-veterinary or veterinary-technician career or a workforce career in operating, managing, or working in a pet shop, animal grooming salon, or laboratory animal research facility. Small animals are referred to in the literature as companion animals, pets, or research animals. Small animal production and care programs do not include farm or zoo animals. Although the small animal production and care program is the recognized certification/licensure taxonomy for this program in the state of Ohio, it is also known as the animal management technician program (AMT). Whereas small animal production and care identifies the program’s curriculum, animal management technician identifies the program’s desired workforce career outcome. In FY 1999, there were 21 teachers for 15 small animal production and care programs in the state of Ohio, all of which were located in metro-urban areas. In the same year, 365 students, of which 78% were female, were enrolled in small animal production and care programs (Office of Career-Technical and Adult Education, 2000).

Phipps and Osborne (1988) offered that students enrolled in small animal production and care programs in urban areas benefit from both course content and the therapeutic value of animals:

Many youth seem to have a special affinity for or interest in raising and caring for plants and animals.... For some, it may also have a mental health function.... Agricultural instruction may serve an important
function in the education of the problem students in a school, the potential dropouts. For emotionally disturbed students at all levels of intelligence, laboratory-centered agricultural instruction may have a calming or therapeutic value. Caring for and studying plants and animals has a desirable emotional influence on most persons. (p. 27)

Gless (1993) suggested that the need to love and nurture animals when denied at home explains why some students enroll in small animal production and care programs. “Another factor [why students enroll in small animal programs] is a love for animals; they are not able to have them at home so they enroll in an animal science class” (p. 21).

Once enrolled in a small animal program, students have many opportunities to experience working with and handling small animals. Johnson (1980) described the activities of a typical small animal production and care program:

[Small animal production and care program students] spend three hours each day grooming dogs, caring for the school and FFA animals, performing laboratory animal health checks, and operating the pet shop.... In the animal health field, students learn handling, sexing and methods of identifying laboratory animals. Cats, dogs, mice, rats, hamsters, guinea pigs, rabbits, and monkeys are used for individual animal identification, blood drawing, and practicing handling and restraining techniques. Other important skills in animal health are identifying anatomical parts, testing for and identifying veterinary biologicals, and mixing and using disinfectants. (p. 11)

Program completers were reported to have found many work opportunities upon graduation; however, many of these jobs were minimum wage, entry level jobs. A few entrepreneurial opportunities were also reported. Parker (1982) identified several of these jobs:

... potential employers of the youth trained through urban vocational agriculture programs [include] veterinary hospitals, pet shops, animal
protective leagues, zoos, and other animal-related businesses.... Many students may find it profitable to begin raising livestock for sale to research facilities, pet stores, or other businesses dealing with animals. Students may choose to open a dog grooming parlor where the cost of a hair cut for a pet may exceed the cost of having the entire family’s hair cut. (p. 6)

There are several examples in the literature of successful secondary small animal production and care programs throughout the United States. Payton (1994) briefly described one such program at the Bristol County agricultural high school in Massachusetts. This program was known as the laboratory animal technician training program. Students from anywhere in the county, including 22 cities and towns, applied for admission to the program. A reason that Payton gave for the success of this program was that the presence of major biotechnological and research industries in the area that needed trained employees.

The Laboratory Animal Technician Program started on a small scale and emphasized proper husbandry, handling, and restraint of a variety of animals. The curriculum has expanded to include topics such as aseptic technique, introductory cell culture, and laboratory animal facility design.... Students having graduated from the program are often sought after by area institutions, including hospitals, universities and private corporations, that are involved in medical research and biotechnology. Other graduates continue their education at various colleges and universities in animal science, cell biology, and wildlife biology. (pp. 6-7)

In summary, small animal production and care programs are ideally suited for urban agricultural programs. Urban students are attracted to working with and learning about small animals, including companion animals, pets, and research animals. Several job opportunities exist for graduates of small animal programs in veterinarian offices, pet shops, pet grooming salons, and research facilities.
Opportunities also exist for graduates to continue their education in post-secondary veterinary or veterinary-technician programs.

**Image of Agricultural Education Programs**

Image is the public perception of an agricultural education program. Teachers and students contribute to the public image of a given program through effective marketing. The Reinventing Agricultural Education for the Year 2020 Initiative clearly stated that “agricultural education leaders will be required to seek out additional resources and expanded financial support through effective marketing: (National Council for Agricultural Education, 1999, p. 9). Poor marketing or no marketing of an agricultural education program will lead to a poor or ambivalent public image of urban programs.

The director of the Ohio Agricultural Education Service has identified poor public image of secondary urban agricultural education programs as a reason that impedes the expansion of secondary agricultural education programs in metro-urban areas of Ohio. Urban school district board members are hesitant to build new facilities or increase budgets for urban agricultural programs when communities do not support such programs. For example, it recently took three years to negotiate and begin new ag-science and ag-management programs near Toledo, Ohio. On the other hand, existing agricultural education programs with an effective marketing strategy led by a committed teacher and supported by advisory committee members have resulted in a positive public image and strong community support. These community-supported
programs will be maintained and perhaps even expand in the future (I. Kershaw, personal communication, September 5, 2001).

Building and maintaining a positive public image of an agricultural education program are challenging and demanding tasks required of agricultural education teachers. The positive public image enjoyed by the urban agricultural education program in this case study was the result of the hard work of its dedicated teachers. The school district also had a positive image of this program as a result of student achievement, student job placement upon completion of the program, and advocacy done by the teachers, the school’s administration, and advisory committee members. The teachers’ roles in delivering quality programs and efforts to increase the visibility of the AMT program in the community, with school staff, and state supervisors contributed to the continuity of this program and will lead to the necessary support to expand urban programs in this and other school districts in the state of Ohio.

Newcomb (1982) asserted that the image of a vocational agriculture program is based on evidence that is ascertained in one of three ways: “hear-say,” direct observation, or the caliber of the product (the student). Hearsay evidence is what people hear from other people, by word of mouth, the media, newspaper, radio, or TV. Hearsay evidence is often manipulated and difficult for the teacher to control. However, the teacher is able to control what students’ families, community visitors, and district administrators observe in agricultural education classrooms, at agricultural recognition banquets, or at school-sponsored events such as county fair booths. Newcomb suggested that public venues and activities that showcase agricultural
education programs portray a positive image of vocational agriculture, as they are under the direct control of the teacher and impact community support of the program. Newcomb concluded that the product—the student—is the ultimate image-building tool for any agricultural program and therefore should be of the highest quality:

> When members of the public [including students’ families] view vocational agriculture classrooms, they ought to look like places where learning is likely to occur. Classrooms need to contain agricultural pictures, posters, displays, and books.... The vocational agriculture laboratory needs to contain modern machines, equipment, student projects, and supplies.... It [the classroom/laboratory] should deliver the image that this is a place in which students are majoring in ‘vocational agriculture,’ not ‘vacational agriculture.’ (pp. 4-5)

Phipps and Osborne (1988) also identified students as future alumni and supporters of a positive image of an agricultural education program. However, they suggested that the teacher is ultimately responsible for the image of any given agricultural education program:

> Most teachers would probably list current and former students as the best public relations tools for their programs.... Being able to attract a variety of students in terms of their ability, gender, and interests will do much to develop a positive image of the program. If key alumni and other leaders in the community become advocates of the program, then the image and base of community support will be strengthened.... In the end, developing and maintaining positive public relations is the responsibility of teachers of agriculture. (p. 128)

Roller (1982) also identified the teacher as the key individual who projects the agricultural education program’s image, finding that:

> [Dedicated teachers] strive for excellence in instruction and related activities. They develop their student’s personal, leadership, and citizenship traits as well as provide realistic training for the world of work. A quality program of vocational agriculture under the guidance
of a dedicated, hard working teacher is practically absolute assurance of a positive public image. (p. 6)

Lee (1982b) suggested that, besides the students and teacher at the local level, stakeholders at other levels of the vocational program, including state supervisors and national agricultural education administrators, also play a role in the public’s perceptions and support of vocational programs:

The real test of image is at the local level but the other levels have considerable input. For example, the characteristics of state supervision and the individuals involved in it have strong impacts on many influential groups, including legislators, leaders of farm organizations and agribusinesses, and officials of agricultural and educational agencies. The same can be said for national-level administration. (p. 3)

The literature clearly addresses why an effective marketing strategy resulting in a positive public image of agricultural education is important—funding. Secondary agricultural education programs cannot be established nor can they be maintained if they do not receive the necessary federal, state, and local dollars. The voting public and school district’s board of education members must value the services that agricultural programs provide to their students and their community (Roller, 1982).

The favorable support of and confidence in the [agricultural] program by the taxpayers are very important. Public approval is achieved when people look with favor on the program because they appreciate it, they like it, they believe in it, and they request it. People talk about it with pride and the community demands more of the same program. Civic and school leaders soon get the word. They, too, are complimentary and supportive of the program to the extent they are willing to support it with additional funding. (p. 5)

Portraying successful urban agricultural programs to the voting public and school district’s board of education members to influence their perception of
agricultural education programs is difficult. However, Hylton (1982) left no doubt that the future of urban agricultural education programs is dependent upon effective marketing through documenting and then disseminating information about successful programs to the appropriate stakeholders:

Documentation of the success of urban programs is like the word “success” itself. You know that it’s there, but can’t put your hands on it. Survival of our successful urban programs may depend on our image in urban area.... Let us never forget that we need to document those successes so that others (administrators, board members, legislators) won’t consider urban programs as merely ‘chic,’ and therefore a willing sacrifice for the budgeting axe. (p. 4)

In summary, the image of secondary agricultural education programs is the perception that the public has of the program. Students, students’ families, local administrators, state supervisors, national administrators, and especially teachers all play a role in marketing a positive public image of urban vocational agricultural education by documenting and disseminating success stories of programs and students. Policy makers and those people who influence policy makers, including the voting public, and school district board members, contribute to the continuity of agricultural education programs and are necessary allies when seeking future support to expand urban programs in this and other school districts in the state of Ohio.

**Overview of Educational Theoretical Models Used in this Study**

In addition to the literature on secondary agricultural education programs, the literature reviewed for this study also reported on noninstructional factors or variables that relate to (are predictors of) academic success or failure, in secondary educational
settings. Steinberg, Brown, Cider, Kaczmarek, and Lazzaro (1988) identified four significant noninstructional variables on high school student achievement: parents, peers, extra-curricular activities, and part-time work.

Policy-makers, researchers, and educational practitioners have focused their suggestions for school reform on influences of adolescent achievement that occur within the boundaries of the school or classroom. [Our meta-analysis], in contrast, reviews the research on experiences outside of the classroom in the family, the peer group, the extracurricular setting and the adolescent work place that may affect student achievement during high school years. (p. 5)

The role these noninstructional factors play in the academic success of secondary students has been described in different theoretical educational models, examined and used as the theoretical framework for this study: Hollins’ (1996) Mediating, Accommodating and Immersion Models and Phelan et al.’s (1998) Students’ Multiple Worlds Model.

**Hollins’ Mediating, Accommodating and Immersion Models**

Hollins’ (1996) models of learning proposed two determinant spheres of influence on a student’s academic success: the home culture and school practices. These spheres were the most significant predictors of a student’s academic performance. The importance of Hollins’ models was her identification of home practices as contributing to a student’s cultural learning style and the mediating or accommodating role that the teacher played in facilitating learning in the classroom with students of diverse cultural backgrounds.
Hollins (1996) proposed that, if a student’s two spheres—home culture and school practices—were in congruence, then that student would perform well. She labeled this model the Cultural Mediation Model:

In authentic cultural mediation schooling practices are an extension of the enculturation process found in the child’s home and local community.... Culturally mediated instruction is most likely to occur where the teacher and students share a common culture and experiential background. Where teachers and students share a common culture, they are likely to share ways of knowing, understanding, representing and expressing ideas.... During classroom instruction, new knowledge is routinely connected to what already exists in the student’s memory structure using familiar intellectual processes. (pp. 139-140)

If, however, the home and school spheres were not congruent but the teacher would intervene by adjusting the pedagogy or curriculum to minimize these differences, then the student would again be predicted to perform well. Hollins labeled this model of teacher intervention as the Cultural Accommodating Model (1996):
The primary goal of cultural accommodation is to facilitate teaching and learning in situations where teachers and students do not share the same culture and there is a standard curriculum. Teachers practicing cultural accommodation need to be knowledgeable about the students’ cultural background; however, the extensive knowledge necessary for authentic cultural mediation is not required. (p. 145)

On the other hand, when the home and school spheres were not congruent and the teacher did nothing to minimize these differences, students failed unless they made the necessary adjustments themselves. Hollins (1996) labeled this model as the Cultural Immersion Model.

The practice of cultural immersion involves repeated exposure to curriculum content, instructional processes, and socially constructed learning situations that are based on cultural practices other than those of the students’ being taught. Teachers practice cultural immersion because they believe in universalistic notions of teaching and learning, have limited knowledge of their students’ cultural background, or believe that acculturation is as important as the acquisition of academic knowledge and skill.... Explicit cultural immersion represents overt rather than covert attempts to resocialize youngsters viewed as outside the mainstream and to inculcate in them mainstream perceptions and behaviors, that is, to assist students in conforming to existing social
norms while simultaneously focusing on the acquisition of basic skills. In such programs, youngsters are encouraged to abandon their own cultural values and practices in favor of those of the majority culture. Cultural immersion largely relies on drill-and-practice or rote learning, rather than developing meaning and understanding. (pp. 147-149)

Hollins (1996) concluded that the Cultural Mediating Model was the best model to promote learning, while the Cultural Accommodating Model was the best model to utilize when students and their teacher had multi-cultural or multi-social differences. Hollins acknowledged but did not support the Cultural Immersion Model.

**Phelan, Davidson, and Yu’s Students’ Multiple Worlds Model**

Phelan et al. (1998) proposed a more complex model that included the variables of school, home, and peers. Through their case study research, they concluded that individual adolescent students from different cultural or social backgrounds were constantly negotiating among three spheres of influence as they

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*Figure 3. Hollins’ Cultural Immersion Model*
went through their educational experience. Like Hollins (1996), if the spheres were congruent, then learning was facilitated. If the spheres were not congruent, then the individual negotiated crossing from one sphere to the other to be academically successful. Although some individuals were better at crossing these boundaries than were others, the ease with which they crossed the spheres influenced their academic performance. Phelan, Davidson and Yu investigated both successful and poor performing students. Their findings showed that some individuals chose to rebel against a congruent system, while others failed to negotiate the boundaries of their noncongruent spheres. These students either dropped-out or were forced to leave school. They also investigated students who negotiated their spheres with difficulty, but who were, nonetheless, academically successful.


**Figure 4. Phelan, Davidson, and Yu’s Students’ Multiple Worlds Model**
Initially, this research study began by examining the three spheres of family, peers, and school. These three spheres and the theoretical models proposed by Hollins (1996) and Phelan et al. (1998) were used to frame the research questions guiding this study. The roles that school (especially the teacher), family and home, and peers played in students’ negotiating and accommodating educational experiences was also examined. The interaction (or noninteraction) among these spheres was used to compare and contrast successful and unsuccessful student achievement. The researcher sought to examine both Hollins’ theoretical view that the teacher was responsible for accommodating diverse students (Accommodating Model) and Phelan, Davidson, and Yu’s theoretical view that students were responsible for accommodating their diversity in the classroom.

**Summary of the Literature Review**

This review of literature examined secondary agricultural education programs, including the historical legislation of secondary agricultural education programs, the four components of secondary agricultural education programs, the definition of a secondary urban agricultural education program, and the image of agricultural education programs. Successful agricultural education programs were described in terms of student achievement and continued federal, state, and local financial support. The focus of secondary agricultural education programs was described in terms of student-teacher interactions. Student participation in classroom, laboratory, FFA, and
SAE activities or job placement were reported to be related to achievement. In addition to classroom or school related activities, student achievement was also reported to be related to noninstructional factors or variables, such as family, peers, extracurricular activities, and part-time work. Hollins’ (1996) and Phelan et al.’s (1998) theoretical models for accommodation in the classroom were also discussed.
CHAPTER 3
METHODOLOGY

This chapter articulates the research design and methods used in the study and provides justification for the use of an ethnographic and interpretive case study design. Modified grounded theory methods of data collection and analysis are explained with an emphasis on the emergent nature of data collection techniques (questions) and theory development through the establishment of evidentiary warrants supported by the data corpus. The process of obtaining permission to do research with secondary school students in an urban secondary public school is detailed as a model for future studies. Descriptions of the participants, letters, consent forms, and interview protocols are included. Data collection and analysis are described with emphasis on the researcher as primary data collection instrument, leading to a discussion of the trustworthiness of the researcher and consequently the credibility of the final report and its representation of participants’ voices. The transferability of the research findings is left to the reader.


**Research Design**

Highly complex and contextual human relationships, such as the enculturation of children through education, require a holistic research design that encompasses the multiple dimensions of qualitative or naturalistic inquiry. The methods used in these designs involve an analysis and interpretation of local and particular situations or sets of circumstances using the words and experience-near concepts of participants—portrayal of the emic view (Denzin, 1994; Geertz, 1983). Qualitative methods of inquiry promote a research dynamic “within which people [students] can respond in a way that represents accurately and thoroughly their points-of-view about the world” (Patton, 1990, p. 24). Because the focus of this study was on how students and their teachers interacted in the context of an urban secondary agricultural education program and the meanings they gave to these interactions, qualitative methods of naturalistic inquiry were chosen to elucidate the perceptions they held toward the program and their experiences within this context.

A case study research design used in this study is similar to ethnographic and interpretive research design. Geertz (1973) stated that the characteristics of ethnographic research include the interpretation of particular situations and events. Ethnography “is interpretive of the flow of social discourse; the interpreting involved consists in trying to rescue the ‘said’ of such discourse from its perishing occasions and fix it in perusable terms; ... and it is microscopic” (pp. 20-21). By microscopic, Geertz proposed that an ethnographic study is particular to a given group in a given place and time. Therefore, ethnographic case studies have been reported in the form
of participants’ stories and vignettes that seek to reveal meanings given to human experiences. The ethnographic case study design has historically been used to give anthropologists a starting point or a base point of reference when recording the cultural foundations of a particular group of people. “Ethnographic findings are not privileged, just particular” (Geertz, 1973, p. 23).

Along similar lines, Merriam (1988) proposed that case study designs, in addition to being interpretive and particular, use heuristic methods to describe and conceptualize findings that emerge from a particular situation, event, context, or program. Case study findings must be supported through the development of in-depth descriptions of events and inductive reasoning on the part of the researcher. Analysis should lead to generalizations and hypothesis grounded in the case’s data.

Although ethnographic case study research design has its roots in anthropology, it has also been adopted by educational researchers. Erickson (1986) advocated the use of ethnographic interpretive research designs to address complex educational phenomena. He believed that the content of educational research was best addressed by using interpretive methods. The content of interpretive educational research, as he explained it, should focus on three substantive concerns of education:

(a) the nature of classrooms as socially and culturally organized environments for learning, (b) the nature of teaching as one, but only one, aspect of the reflexive learning environment and (c) the nature (and content) of the meaning-perspectives of teacher and learner as intrinsic to the education process. (p. 120)
Zaharlick (1992) further elaborated the function of ethnography educational research, suggesting that educational ethnographies could be used as one method to gather information to inform educational policy makers:

Educational researchers believe that understanding beliefs, attitudes, and behaviors of sociocultural groups will enable them to design more effective strategies for bringing about educational improvement. Ethnography, with its inherent sensitivity to people, culture, and context, offers one approach to providing valuable new insights that can contribute to educational improvement and reform. (p. 122)

Zaharlick maintained that a case study’s holistic approach to educational change should include the study of the interrelatedness of what happens in the classroom and should consider the social, political, economic, and cultural forces that surround the classroom. Case study design is especially appropriate when studying cross-cultural phenomena in educational settings:

When people from diverse cultural backgrounds are brought together, they inevitably will not share all the same values or operate according to all the same standards for appropriate behavior. Miscommunication and conflict can easily occur between and among people who have different cultural orientations and perspectives. Central to delineating the source of conflict is clarifying the conceptual viewpoint of the people involved. Ethnographic research can help in understanding conflicts by looking at these problems in a new way and from a different perspective. (p. 122)

Collections of case studies that address the substantive concerns of education in classrooms have been used in preservice teacher preparation programs. Pitton (1998) advocated the use of case studies as a tool to provide preservice teachers with problematic situational classroom experiences in which teacher candidates could practice their decision-making skills linking theory and practice:
Most veteran teachers have years of experiences and interactions that provide options for dealing with situations in the classroom. Novice educators do not have such a repertoire. Cases help future teachers analyze the complexities of classroom difficulties and provide a context for discussion that links theory with the reality of the classroom. (p. vi)

Rand and Shelton-Colangelo (1999) reiterated a similar argument for the use of case studies in the preservice training of teacher candidates:

We are especially drawn to teaching cases because they support our constructivist view of learning in higher education. Cases offer the opportunity for students to construct their own understanding, work at their own level, have choice in the curriculum, and, most of all, be active participants in their own learning. Cases are an ideal bridge between theory and practice. (p. v)

Because there are few research studies about urban secondary agricultural education programs, the researcher determined that a qualitative descriptive and interpretive case study design would best contribute to the urban secondary agricultural education literature base and agricultural education profession. In choosing a case study design, the researcher sought to establish a base of information and reference point from which future studies in urban secondary agricultural education could be developed and sought to develop an urban secondary agricultural education case study for preservice teacher candidates to use in their training.

Following Erickson’s guidelines on educational concerns that necessitate an interpretive research design, this study articulated its research questions to address the phenomena of accommodation made by teachers and students in a socially and culturally diverse urban secondary agricultural classroom. While an ethnographic and
interpretive case study design framed the research, emergent methods of data collection and analysis were used.

**Research Methods**

Multiple qualitative research methods in educational settings have emerged from Glaser and Strauss (1967). In their methodology, procedures regarding the research and specific direction of interviews and final analysis of theory and theory construction should develop as the research is being carried out. In other words, the research methods are to be grounded in the study and emerge from the data collection process. Similarly, Denzin and Lincoln (1994) approached qualitative research by advocating an emergent methodology with a special interest in “interpretive inquiry.” General ethnographic and interpretive methods laid the foundation for what Strauss and Corbin (1994) later elaborated as “Modified Grounded Theory.” The qualitative methodology proposed that some pre-theoretical construction and preparation be completed before actual fieldwork was to begin. In Modified Grounded Theory methodology, the researcher acknowledges a starting point and tentative variables to be studied. Also, the researcher concedes that it is impossible to identify all the relative variables and theories related to a complex study ahead of time and, therefore, does not belabor their identification at the outset of the research. So not to limit data analysis, Strauss and Corbin further recommended that the theories and methods employed at the outset be flexible enough to change as data are analyzed throughout the research process.
With regard to this particular study, a Modified Grounded Theory methodology with an interpretivist perspective was used to collect and analyze the research data. Initially, educational research theories and models (Hollins, 1996; Phelan et al., 1998) were used as a basis for identifying important research constructs (e.g., accommodation, peers, family). These initial constructs were meant to focus but not limit the research questions that sought to describe and explain culturally diverse students’ academic experiences and accommodation in an urban secondary agricultural education program. The cultural diversity of students in this setting referred to students’ ethnic, socioeconomic, and academic differences.

This case study was developed from the researcher’s interest in secondary urban agricultural programs in Ohio. Therefore, a secondary urban agricultural program was purposefully selected for this study based upon the program’s recognition for “success,” the teachers’ recognition for teaching excellence, and the school’s and district’s cooperation to permit data collection for one academic year, namely 2000-2001. The research was intended to be descriptive and interpretive in nature of an urban secondary agricultural education program.

**Research Proposal and Permission**

A case study must be bounded in context (Miles & Huberman, 1994); therefore, the context of this case study was a purposively selected (Patton, 1990) urban secondary agricultural education program housed within an urban school district’s career center. This career center was one of four career centers in the school
district, which was one of the 20 largest metro-urban school districts in Ohio (Table 3, p. 5). This particular “successful” program was recommended to the researcher for study by state agricultural teacher educators based on the program’s superior quality, diverse student body, that the two teachers in the program had been recognized for teaching excellence by the Ohio Department of Education, the local school district, and several education associations, and the practicality of the program’s accessibility to the researcher. Because of its distinction as a “successful” metro-urban agricultural education program, this case could be considered an extreme or deviant case. According to Patton (1990), deviant case sampling “focuses on cases that are rich in information because they are unusual or special in some way” (p. 169). A successful program, it was argued, could best inform the researcher seeking to describe the best practices of an educational program.

Having selected the case for this study to be the Animal Management Technician (AMT) program at a particular career center, the focus of the data collection and analysis sought to identify and describe the essential components of the programs and the teacher-student interactions and accommodation in the program. Permission to collect data during the 2000-2001 academic year in this program was solicited and granted on several levels.

After selecting the program, contact was initially made with the two teachers of the agricultural program, Animal Management Technician (AMT), and the career center’s administration. Although the Ohio Department of Education recognized this program as a small animal production and care agricultural program, the school
district believed that the name Animal Management Technician (AMT) program better reflected its professional career aspect. The teachers, with the agreement of the career center’s director, drafted a letter of support for this research (Appendix A).

Next, the researcher developed questionnaires and interview protocols, based on pre-theoretical construction and research questions. The questionnaires and protocols were reviewed and approved by the researcher’s graduate committee. Afterward, a reformatted research proposal was submitted for approval to The Ohio State University (OSU), Office of Research Risks Protection, Behavioral and Social Sciences Institutional Review Board (IRB). The IRB requested several revisions be made to the proposal before granting its approval with conditions (Appendix B). After approval by the IRB, the draft proposal was reformatted and submitted for approval to The Ohio State University, Department of Education, Office of Professional Practices (OPP) (Appendix C). The OPP (subsequently renamed the Office of Professional Development) forwarded the draft research proposal to the urban public school district for its approval and participation; OSU offered the school district 17 fee waiver hours in exchange for its participation in this research (Appendix D). The school district requested additional information concerning the dissemination of research findings (Appendix E) and then gave its approval and permission to canvass students to participate in the study (Appendix F).

A letter explaining the research study, granting confidentiality, and requesting consent to participate was prepared for the 15 students in the AMT program
Confidentiality was of concern to the researcher and participants (Hoyle, Harris, & Judd, 2002).

There is almost never anonymity [in social research], so guaranteeing confidentiality becomes an ethical imperative.... These concerns can be largely met through informed consent processes. Confidentiality is preserved by changing names and all identifying information when findings from the study are reported. (p. 418)

A second letter explaining the research study, granting confidentiality, and requesting consent for student participation was prepared for each student’s parents/guardians. This consent form requested parents/guardians to participate in a 45-minute interview with the researcher (Appendix H). Of the seven student consent forms returned, only one parent agreed to meet with the researcher for an interview. Subsequently, parental/guardian interviews were dropped from the research agenda.

A third letter explaining the research study, granting confidentiality, and requesting consent to participate was prepared for each student’s job placement employer (Appendix I). This letter sought the permission of the employers to interview and observe students at their job placement sites. Interviews at job placement sites became problematic during the course of the year, however, and were subsequently dropped from the research agenda. Consent forms were not required for adults participating in the study, namely teachers and administrators.

The two AMT teachers read the student consent letters/forms and interview protocols before distributing them to students. Both teachers believed that the language of the letters and interview protocols was too technical and requested that they be rewritten. However, rewriting the letters and consent forms would have
required that they be resubmitted to the OSU-IRB, and office of the school district. The letters and consent forms were not re-written because resubmitting would have delayed the beginning of the research by several months. Before the letters and consent forms were given to students, the teachers and researcher verbally clarified with students the items that were considered technical (Appendix J). Specifically, students were informed that their participation or nonparticipation would have no effect on their AMT course grade and assessment. Additionally, students were informed that they would not be identified in the final report by their names; in an effort to shield the students from invasion of personal privacy and annoyance, they were informed that they would not be identified in the final report by their names; in an effort to shield the students from invasion of personal privacy and annoyance, they final report would refer to pseudonyms, both for the students and for their school. Giving pseudonyms to participants and schools being researched is a common practice in anthropological research. “Protecting informants and their communities [schools] has become a canon in anthropological research; it is probably one of the few ethical principles taught during professional training. Traditionally, the identity of informants and communities is concealed by the use of pseudonyms” (Fluehr-Lobban, 1991, p. 95). Every effort was made by the researcher to protect the identity of all participants, the school, and school district in the final report.

Participants

The animal production and care program, Animal Management Technician (AMT), at this career center had two teachers and two classes—a junior and a senior class. Both teachers participated in this study, as did the career center’s director,
academic counselor; and Vocational Special Education (VOSE) coordinator. These three career center administrators played key roles in giving support to the AMT program. The AMT classes were comprised of diverse (ethnic, socioeconomic, and academic) students. Initially all the junior and senior class students in the AMT I and AMT II were to be considered as participants in the study; however, because of time and schedule conflicts, the researcher decided to only request the participation of the senior class, AMT II. Although all AMT II students were initially observed and interviewed informally, only the seven students who returned their signed consent forms were included in the formal research interviews and follow-up interviews and observations. The study initially sought the participation of students’ parents/guardians, peers at their home high schools, and employers at their job placement sites, but because of several factors, access to parents/guardians, peers, and employers proved problematic and impractical; they were subsequently dropped from the study.

**Instrumentation and Data Collection**

Multiple qualitative methods of data collection were utilized—formal individual interviews, informal individual and group interviews, and participant observations. An observational protocol was established to record observations of student/student and student/teacher interactions in the classroom and laboratory (Appendix K). The data that were collected during this time were in the form of detailed fieldnotes regarding observations, informal interview recordings, and
transcriptions. Formal interview schedules were established for student participants (Appendix L), and teacher participants (Appendix M). The formal interview protocol used with teachers was also used for career center administrators. The protocol written for parents/guardians of student participants (Appendix N) was not used. Preliminary contact with students began on September 4, 2000. Data collection began after November 10, 2002 and continued until June 5, 2001.

Observations of students included what they were doing, with whom they were working, their conversations, and their nonverbal communications. These data were recorded as fieldnotes. Which student worked with which other student(s) during the laboratory period was assigned by the teacher. After they completed their assignment, however, students were free to rejoin their self-selected peer group. Work group and peer group actions and interactions were recorded as fieldnotes.

Interview protocols served the researcher as checklists to ensure participants were asked similar questions and that all research topics were addressed. While the teachers and administrators participated in individual 30- to 60-minute formal interviews, students participated in individual 20- to 30-minute formal interviews and informal individual and group interviews and observations. Students were observed during their classroom sessions, their laboratory periods, and during special extracurricular events.

All formal individual interviews were conducted privately with the researcher in either an office or unoccupied classroom. All formal interviews were recorded. While most participants were forthcoming with detailed information, a few students
were uncomfortable with the formal interview process and gave short cryptic responses. Perhaps they were uncomfortable because of the formality of the questions and, although they had been assured that there were no right or wrong answers, believed they were being assessed in some way. Perhaps they were uncomfortable being recorded. On occasions when the researcher would turn off the recorder, the students remained uncommunicative. A third reason for their reticence may have had to do with their perception of the researcher, and being alone with the researcher somehow offended or intimidated them. These same few reticent students, when asked the same questions informally with a group of other students present in the laboratory, gave more detailed and rich responses than in the formal interviews. Conversely, some students who responded and spoke freely during the private formal interview remained silent when asked similar questions with their fellow students present or responded with a neutral, noncritical response, or simply, “I don’t know.” Perhaps these students were intimidated by their peers.

**Trustworthiness/Credibility**

Following the outline and approach of Glesne and Peshkin (1992) for qualitative research design, a participant-observer role was considered the most appropriate for the researcher. In this role, the researcher was best able to collect observations and interview data to construct amalgamated stories that best summarized the students’ perspectives and experiences. Although Glesne and Peshkin (1992) did not advocate any set of procedures for their design, they agreed with
Lincoln and Guba (1985) that the researcher should first gain access to a given group of individuals and then become an active member of the group but remain somewhat apart and neutral, so as to obtain the highest quality observations and interviews. Glesne and Peshkin stated that the engagement with the research group should be long-term, persistent, and constant. Erickson (1986) added that interpretive research, in addition to long-term participant observation in the field, must be “followed by deliberate and long-term reflection [by the researcher] on what was seen there” (p. 156).

The procedures for qualitative research outlined by Lincoln and Guba (1985) stated that the researcher, after gaining access to a given group, should become an active member of the group but remain somewhat apart and neutral, soliciting data from participants directly through interviews and questioning and indirectly through observations—the researcher is the primary research instrument in qualitative research. The researcher, although a participant observer, should be neutral in terms of teacher and student classroom/laboratory assignments and assessment. Nevertheless, the researcher approached this study with what Patton (1990) called ‘empathetic neutrality.’ Being a graduate student of secondary agricultural education contributed to the researcher’s subjectivity on one hand; but, on the other hand, this subjectivity allowed the researcher to carefully reflect on the data holistically. “Seen as virtuous, subjectivity is something to capitalize on rather than to exorcize” (Glesne & Peshkin, 1992, p. 104). The researcher’s goal was to describe and explain a successful urban secondary agricultural education program. The researcher did not
seek to prove a specific educational theory or highlight one program component over another. Nevertheless, because of his background, experiences, and interest in agricultural education, he was predisposed to understand the broader context of the program under study. The researcher’s role in the study contributed to the study’s credibility.

In qualitative research, trustworthiness is associated with its counterpart in quantitative research, namely validity (Lincoln & Guba, 1985). For the findings of the study to meet the high standards of trustworthiness and be acceptable in qualitative research, the credibility and dependability of the researcher and the data analysis process must be presented. In addition to his background in agricultural education programs as mentioned above, the researcher established his credibility with the AMT study participants by his consistent presence at the career center. The researcher attended the 3½-hour classroom and laboratory periods 2 to 3 times a week throughout the school year. He also participated in several extracurricular AMT activities and skills events. In general, most students accepted the researcher as a member of the class, and they would often volunteer comments and information when they were in group settings in the laboratory. As reported above, some participants were uncomfortable with the researcher when participating in private formal interviews. The establishment of the trustworthiness of the researcher is the precursor of establishing the trustworthiness and credibility of the research analysis and report.

To further strengthen the trustworthiness of the study, Lincoln and Guba (1985) suggested that the researcher follow procedures of triangulation, verification,
and emendation of the data. Accordingly, dependability of the research data is accomplished through member checks and peer debriefings. Member checks are the reviewing of the data (i.e., observations, interviews, and conceptualized constructs) with the participants in the study. Member checks were conducted with the participants during and at the end of the study. Peer debriefing is an aspect of trustworthiness that requires that a colleague of the researcher be given access to the raw data and the construction of the concepts and theories that the researcher proposes. Peer debriefing was effectuated with the researcher’s graduate committee members during the data analysis process.

**Representation**

Lincoln and Guba (1985) and Denzin and Lincoln (1994) have raised the issue of whose story is reported in qualitative research. They contended that the researcher must acknowledge his or her biases within the final account to establish a frame of reference or situational context for the reader. Furthermore, to protect the integrity of the study, the final report must contain as much of the original (raw) data as possible. Interviews in the form of dialogue or story telling best represent the participants’ view of the world and should be included.

**Data Analysis**

At the end of each week of data collection, interviews and fieldnotes were transcribed into a word processing file. Initially, a qualitative research word
recognition software program was to be used in data analysis; however, the cost of the software package was prohibitive. Therefore, data were coded and sorted by hand. An analytic induction reasoning process was used for data analysis (Miles & Huberman, 1994). Data were sorted and categorized (Appendix P) by concepts and constructs to uncover linkages and connections among the data. Broad categories were developed that corresponded directly with the initial theoretical framework of the study—school, home culture, students, peers, and work. Once data were collected and coded, they were placed into one of these categories. However, some data spilled out of categories, so new categories were created during the study. Second readings of interviews and observational notes led to a process of coding and recoding. New codes emerged, and old codes disappeared or were combined with other codes.

The next level of data analysis involved conceptualizing the different categories into a matrix, (Miles & Huberman, 1994). The matrix (Appendix Q) was helpful in eliminating data. Data that explained the phenomena of how the teacher accommodated students emerged from the overlapping of the student and teacher categories in the matrix. This category, teacher accommodation, represented one of the major themes supported by the literature (Hollins, 1996). On the other hand, how students made accommodations between their home, peers, and school was not as apparent as discussed in the literature (Phelan et al., 1998). Next, the major constructs were then woven together into a model to describe and explain these phenomena; other constructs lent themselves to cultural portrayals.
In addition to the program model, student portrayals or vignettes began to emerge from the data. The ongoing process of coding and matrix analysis uncovered bias in some interviews and helped to identify incomplete data sets that were clarified or elaborated upon in subsequent interviews and observations (Miles & Huberman, 1994). Peers and peer group interactions was one such complex construct that, once identified, became clearer with each additional interview. Wolcott (1994) referred to this analysis process of data as “identifying critical elements and wringing plausible interpretations from them” (p. 36).

Interpreting student portrayals and vignettes was accomplished through stages of analysis. Erickson (1986) referred to three stages of data analysis—particular description, general description, and interpretive commentary:

Reporting details can be called particular description.... Particular description is supported by more synoptic surveys of patterns in the basic units of analysis. This can be termed general description. A third major type of content in a report of fieldwork research is interpretive commentary. Such commentary is interpolated between particular and general description to help the reader make connections between the details that are being reported and the more abstract argument being made in the set of key assertions that are reported. (p. 149)

Erickson noted that the researcher’s assertions and commentary must be supported by the data. By reporting particular and general description, the research establishes what Erickson termed an evidentiary warrant. An evidentiary warrant is established when a researcher reviews “the data corpus repeatedly to test the validity of the assertions that were generated, seeking disconfirming evidence as well as confirming evidence” (p. 146).
In summary, data analysis followed a pattern of collection, coding, construct analysis, assertion, and interpretive commentary that led to an educational model and student portrayals. Erickson stated that data analysis of qualitative research served two functions—“to make clear to the reader what is meant by the various assertions and to display the evidentiary warrant for the assertions” (p. 149).

**Transferability**

As in most qualitative research studies, breadth of the study was sacrificed for depth. While only one program was studied, it was studied and reported in detail. Hoyle et al. (2002) suggested that the external validity or transferability of qualitative research analysis should be judged by the reader. Similarly, Erickson (1986) espoused that the combination of richness of details (descriptions) and interpretation (analysis) give the reader clarity in judging the transferability of the analysis to other similar cases. “The responsibility for judgment about logical generalization resides with the reader rather than with the researcher” (p. 153).

**Summary**

This chapter provided an overview of case-study research, the qualitative research design used in this study. Modified Grounded Theory, an emergent methodology that allows for some pre-theoretical design and development of research questions, was used to study a particular urban secondary agricultural education program in Ohio. Procedures for writing the research proposal, case selection,
developing research questionnaires, and securing permission for the research were discussed. The ethical considerations of research participants, their selection, and their representation in the final report were also discussed. The trustworthiness of the researcher was linked to the credibility of the final analysis of the study. The procedures for data analysis briefly described the process of interpretive commentary through the use assertions supported by evidentiary warrants as a model of data analysis. Findings and analysis have been reported in the next chapter and are organized according to the research questions presented in Chapter 1.
CHAPTER 4
FINDINGS

This chapter reports the findings for the case study, as reported by research question. The description of the program addresses Research Question #1 regarding the program’s components and organization. Specifically, this description includes the process of how students enrolled in the program, transportation issues, classroom and facilities, students, teacher, administrative support, students’ families, community involvement, SAEs, FFA, job placement, and how students viewed the Animal Management Technician (AMT) program. Next, diverse student experiences that occurred during the school year address Research Question #2. These descriptive experiences overlapped with responses to Research Question #3, which sought to explore how students expressed their differences and similarities through “cultural production portrayals.” Students’ negotiating styles and the teacher’s accommodating style are reported in response to Research Question #4. A model is also included that visually interprets the teaching and learning paradigm in the context of an urban secondary agricultural education program. Factors that attract and retain students in the program are reported in response to Research Question #5.
The study was conducted in an urban school district in Ohio. According to the Ohio Department of Education (2001b), this district had 67,487 students enrolled in K-12 during the 2000-2001 academic year, of which 39,712 (58.8%) were African-Americans, 24,801 (36.7%) were European-Americans, 1,598 (2.4%) were Asian-Americans, 1,235 (1.8%) were Hispanic-Americans, and 141 (0.3%) were American Indian or Alaska Native. High school students in the district numbered 16,554. There were 5,514 ninth-graders, 4,462 tenth-graders, 3,537 eleventh-graders, and 3,041 twelfth-graders. The decrease in number of students from grade 9 (5,514) to grade 12 (3,041) was reflective of the high (>40%) noncompleter rate in the school district. All 6,578 students enrolled in 11th and 12th grades were eligible to apply to the district’s career-technical training programs located in four career centers geographically dispersed throughout the district.

The four career centers in the school district were half-day schools—students spent a half-day at their home high school for academic classes and a half-day at the career center for career-technical classes. In addition to the students enrolled in public high schools, students in private schools and home-schooled children within the geographic boundaries of this school district were eligible to apply to the district’s career centers without charge or contract. A limited number of students from adjacent

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2 The school district reported ethnicity by US Census racial groupings: African-American was reported as Black, non-Hispanic; European-American as White, non-Hispanic; Asian-American as Asian or Pacific Islander; Hispanic-American as Hispanic. The district also reported American Indian or Alaska Native. There were no entries reported in the Other category.
suburban school districts was accepted into this district’s career centers on a Vocational Education Planning District (VEPD) contracted basis. This arrangement was somewhat different from Joint Vocational Schools operated by adjacent school districts. According to the career center’s director, “Lots of vocational centers in Ohio either call themselves career centers, technical schools, or JVSs [Joint Vocational Schools], depending on their administrative model. Joint Vocational Schools in Ohio are independent school districts. They offer students from adjacent school districts both academic and vocational classes” (interview, May 21, 2001). Unlike Joint Vocational Schools, the career centers in this school district offered only career-technical classes. Students in this school district and eligible students in adjacent districts applied to career-technical programs in the district’s four career centers and then were enrolled through a process described in detail below.

At the time of the study, the Animal Management Technician (AMT) program was offered at one of the district’s four career centers. It was the only secondary small animal production and care program in the school district or adjacent districts. Horticulture was offered by this school district as another agricultural education program but at a different career center. In addition to AMT, this career center offered programs in cosmetology, accounting and banking, food services, warehousing, automotive care, police science, and fire science.

The AMT program’s focus was small animal production and care. Small animal production and care programs do not include farm animals but include those animals considered pets or laboratory animals, not animals raised for consumption
Two AMT teachers organized the program into four curricular areas—pet shop management, pet grooming, small animal health, and laboratory ward animal care and procedures.

In Ohio, small animal care and production is a relatively new agricultural program area beginning around 1975. “If you think back 25 years ago [to 1975], that was really kind of something new, different and novel for agriculture.... I think that maybe Miami Valley, which was Montgomery County School then, might have been the first [to offer small animal production and care in Ohio]” (Mrs. Shepherd, interview, January 17, 2001). By 2000, of the 331 schools (high schools, JVSs, and career centers) in Ohio that offered secondary agricultural education programs, only 12 offered small animal care and production. Most schools offered programs in farm-based curricula (Agricultural Education Service, 2000). Nevertheless, the number of small animal care and production programs will continue to increase as metro-urban centers grow in population and the pet and small animal research industries increase in importance in the state.

I’ve seen [AMT] expanding; we have another career center adding small animal care next year, and I think it will continue to grow.... Some schools are adding [AMT] to their curriculum because there aren’t many schools that are truly rural anymore; they’ve moved into the urban aspect [of agriculture] or they’ve got the kids living in townhouses, apartments, and they’ve got to have smaller agricultural projects, like with pets. So, I think that [AMT] will continue to grow. (Mrs. Shepherd, interview, January 17, 2001)

The AMT program at this career center began in 1981. The program was organized as a 2-year program—AMT I typically enrolled 11th-grade students, and
AMT II typically enrolled 12th-grade students. AMT I was a prerequisite for AMT II. Each class had an independent teacher; however, the two AMT teachers always taught collaboratively, and on occasion both teachers assisted students during laboratory sessions. AMT I, the first-year course, was taught during the morning 3-hour session. AMT II, the second-year course, which was the case for this study, was taught during the afternoon 3-hour session. However, following the end of this study, the consecutive year format was discontinued. Beginning in the 2001-2002 school year, AMT I encompassed pet shop and pet grooming curricula only, while AMT II focused on small animal health, a pre-veterinary curriculum. Both 11th- and 12th-grade students were permitted to apply to either one or the other course. AMT I was no longer a prerequisite for AMT II.

**Participants**

Direct participants in this study were the two AMT teachers, three career center administrative staff, and 15 AMT students. While the original intent of the study was to focus on AMT students and their multiple dimensions, the study evolved into a broader, more holistic study of the AMT program, whereby the teachers and administrators became co-participants with the students. The final analysis of the AMT program is presented in the context of how teachers, administrators, and students perceived and articulated their experiences in the program.

To protect their identity and to respect their confidentiality, the researcher gave pseudonyms to the study participants. Both the American Psychological Association
and the American Anthropological Association support the use of pseudonyms to disguise the identity of research participants. “In scientific and professional presentations, psychologists disguise confidential information concerning persons or organizations so that they are not individually identifiable to others, and so that discussions do not cause harm to subjects,” (American Psychological Association, 2001, p. XXX). The American Anthropological Association, Revised Principles of Professional Responsibility (cited in Fluehr-Lobban, 1991), resounds a similar directive to anthropologists:

Anthropologists’ first responsibility is to those whose lives and cultures they study. Should conflicts of interest arise, the interests of these people take precedence over other considerations.... The rights, interests, safety, and sensitivities of those who entrust information to anthropologists must be safeguarded.... Anthropologists should not reveal the identity of groups or persons whose anonymity is protected through the use of pseudonyms. (pp. 274-275)

This proclivity for pseudonyms is a convention supported by qualitative researchers. Punch (1994), in his article on “Politics and Ethics in Qualitative Research,” stated, “There is a strong feeling among fieldworkers that settings and respondents should not be identifiable in print and that they should not suffer harm or embarrassment as a consequence of research” (p. 92). Glesne and Peshkin (1992) also encouraged the use of pseudonyms for research participants, “To protect their [participants’] anonymity, researchers use fictitious names and sometimes change descriptive characteristics such as sex and age” (p. 118).

Despite the use of pseudonyms, AMT teachers in this study may be identifiable to people familiar with secondary agricultural education programs in Ohio.
because, in FY 1999, there were only 21 small animal care and production teachers, 16 of whom were women, in 15 programs in the state. Therefore, to further protect the anonymity and confidentiality of the two AMT teachers, they are presented in this study as one composite teacher (Sizer, 1992). By creating composite participants, the researcher’s intent was to provide another layer of privacy for the teacher participants.

Mrs. Shepherd was the pseudonym given to the two AMT teachers. Mrs. Shepherd was a 39-year-old European-American with 13 years of experience teaching AMT. She held a Masters Degree in agricultural education and had received several awards and certificates of recognition of teaching excellence from her colleagues, school district, and professional organizations. She was gregarious, professional, organized, and committed to providing equal learning opportunities for her students regardless of their demographic characteristics or Individual Educational Plan (IEP).

The career center’s staff was represented by three administrators. Dr. Shely was the career center’s director. He was a 45-year-old European-American, with 20 years of experience in career-technical education. Ms. Britney, the Vocational Special Education (VOSE) coordinator, was a 35-year-old European-American, with 12 years of experience in special education. Mrs. Basenji, the career center’s counselor, was a 45-year-old European-American, with 15 years experience in secondary academic counseling. All three administrators had private offices in the career center’s administrative block.

The 15 students enrolled in AMT II were all seniors—three boys (one Hispanic-American, and two European-Americans) and 12 girls (4 African-Americans
and 8 European-Americans). One of the African-American girls was deaf. All of the students were between 17 and 19 years of age and had completed the AMT I program the previous school year. Students were from either urban or suburban areas of the school district. Two students were from adjacent suburban school districts. Ten of the students rode school buses from their home schools to the career center; the others either drove or were driven to and from the career center in private vehicles. The seven pseudonyms given to the seven students who participated in the study were Marie, Paula, Lovanda, Ronnetta, Aisha, Bob, and Darrell.

Marie was a 17-year-old European-American student. She lived with her parents near the inner city and had both physical and academic IEPs. She was self-conscious of the extra effort and extra time she needed to complete a task compared to the other students in the class and was sometimes embarrassed by her slowness. She often sat by herself. She was willing to do everything the teacher asked her, except touch the snakes, which she adamantly refused.

Paula was an 18-year-old European-American student from the city’s urban center. Her parents were separated, and she lived with her mother. Her father lived in the same city but in a different neighborhood. She was overweight and preferred to sit while grooming a dog or working in the rodent ward area. She was outgoing, outspoken, and opinionated. She was always with another student and always had something to say.

Lovanda was an 18-year-old European-American student. She lived with her parents in a suburban neighborhood. She had an academic IEP. She participated in
whatever group work was assigned but was quiet most of the time. She liked holding
the rabbits, hamsters, mice, and rats and would often carry them around in the
laboratory either in her hands or smock pocket.

Ronnetta was an 18-year-old African-American student who lived with her
mother and brother in a suburban neighborhood. She never spoke about her father.
She was a loud, take-charge person compared to the other students. She was
aggressive and often playfully air boxed with other students. Nevertheless, she
showed respect to the teacher most of the time. She was overly protective of all the
animals in the laboratory.

Aisha was a 19-year-old African-American student who lived with her parents
in a suburban neighborhood. She was an honor student. Although she participated in
group work, she preferred to work on her laboratory assignments alone. On several
occasions, she made the comment that she did not count on anyone for anything.
Unlike most other girls in the program who treated the laboratory animals like
porcelain dolls, Aisha was firm and sometimes rough with the animals. She was the
class FFA president and career center senior class president. She aspired to join the
ROTC and eventually be a veterinarian.

Bob was an 18-year-old European-American student from near the inner city.
He lived with his parents. He was an average student and did the minimum required
in the AMT program. Although a loner at the career center, he reveled in teasing the
girls and testing how far he could push his limits with Mrs. Shepherd. Because he was
involved with many sports at his home school, he was often excused early from the AMT program so he could attend practice or a game.

Darrell was a 19-year-old European-American student. He lived near the inner city with his mother; his father was in jail. He had an academic IEP for short-term memory loss. He liked handling snakes and was always willing to help anyone—especially Marie—assigned to the snake ward. He was friendly and hard working. If there was ever anything nasty to clean up or heavy lifting to do, Darrell was always the first volunteer for the assignment. He was the only student in the program who did not have a job placement at the end of the year.

**Research Question #1**

What are the components of a successful urban secondary agricultural education program in Ohio, with regard to enrollment, transportation, classroom facilities, students, teachers, administrative support, students’ families, community involvement, Supervised Agricultural Experiences (SAEs), participation in a youth organization (FFA), job placement, and the students’ views of program components?

**Program Enrollment Process**

Recruiting students for career center programs occurs during specified times during the school year. This school district organized a mandatory career center visitation day for all 8th-graders during the winter months of each year, followed by an optional exploratory visitation day in early spring for 10th- and 11th-graders.
Eighth-grade students visited the career centers during one day each year; however, because of the large number of 8th-graders in the district, 8th-grade visitation continued for two weeks.

Eighth-graders in the school district are given an interest survey by middle school counselors. Based on the survey results, one of the four career centers in the district is selected for each student to visit. Eighth-graders tour the entire career center, a trip that is considered career exploration. For many students, this was the first time they became aware of the small animal program and potential careers in small animal production and care. “I first thought about coming here in 8th grade when we had a field trip to the career center; that’s when I found out about this program ... and I decided I wanted to work with animals” (Lovanda, interview, January 19, 2001). Additional visits are arranged for middle school students in adjacent districts as requested. According to the career center’s counselor, “They [school counselors in adjacent school districts] call us when they want to come for a visit; then we go ahead and plan it for them.... We would always welcome tours; we like to show off the career center” (Mrs. Basenji, interview, March 15, 2001).

On occasion, elementary school students, considered at-risk for dropping out of school, are given special tours when requested by their home school counselor. Previously, these at-risk students were referred to the career center by the Occupational Work Adjustment (OWA) counselor, but the OWA program is no longer funded in this school district. Transitional Counseling Services (TCS) replaced OWA, but in 2001 TCS lost its funding, and this program had also been phased out.
According to the career center’s counselor, regardless of who made the recommendation, the career center was always willing to accommodate student visits regardless of a student’s age or grade level:

I’ve had elementary counselors call me and just bring a couple kids out [to visit the career center]. Kids who perhaps are not seeing any reasons to stay in school or why school is important, and they want to hook them up with something exciting that can happen if they work really hard and understand that they’re working toward getting into an automotive program or something like that.... We take kids on tours at any age because we feel like that this might be an opportunity that we could plant something in the student’s mind for later on. (Mrs. Basenji, interview, March 15, 2001)

After the 8th-grade visitation days but before the 10th- and 11th-grade exploratory visitation days, one to three teachers from each of the four career centers visit each high school in the district during a scheduled career day assembly. Each of the four career centers is represented at each high school in the district during that school’s career day assembly. Depending on the high school, career center teachers either meet with a large group of students at the same time in the school auditorium or assembly room, or the career center teachers individually go to different classrooms during the school day to meet with small groups of students. The career center teachers give a brief presentation of all of the programs offered at the career center they represent, and then they meet with individual students.

We have a lot of teachers who do this. As in any building, we have some teachers who are really enthusiastic and excited about going out to other schools, who have good speaking skills.... They do this on a volunteer basis.... They have to present all of the programs at [this career center]. And so we have poster boards made up for all of the programs, and they use these poster boards in their presentations. (Mrs. Basenji, interview, March 15, 2001)
After the career center presentations in high schools in early spring, high school students (10th- and 11th-graders) interested in visiting a particular program or career center are given additional information about the program(s). Students then request permission to visit that particular career center by registering with their home high school guidance counselor or career center liaison person. Interested students can participate in one to four career center visits, visiting one or two programs in each career center. If a student would miss the exploratory visit because of an illness or other conflict, other visitation times are arranged by the career center counselor and home high school counselor. If, after these four career center visits are completed, a student has not found a suitable career-technical program, that student may request additional career center program visits.

During the career center exploratory visit, high school students visit the classrooms and laboratories of the programs in which they expressed interest. During the visit, students meet the teacher or teachers of each program and are given a tour of the laboratory by current students. Prospective students are encouraged to ask the teachers and current students questions about the program and to leave their names with the teacher of the program to which they are interested in applying. AMT teachers ask to interview potential student candidates during these visits. “I took a tour of the career center ... when I was a sophomore. I came and had a short interview with Mrs. Shepherd. She interviewed me in the lab” (Marie, interview, February 8, 2001). Students interested in attending a career center from adjacent school districts
or private schools make individual visitation arrangements through their high school counseling services and the career center counseling service. After this exploratory visit, all interested students begin a career-technical program application procedure at their home high school.

After the career center visits, high school guidance counselors or career center liaison people in the home high schools, assist potential 10th- and 11th-grade students in filling out career center applications. Students can indicate a desire to enroll in up to four programs on each application (Appendix P). The students rank these programs in order of preference. After parents/guardians sign the student application, they are sent to one of the four career centers in the district. The applications are sorted by first choice career center. The career counselors from each of the four career centers pick up all the applications for their respective career center, and upon return to their career center they distribute the applications to the appropriate teacher or teachers of the first program requested. Attached to each application is a copy of each student’s grades and attendance record. If a student has an Individualized Education Plan (IEP), the written IEP is also included with the application. Teachers accept students into their programs based on applications and any comments or information the teachers may have noted when students made their 10th- or 11th-grade program visit to the career centers. Teachers who accept IEP students into their programs must also have each student’s application approved by the VOSE coordinator in the career center.

Mrs. Basenji, the counselor, coordinates the application process at the career center:
[When I review the student applications] if it’s an IEP student, what I do is, the teacher gets a copy of the application, but I also give the VOSE coordinator a copy, and she works with another person, who’s called the work-study coordinator from that student’s high school to see if this is a good placement for that student.... So even if a [career center] teacher would want that student, if the student has an IEP, the teacher has to work through the VOSE coordinator to see if it’s a good match for the student. (Mrs. Basenji, interview, March 15, 2001)

If students are not placed in the program selected as their first choice during the first round of application review, then their applications are forwarded to the program listed as the students’ second choices, and so forth until all students are accepted into a career center program. Career center applications that are submitted after the deadline are forwarded to the appropriate career center directly by the home high school counselor through inter-school mail. At that time, late applications are put into the selection process. Depending on how late they are received, they may have missed the first round of application review.

Because this AMT program was the only small animal production and care program in the district, students from high schools, private schools, and home schools within the boundaries of this school district and adjacent school districts were eligible to apply to the program. The AMT program received from 80 to 100 student applications to the program each year. The program could accommodate only a maximum of 50 students in both AMT sections. Many potential students were turned away from this program each year because of the limited number of seats available. According to Mrs. Basenji, the AMT program always filled quickly:

There is a cooperative agreement between [this school district] and four [adjacent] suburban school districts, but we service more than four
school districts.... They have a VEPD [Vocational Education Planning District, a name that has been changed to CTPD, Career Technical Planning District] contract with us. So, our career center accepts students from other districts through this agreement. In addition to them, we also work with a lot of the private schools [within our district’s geographical boundaries] like the Catholic schools, and the Christian schools. If a student lives in [our district’s boundaries], it’s no charge to them to attend this career center.... We get calls from all over. Kids want to come in and look at our programs, particularly the auto programs and animal management program. [These programs] don’t have enough space for all of the applications that we receive. (Mrs. Basenji, interview, March 15, 2001)

After a student is accepted into a career center program, the career center counselor enrolls each student into a specific career-technical (vocational) program on the district’s computerized enrollment system. Students and home high schools are notified of each student’s acceptance into a career-technical program by official letter from the career center counselor’s office at the end of the school year or during the summer. Some career center teachers may also send a letter of acceptance to each student placed in their program. Their home high school counselors make handle enrollment questions and transportation arrangements. Paula summarized her enrollment process in the AMT program:

At our high school, we have like a career center counselor type person, and she came around and talked to us when I was in the tenth grade [about enrolling in a career center program].... During the visit at the career center, if we were interested, she [the AMT teacher] gave us a paper. And we had to put down what our interests were, what our favorite animal was, if we had any allergies or any problems or anything like that.... I wrote that I liked cats. And then she took us out in the hallway one at a time. And she asked us like why do you think that you would be good for this program? And I said because I love animals, which is a big one, and that I’m easy to get along with. And I have a good personality. And she was like okay. And then I found out that I got accepted in eleventh grade, or I think it was when I got my
schedule to go back to school like right before eleventh grade. It was on there. And then I found out on the first day of school that I had to go straight and get on the bus and everything like that. (Paula, interview, November 15, 2000)

Students enrolled in a career-technical program spent a half day at their home high school for academic course work and a half day at the career center for their career-technical (vocational) course work. AMT I was offered during the morning program, and AMT II was offered during the afternoon program. Students in this study had enrolled in the AMT I program during the spring of their sophomore year and completed the AMT I program during their junior year. Because AMT I and II were consecutive-year programs, students enrolled in AMT II had completed AMT I the previous year. Unfortunately, not all students who finished AMT I continued the following year with AMT II. Because the students who dropped out of the program between AMT I and AMT II were not replaced, there were fewer students enrolled in AMT II than in the AMT I program the previous year. There were multiple reasons why students did not return to the AMT II program after completing AMT I.

Students were supposed to enroll [in the AMT program] for two years, but we’ve always had from two to five kids who didn’t come back the second year: they needed graduation requirements; they found out the program wasn’t what they thought it would be; they didn’t get along with their classmates who would be the same people; mom doesn’t want them to be this; all kinds of things. (Mrs. Shepherd, interview, January 19, 2001)

In summary, the enrollment process for the AMT program was uncomplicated and yet systematic and equalitarian. The school district had invested many resources in promoting career center programs, including the AMT program, at every high
school in the district and gave students several opportunities and resources to review the opportunities of attending a career center in both the 8th and 10th grades. In addition to 8th-grade visits, career center teachers did one-day recruitment drives in the district’s high schools once a year. During their sophomore year, 10th-grade students with an interest in working in a pet shop, small animal clinic or research facility self-selected to visit the AMT program for a half day in the spring. This visit, for some students, was their second visit to the AMT program. Students visited the AMT laboratory area and talked with current AMT students and teachers. AMT teachers briefly interviewed interested students during this visit. Both the 8th- and 10th-grade visits to the career centers were significant factors in helping students decide to apply to the AMT program. At their home high school, students had the opportunity to discuss career-technical programs with their school’s career center liaison or school counselor. Tenth-grade students interested in attending a career center program completed a formal career center application and returned it to the home high school career center liaison person. Although parents/guardians had to sign the career center student application, family involvement in the process was not clear. Other than the input that the VOSE coordinator gave for IEP students, AMT teachers alone reviewed student applications and selected students for the program based on subjective criteria. Selection of students was not systematic, and student selection criteria were not clearly apparent. Students selected for the AMT program were informed by mail before the beginning of the following school year. Students completing AMT I were to enroll for AMT II their senior year, but not all AMT I
students returned their senior year. Therefore, due to the sequential programming of AMT I and II, the AMT II program had fewer students than did the AMT I program.

**Transportation**

After completing the enrollment and selection process, the district’s transportation office arranged bus service for each student accepted into the AMT program. Because of the career center’s geographic location—it was a significant distance from all the district’s high schools—all students attending this career center required transportation. Students in the AMT program attended five different high schools. If students did not want to ride the school bus provided by the district to and from the career center, they were permitted to make their own transportation arrangements. Travel to and from the career center and home high school averaged between 30 to 60 minutes one way. Students in the study did not complain about their long commute, but some did complain about the cost of driving their own car to the career center.

I don’t drive up here anymore because it costs too much gas. My car is really a gas hog. Now, I usually just park my car at my home school, and after home school I just get on the bus to come here. It takes, let’s see, the bus usually comes like 11:00 or 10:50 a.m., and we get here at about 11:30, like it takes 40 minutes. We stop at another high school, but it’s on our way. Going home, it takes about the same amount of time. It’s usually a little bit longer because there is more traffic in the afternoon. So, I usually get home at around 4:30 p.m. Because I live about 20 minutes, no, about 15 minutes from my home high school. (Paula, interview, November 15, 2000)

I drive myself [to the career center]. It takes me 15 to 20 minutes to get here from [my home school]. After school here, I don’t go back to my
home school, I either go to work or like today I have to go to softball practice. (Aisha, interview, November, 16, 2000)

The career center had two daily sessions—morning and afternoon—so school buses made a morning, noon, and afternoon trip to and from the career center. Morning sessions began at 7:30 a.m. School buses brought first-session students to the career center from their home high schools. The morning session ended at 11:00 a.m., and students ate lunch or waited in the cafeteria until buses arrived at 11:30 a.m. with the second-session students. First-session students returned to their home schools for their academic classes on the same buses that brought the afternoon-session students. The second-session students arrived at the career center from their home schools where they had academic classes in the morning. The afternoon students ate lunch or waited in the career center’s cafeteria area until 12:20 p.m., when the second session began. Sometimes buses and student vehicles arrived late. These late students brought their lunches into the classrooms with them. At 3:20 p.m., the end of the afternoon session, students boarded school buses that returned them either to their home schools or to a bus stop near their homes. Some students returned home in private vehicles. By 3:30 p.m., the career center was empty of all students. Only teachers and staff remained in the building after 3:30 p.m.

The career center’s director summarized the transportation arrangements for this career center:

Each morning our [first-session] students get bused with other students to the nearest high school to where they live. It may not be the high school that they are attending, but it’s the nearest high school to where
they live. And then from that high school they are bused to the career center in the morning.

Buses bring the second-session students [from their home high schools] at around 11:30 a.m. The morning session students leave and go back to their home high school on those same buses. And then at 3:20 p.m., at the end of the day, second-session students are either bussed back to the nearest high school to where they live or to a neighborhood street or corner that is within walking distance of their home. Because we get out later than the high schools, almost all of them get out at 2:30 p.m., the students can’t go back to their home high schools and catch a bus home.

... [A problem with the second session is that] they only have a few buses at the end of the day picking up our students; for example, the Route 1 bus goes all the way to the west side, then goes to the southwest side, and then across to the south side.... It covers that whole territory, which is a huge section of the city. Instead of sending two separate buses, one for the south side and one to the west side, they combine it and make the south side kids ride for an hour, sometimes an hour and a half, which is an unreasonable amount of time, ... and sometimes that interferes with their desire to come to the career center from the south side.... It is kind of a transportation headache, but we have been able to work it out every year for our students.

The suburban school districts that send students [to this career center] also provide buses, just about all of them do; there are a couple that don’t.... In a few cases they provide a taxi service ... because there are only one or two students coming from that school to this career center, and it’s cheaper to do that then send a school bus out here.... [One of the private schools] tells their students that they have to drive themselves.... Students do have the option of driving, and many students take advantage of that. (Mr. Shelty, interview, May 21, 2001)

Modes of transportation to and from the career center varied from student to student, but most of the AMT students rode the school buses provided by the school district. There was no public transportation, bus service, to this career center location. Occasionally, an AMT student would be driven to or was picked up at the career center by their parent/guardian, but this rarely occurred, as most students seemed to not want their peers to see them with their parents/guardians. While the school district
provided school bus transportation to and from the career center, transportation for extracurricular activities, such as SAE mentorships, special FFA meetings and events, and job placement, was not provided. Because all AMT students lived a significant distance from the career center, lack of transportation options limited their participation in AMT extracurricular activities and the teacher’s ability to organize such activities.

Transportation needs for extracurricular activities is one of seven major obstacles that Gless (1993) listed as deterrents for students attending urban agricultural education programs:

Many urban students ... have problems with transportation. Many families have both parents working, students come from single parent homes, or families do not own suitable vehicles to transport equipment, supplies, and animals. They [students] become totally dependent on the agriculture department for transportation, which places greater demands on the teacher and the program budget. (p. 21)

While the AMT teacher in this study organized student transportation to off-site FFA skills events, students had to provide their own transportation to SAE and job placement sites. Some of the students were able to find SAE and job placement sites within walking distance of their homes; other students either drove themselves, their parents/guardians drove them, or they took the bus. Three of the students with special IEPs in this study were provided special transportation through county services to their SAE and job placement sites.

In summary, students in this study required transportation to and from the career center; students did not report any problem with their transportation
arrangements. While most AMT students rode the school bus provided by the school district, others drove themselves or rode with other students in private vehicles; occasionally family members provided transportation. If given a choice, students seemed to prefer to travel to the career center in private vehicles, as this afforded them some notoriety among their peers. Many of the AMT students did not have a vehicle, did not have any friends with a vehicle from their home school who also attended the career center, or found the gasoline and maintenance costs associated with driving to the career center prohibitive. Travel times to and from the career center varied between 30 to 60 minutes depending on where students’ home schools or homes were located and time of day; travel time increased in the late afternoon because of traffic congestion. While students did not complain about these transportation arrangements, it was apparent that the teacher had to prepare daily lessons and activities that ended at a prescribed time to accommodate school bus schedules. Transportation needs for extracurricular activities, including SAEs, FFA skills events, and job placement, were not provided by the school district, so either for these activities was arranged by the teacher, parents/guardians, or students.

**Classroom and Facilities**

Research has shown that well maintained school buildings have a positive affect on a school’s climate and student performance. “The age of the [school] facility does not seem to matter, but its condition does. Like everyone else, teachers [and students] want to feel safe and secure, they want to have usable and comfortable work
space” (Wilson & Corcoran, 1988, p. 95). School district administrators in the district where the research was conducted were proud of the well-maintained buildings in the district including the four career centers.

The career center housing the AMT program investigated in this study was built in 1977 in a neighborhood on the extreme edge of the school district. The career center was a brick, one-level, freestanding, well maintained, air-conditioned building ringed on three sides by parking lots. An attractively landscaped garden greeted students at the building’s main entrance. A grass area was located in the back of the career center, which the AMT students used to walk kenneled dogs. Each afternoon, AMT students assigned to the grooming area would leash the dogs and take them outside. In the fall and spring, students looked forward to walking the dogs in the kennel. “Let’s play first dog to the fire hydrant” (Ronnetta, fieldnotes, October 12, 2000). Once outside, students walked and ran the dogs around in the grass area. If the weather was pleasant, students were not anxious to return to the laboratory. “Let’s not go back inside until Mrs. Shepherd comes out to get us” (Paula, fieldnotes, October 12, 2000). Students were not so enthusiastic on inclement days or during the winter months to walk the dogs outside. “Why don’t you take it [the dog] outside, and I’ll get the grooming stuff ready?” (Paula to her grooming partner Marie, fieldnotes, January 10, 2001).

The cafeteria, multi-purpose area, restrooms, and administrative block were located in the center of the career center building. The library, computer classroom, technical classrooms and laboratories were located in the two wings of the building.
In addition to AMT, other programs offered at this career center included cosmetology, accounting and banking, food services, warehousing, automotive care, police, and fire. Career center students arriving early for the afternoon session gathered in the cafeteria. AMT students usually sat at one or two tables together, talking and laughing. Some students brought their own lunch, and others purchased the cafeteria lunch. Lunchtime was always a pleasant and loud time during the day. In the cafeteria and throughout the building, student work and awards were displayed in glass cases and on bulletin boards. In the hallway outside the AMT laboratory, AMT students decorated and periodically updated a bulletin board where they posted their FFA activities and AMT related work. Students took turns during the year to post items on this bulletin board. During the 2000-2001 school year, the entire interior of the building was repainted, and security cameras were installed inside and outside the building.

A hallway separated the AMT technical classroom and laboratory areas. The AMT technical classroom was a traditional classroom layout, was carpeted, and was well lighted. Inside this classroom were tables, desks, chairs, blackboards, bulletin boards, and various audiovisual equipment. There were two doors but no windows in this classroom. Every day, the AMT program began in the technical classroom. Students arriving late brought their lunch into the classroom. After marking attendance, Mrs. Shepherd spent a few minutes interacting with students, asking them personal questions about their families, home school, or homework. Students responded positively to Mrs. Shepherd and were generally well-behaved and attentive.
during the classroom period. Although no student ever made any remarks praising the classroom facilities, no one complained.

The laboratory area was across the hallway from the classroom and was divided into 10 separate fully equipped areas. The fish area contained eighteen 33-gallon fish aquariums, and students were responsible for planning the aquariums’ decorative designs and choosing the fish. The reptile ward area housed eight snakes and two iguanas. A small rodent ward area housed on average 50 mice, rats, hamsters, guinea pigs, rabbits, and chinchillas. Students assigned to this area practiced restraining, weighing and recording the weight of each rodent. There were more than 30 birds in the two bird ward areas. One enclosed area was for breeding cockatiels, and the second area had two large cages that housed a variety of birds. The grooming area had a 12-cage dog/cat kennel, six grooming tables, and two bathtubs, next to which were a washer and dryer that students used to wash towels and other materials used in the laboratory. The clinic area had two large sinks, counter space, an autoclave, and six microscopes. This area was used for cleaning equipment and working with microscopes. The locked storage area was well stocked with pet grooming supplies, pet food, cleaning supplies, AMT textbooks, and miscellaneous AMT teaching kits and materials. The student area had a large hand sink and student lockers that were covered with students’ personal photos and animal pictures. Students kept their personal belongings, jackets, and work smocks in their lockers. This area also had four large study tables and a dozen chairs surrounded by FFA awards, plaques, and banners covering the walls and trophies filling one glass trophy
case. The pet shop management area had two student computers, a printer, and a cash register. For the two AMT teachers, there was a locked office that had two desks, files, chairs, and a large glass window viewing the other laboratory areas. Displayed inside the teachers’ office were many animal photos and posters and past and present student photos. Although there were no outside windows in the laboratory, there were two doors, one opening into the career center hallway and the other opening to the outside. The teachers and students never complained for lack of teaching supplies, materials, equipment, or space. The laboratory’s modern and up-to-date facilities, supplies, animals, and teaching aides enabled students to practice and demonstrate their AMT aptitudes for skill events and job placement.

In summary, this section described the excellent physical conditions of the career center and the well-supplied AMT laboratory. School district support of maintaining modern, clean, and safe facilities was a point of pride in the district and among teachers. The maintenance of the career center and abundance of modern and up-to-date supplies and textbooks were overlooked by most students. Nevertheless, in the opinion of the researcher, the well-maintained facilities and plethora of supplies and teaching aides, including a diverse small animal population, contributed to the positive disposition of students and the overall success of the AMT program.

Students

Metro-urban areas in Ohio have diverse populations. Central Ohio, while predominated by middle class European-Americans, is home for many minority
groups, especially African Americans and Hispanic Americans. Large immigrant populations from numerous African and Asian countries have recently settled in Central Ohio. Students attending career centers in Central Ohio reflect the diverse racial, ethnic, and social background of the area. A snapshot of this diversity was reflected in the student make-up of the AMT program studied. As noted earlier, two of the three boys in the program were European-American, the other boy was Hispanic-American. Of the 12 girls, eight were European-American and four were African-Americans. One of the African-American girls was deaf. Students described themselves as middle class, but family economic and social status was beyond the scope of this study and not corroborated. Three of the students volunteered that their parents were separated; one volunteered that his father was in jail. In addition to their racial and socioeconomic diversity, AMT students had diverse academic backgrounds. Six of the 15 students had Individualized Educational Plans (IEPs), while two students were honor students.

Regardless of the academic diversity, the AMT teacher believed that she could motivate her students to learn the AMT curriculum. Mrs. Shepherd made herculean efforts to make the curriculum fun yet challenging for all her students. Because AMT students in this study had a wide range of academic aptitudes, Mrs. Shepherd was constantly adjusting and accommodating them. Having taught in the AMT program at this career center for the past 13 years, Mrs. Shepherd compared recent and past AMT students concluding that the students in this study came to the program less academically prepared than students in previous years. “Overall the quality of student
and their academic ability has decreased, [over the past several years] ... we teach differently, and we basically scale down ... the academic stuff, so it’s easier for students to digest and more fun” (Mrs. Shepherd, interview, January 17, 2001).

When asked what type of academic students they were, most students responded like Lovanda, “I’m an average student” (Lovanda, interview, January 19, 2001). When asked to assess her academic level, Marie, who had an academic IEP, said that she thought she was an average student academically. “I usually get Cs and grades like that, and I think in my high school career I only got three Fs. That’s all together” (Marie, interview, February 8, 2001). Paula had been an A student in the AMT program but was having some problems at the end of her senior year. She had been a good student in the classroom but was not adjusting to the demands placed upon her at her job placement site. She often complained about how her boss was constantly telling her to do different things in the pet shop. Mrs. Shepherd and Paula’s job placement supervisor know she was capable of more, so she was give a grade of C3 for the grading period.

Until this year, my grades were really good. The first couple of 9 weeks I had a 4.0. And I just got another report card and had a 2.3. So I bombed. I don’t feel like I was slacking actually.... I got a C in here [AMT], which I don’t think was very fair because I’ve been working my butt off at job placement.... I don't understand. It’s a C3 too [3 means little effort]. I don’t understand. I’ll never understand that.... My mom and my dad were looking at me like what happened to you? Because I’ve never gotten less than an A in this [AMT], in both years that I’ve been in it. And all of a sudden I get a C3! What’s wrong with that picture? (Paula, interview, March 16, 2001)
High academic achievers in the AMT program were given special assignments in the library, on the computer, and in animal ward areas. Facilitating the learning process and activities for the two honor students in the program varied from unit to unit. Both of these students were college bound along with two or three other AMT students. Students with academic and physical IEPs were often given shorter, less complicated academic assignments and more repetitive and hands-on assignments in the laboratory. Six of the students in the AMT program had IEPs, of which three were special needs students. These students simply aspired to finding a job after graduating from high school.

**Students with IEPs.**

Special needs students had academic or physical disabilities or poor academic dispositions. However, not all special needs students had IEP status. Parents/guardians must give their permission to have their children registered for IEP status, and some parents/guardians out of religious conviction, fear, or informed reflection do not request IEP status or special services for their children. Therefore, the urban agricultural education teacher must be aware of and make accommodations for “non-IEP” special needs students in her classroom in addition to those students with IEPs. Downey (1985) presented a short list of the background of special needs and disadvantaged students she had taught in her urban secondary agricultural education program:
The characteristics of a disadvantaged student might include one or more of the following: students come from broken home situations, some have been retained a grade level or more, many are disinterested in school, others may lack personal goals, are underachievers, lack self-confidence, come from low income families or have a negative attitude. Handicapped students may be mentally or physically disabled but none of my students are so severely handicapped that they cannot function in the laboratory. (p. 5)

Mrs. Shepherd commented that the number of AMT students with special needs IEPs had grown through the years because of the program’s reputation for serving students regardless of their academic levels. Word had informally circulated among work-study coordinators and IEP contact teachers in the district’s high schools that the AMT program served IEP students well. “Our [AMT] program has a reputation, it’s a good one, that we do very well with all of our students—we’re involved with the students, ... and we work hard at making them successful no matter what their ability” (Mrs. Shepherd, interview, January 17, 2001).

To assist Mrs. Shepherd and other career center teachers with IEP students, the district funded a Vocational Special Education (VOSE) coordinator position. Each of the four career centers in the district had a VOSE coordinator. While student IEPs were coordinated and written by home school counselors, career center counselors and teachers had input. Mrs. Brittney, the VOSE coordinator who worked with Mrs. Shepherd, said that the home high school appointed a teacher or teachers to coordinate their students’ IEPs. The lead teacher in “the home high school, designated team leader teacher, pulls everybody together as a team to write the IEP for a CTE [career-technical education] student” (Mrs. Brittney, interview, January 25, 2001).
Depending on the IEP, AMT students were either provided with a certified American Sign Language interpreter (for the deaf student in the program), additional time on tests, retesting permission, or a reader. IEP students were generally assessed differently regarding standardized tests.³

IEP students are given academic accommodations. For example, they might be given extra time when taking a test. Or if they need questions read to them, for most of them then most students wouldn’t get any help, but they could have a statement or question read to them, or identify a word for them. A lot of times, the first time on a standardized test, they won’t make any accommodations for them. And then the next time they take it again, they will.

I’ll sit down with teachers and talk to them about what each student’s IEP is and which objectives relate to them so that they can implement those in their class; and then I share all the information with the home schools as far as grades and attendance and everything. I am the liaison person with the home school for the IEP students.... I am the one who helps teachers change instructional materials and teaching techniques to adapt the curriculum to the IEP. (Mrs. Brittney, interview, January 25, 2001)

Each student’s IEP specified the number of competencies that they were required to complete in the AMT program. Non-IEP students needed to pass a standardized test in 25 competency areas to successfully complete the AMT program, but IEP students, depending on their IEP, did not have to pass all 25 competencies.

I’d say that they [AMT IEP students] are much the same as far as IEP kids in other programs because there is a variety of levels and disabilities [in the AMT program] just like there are in other programs. I would just say that the numbers are probably higher [in AMT] of special needs kids because they [AMT teachers] take more and are willing to work with those kids. I would say that the teachers in AMT are more accommodating and willing to make adjustments and changes for my students than the other instructors. The instructors are the key.

³ Review of district policy for IEP students and services provided is included in Appendix O: Process of Identifying Students with Suspected Handicaps.
I think the [AMT] program lends itself to that because there are a lot of levels or positions ... for example, students could learn 10 competencies instead of 25 and still be successful in an AMT related job. That is not true for other programs, like our Fire program where students must demonstrate competency for 25 out of 25 competencies to be successful. (Ms. Brittney, interview, January 25, 2001)

The State of Ohio Schools for the Blind and Deaf were located in this school district. A number, perhaps disproportionate to other school districts, of deaf students were mainstreamed into district schools and career centers. Special accommodations were made for these deaf students district wide.

If a student is hearing impaired, then the district will assign a signer for that person. This district has its own certified interpreters that they assign to each student. If the student comes from a suburban school, then [the suburban school district] provides one [a signer], but they contract with outside services because they don’t have the number of [deaf] students that we have in this district. (Ms. Brittney, interview, January 25, 2001)

In addition to individualized academic support, IEP students were also eligible for other support services depending on their IEP, arranged by the VOSE coordinator. She was responsible for contacting state, county, and local social services for IEP students needing assistance when going on job placements. The VOSE coordinator, the teacher, student, parents/guardians, and social services planned job placement activities to ensure that IEP students were successful at their job placement, and eventually, on the job. Services provided by county agencies were not standardized throughout the state. Different counties provided different services, becoming problematic when students with IEPs attended the career center from adjacent school districts that were in different counties.
When IEP students go on job placement, they may be entitled to other services that are out in the community, that we connect them with that help us transition them [students] from school to work.... It could be someone from the Bureau of Vocational Rehabilitation, BVR, which is state funded, or someone from the County Board of MRDD [Mental Retardation and Development Disabilities office].... For example, they could provide a job coach in the beginning of job placement when the students go out on a job; or they could provide bus training to get the students back and forth from their job; or if the students needed some kind of mobility training, say if they’re going to walk to work—how do you get through your neighborhood and to the job site and then back home.... Whatever services we provide in our school then our district pays for it; however, if we contract with BVR or MRDD those are state and county services and then the state of Ohio and/or the county pays for those services....

Some of our students come from adjacent counties, and the MRDD services should be the same, but they are not. For example, we are used to getting all this stuff like a job coach and a bus trainer for our kids whenever we need it, but then MRDD in [an adjacent county], they were telling us that they wouldn’t do it for our kids from [the other county]. MRDD is in every county and they are supposed to offer similar services, [but they don’t]; it may be due to how they budget their money. (Ms. Brittney, interview, January 25, 2001)

Bureau of Vocational Rehabilitation (BVR) and Mental Retardation and Development Disabilities (MRDD) services, although not standardized, were available to all AMT IEP students regardless of which county or school district they lived. In addition, students from suburban school districts enrolled in career centers in this school district benefited from the coordinating services of the VOSE coordinator.

Suburban school districts rely on the state agencies. The difference in suburban districts is that they don’t have [VOSE] positions like our district because they are using our career centers. They’ve paid for that so they get our services.... Work-study coordinators in the suburban school districts are different in the fact that they are like mini-administrators. They offer other services that are more like job coaches or job coordinators; they’ll set up things in a community for several students to go to, and then they’ll monitor them; and so they are more like teacher coordinators. (Ms. Brittney, interview, January 25, 2001)
Placing students with IEPs at job placement sites required many extra phone calls and hours after school on Mrs. Shepherd’s behalf. During this study, Darrell, a student with an IEP had difficulty finding a job placement site. Once Mrs. Shepherd had exhausted all of her possible contacts and placement options, she asked the VOSE coordinator to convene a meeting with Darrell and his mother to discuss adjusting Darrell’s IEP with regard to his job placement requirement. Darrell and his mother granted permission to the researcher to observe this meeting with the VOSE coordinator. Along with Darrell, his mother, Mrs. Shepherd, the VOSE coordinator, and the researcher, the county BVR representative was in attendance. The initial discussion focused on Darrell finding a suitable AMT job placement; he suggested that he be allowed to work at UPS (United Parcel Services) for his job placement. Mrs. Shepherd made a point that his job placement could not be at UPS, as UPS was an unacceptable job placement for an AMT program student. During this discussion, Darrell’s mother volunteered that Darrell was no longer able to work at UPS; so UPS was no longer a job placement option:

His dad’s in jail; I do the best I can. The [school district] has failed my son. I bought him his grooming tools for Christmas, as a Christmas present.... For his job placement he has transportation problems because I can’t take him just anywhere. He got fired at UPS. He can’t remember the numbers and the instructions for how to route the boxes. Maybe his medication is a problem for rememberin’. (Darrell’s mother, fieldnotes, February 23, 2001)

After Mrs. Shepherd had suggested several pet store options, Darrell said that he did not like grooming dogs but that he did enjoy working with reptiles and fish.
Mrs. Shepherd suggested that Darrell join the fish team for the upcoming state FFA skills events as part of his IEP. Considering his interests, few transportation options, and absence of related AMT businesses in his neighborhood, she was at a loss for suggesting a suitable job placement site for him. The VOSE and BVR job coach suggested additional skills testing at a county job placement facility, the Vision Center. The BVR job coach offered to have her agency pay for the tests and transportation costs. A taxi would pick up Darrell at his home school at noon and return him to his home in the afternoon during the 2-week testing period. It was agreed that as a part of his revised IEP Darrell would participate in the Vision Center’s technical testing program in lieu of job placement.

After two weeks of testing, Darrell returned to the AMT classroom. When asked about the technical testing experience at the Vision Center, Darrell replied:

I did testing. Interview. It was writing. And like screwing things together. I had to follow a model like putting stuff together. Puttin’ colors where they are supposed to be.... Workin’ out with money, and stuff like that. Fake money, they had fake money, and you had to do stuff.... And I decided I was wantin’ to do landscaping, because I like landscaping.... Well, they told me to take landscaping, that was how my patterns were. And they said that could be an area that I would be good at.... It’s always been one of my favorite things to do.... I’m more of an outdoors person than an indoors person.... They said that when I get out of school, they will help me find a job. They will call me.... My mom thought that it was okay. (Darrell, interview, May 9, 2001)

Although it was suggested he seek a job placement in landscaping, there were no jobs available for him at that time. He did not have any other work opportunities for job placement, so he came to the career center and worked with Mrs. Shepherd
until the end of the school year. At this time in the school year, Darrell was the only student in the afternoon AMT laboratory as the other AMT students were at their job placements. Mrs. Shepherd assigned him special tasks in the fish and snake wards. He practiced for the state FFA fish skills event with index cards that Mrs. Shepherd helped him prepare. The researcher also assisted Darrell in preparing for the state skills event, and his fish team placed fourth out of 12 teams in the event.

As the school year came to a close, Darrell was joined in the career center by Marie and Paula, who lost their job placements. All three students commiserated that they were not going to pursue a career in an AMT related job and disengaged themselves from any effort Mrs. Shepherd made to teach them new AMT materials. Ogbu (1978; 1987) found similar academic disengagement with minority students that he labeled low-effort syndrome. Ogbu attributed this disengagement to “cultural discontinuity.” When minority students had different teaching and learning styles than the dominant group or perceived that they would not benefit from education, they became complacent and distracted in the classroom. While Darrell, Marie, and Paula were European-American and Darrell and Marie had IEPs but Paula did not, the three of them did manifest similar strategies of disengagement that Ogbu described. Nevertheless, their disengagement was attributed more to their growing lack of interest in the AMT industry and, in Marie and Paula’s case, low self-esteem for losing their job placement. The students’ disengagement had a detrimental influence on Mrs. Shepherd’s effectiveness as a teacher. Whereas in the beginning of the year Mrs. Shepherd was able to accommodate and motivate all her students, by year’s end,
she had a small complacent group on her hands. Wilson and Corcoran (1988) reported a similar phenomenon between disengaged students and their teacher that they labeled “spiral of declining expectations.”

In the case of low-income and minority students, the spiral of declining expectations may be reinforced by their awareness that education does not bring the same benefits to members of their group that it does to members of majority or affluent groups. The realities of economic or racial discrimination undermine motivation and effort in school and this also contributes to lower staff expectations and a viciously declining cycle [of expectations]. (p. 100)

The last two weeks of observing these three students in the AMT laboratory, while their classmates were out on job placement, were the most difficult two weeks for the researcher. The words “spiral of declining expectations” rang true, as these three students seemed to languish in their self-pity. By not finishing their job placements, or as in Darrell’s case not going out on a job placement, they saw themselves as failures for not achieving the goals Mrs. Shepherd had set for them. They seemed to be embarrassed around Mrs. Shepherd and tried to evade her in the laboratory. They shuffled around the laboratory, cleaning animal cages and completing other assignments half-heartedly. When they had completed their assignments, they would sit silently around the worktable and mechanically leaf through animal supply catalogs and magazines. Although Mrs. Shepherd had not given up on them, she seemed to be physically and emotionally worn down by these students’ dispositions. All three students had previously contributed many comments and interviews to this research, but during the last three weeks of school, they became listless and uncommunicative.
**Student behavior.**

Other than the last month of school, AMT students, regardless of their academic aptitude, were generally cooperative and eager to participate in all the assignments Mrs. Shepherd gave them. Student behavior in the AMT classroom and laboratory was generally observed to be respectful and considerate of other students, the teacher, and the animals. Other than for two incidents, the teacher was never distracted by behavior or discipline issues perhaps because she was well organized in presenting the materials in the classroom and effectively kept students on task in the laboratory. Students also liked Mrs. Shepherd, were genuinely interested in learning about small animals, and appeared to enjoy their time in the classroom and laboratory. They did not create major disturbances.

Students that are in there [AMT] are well behaved, very rarely do we have problems, occasionally with each other, as many students will always have a spat or two during the course of their high school career, but overall the behavior of the students in Animal Management is really good. And the teachers obviously work very hard at making sure that students work together and cooperate with each other and learn how to get along. (Dr. Shelt, interview, May 21, 2001)

In the laboratory, Mrs. Shepherd gave students structured work assignments, procedures, and schedules that kept students working throughout the laboratory period. Nevertheless, a few incidences of general horseplay and misbehavior occurred during the laboratory period. When Mrs. Shepherd observed these incidences, she did not tolerate them. Whenever Mrs. Shepherd observed a minor behavior problem, she would ask that student to sit in her office for a 10-minute cooling off period. Ronnetta
was one of those students. When asked what she thought about Mrs. Shepherd’s discipline procedures, Ronnetta responded, “People [AMT students] don’t get in trouble. The only people that get in trouble is me. That’s it. [When I get in trouble], she [Ms. Shepherd] talks to me” (Ronnetta, fieldnotes, February 16, 2001).

Two of the boys in the program were observed more often than the girls engaging in general horseplay. When Mrs. Shepherd would have her back turned or be in another laboratory ward area, these two boys would mock Mrs. Shepherd and target the girls, by poking, punching, and grabbing the girls’ hair. They would also put pet food in the girls’ hair. When Darrell asked Bob why he was throwing things at the girls, Bob said, “I throw it [rabbit food] at the girls to get their attention” (Bob, fieldnotes, November 10, 2000). It seemed that his intentions were not to get their attention in a friendly way but to demonstrate he had control over them. Because the girls ignored him and did not respond to his covert attempts to intimidate them, Bob eventually became frustrated and gave up teasing them. The girls in the laboratory considered Bob immature. When Aisha was asked what she thought about the boys in the AMT program, she shrugged and said:

There are a couple immature people in our class.... They say things after the teacher says something; they say, be smart about it. The mature people would be quite and listen to the teacher, what she has to say, and do everything that the teacher says. The immature people just do what they want and bother us. They say things like, ‘I don’t care’ or ‘I don’t want to do that.’ (Aisha, fieldnotes, January 24, 2001)

Two extreme incidences of misbehavior requiring the teacher’s intervention occurred during this study. One involved an AMT student sneaking home two
bunnies, and the other involved two female AMT students who had an altercation in the student parking lot after school.

In the first incident, a student took two bunnies away from their mother before they were weaned, resulting in the death of both bunnies. Once the teacher identified the student who took the bunnies, a formal suspension and discipline process began. Because the student had an IEP, the teacher, career center director, and the VOSE coordinator were involved in the disciplinary process. The student was suspended from school pending further action on the part of the career center’s administration. However, before the discipline process was completed, the student was withdrawn from the career center by her parents. Other students in the program were angry with this student and could not justify her actions. Mrs. Shepherd used this incident to further a previous discussion on ethics and animal rights issues. Students were strongly opinionated in favor of animal rights and humane treatment of animals in their care.

In the second disciplinary incident, two AMT students fought in the student parking lot after they were dismissed at 3:20 p.m. The career center’s administration again began a discipline process that involved the students, their parents, and the AMT teacher. This incident was resolved with a suspension of one of the students. Both students finished the AMT program.

Overall, discipline incidents of AMT students were relatively few and only momentarily distracted students. Generally speaking, academic engagement was good up until the state skills events and as students prepared to go on job placement in
March. In early spring, students developed what the AMT teacher called “senior-itis” or spring fever. It was more difficult for the teacher to keep students on task. AMT students appeared to be more concerned and distracted by their pending graduation from high school than the AMT curriculum. Some students like Bob and Aisha spent several hours each week during the last two months of school on the Internet, sifting through college web pages and applications. Other students were preoccupied with where they would be working in the summer and discussing with other students what they thought that they would be doing next year. Most were undecided about their future. “I don’t know what I want to do [after I graduate]. I’m thinking about going into the ROTC. They would pay for my school in Cincinnati” (Aisha, interview, May 21, 2001).

Keeping the AMT students academically engaged during the classroom and laboratory hours was the teacher’s goal, but keeping students on task was especially challenging in the spring. After March, students had a tendency to drift into their peer groups and discuss off-topic subjects such as their home school’s baseball teams and players, what they were watching on TV, a new music CD that they had just purchased, or their after graduation plans. In this regard, the AMT students, regardless of their race, ethnicity, socioeconomic, or IEP status, were similar to other American adolescents reported in the literature:

Adolescents often choose to give their time and energy to pursuits other than academic work. Jobs, friends, sports, music, and sex compete for their attention. They often work hardest in the areas in which the rewards are immediate and concrete and where their internal or peer-defined standards of excellence are applied. Appeals by teachers and
parents to future rewards (Do it to get into college or get a higher salary) or to adult authority (Do it or suffer the consequences) often seem to fall on deaf ears. (Wilson & Corcoran, 1988, p. 102)

In summary, Mrs. Shepherd had multiple assignments and laboratory duties that kept students busy both during the classroom and laboratory periods. However, during the spring, keeping students on task was difficult, because they were preoccupied with their pending graduation and life after high school. In general, students were well chosen for this program and genuinely expressed an interest in learning about small animal care and production. Regardless of their academic or IEP status, students were generally well behaved and cooperative. The teacher had a minimum of classroom management problems.

**Teacher/Pedagogy**

The AMT teacher was essential in delivering the AMT program. The methods she used to deliver the program’s curriculum were classroom instruction, laboratory hands-on experiences, and “real world” experiences outside the classroom (i.e., SAEs, FFA, job placement). The curriculum for the AMT II program was presented in units. These units were fish, bird, rodent, reptile, cat, dog, grooming, and small animal health. These unit curricula were similar to the curricula taught in the AMT I program but in-depth in content. Pedagogically, each unit had a lecture and laboratory component. A hallway separated the lecture classroom and laboratory.

Each day, the class began with a classroom lecture and discussion period that the career center referred to as the related content presentation. Teachers and students
often referred to this classroom instructional time simply as “related.” The teacher used overheads, the chalkboard, and handouts to present each lesson in a traditional classroom setting. Other pedagogically appropriate teaching materials, such as animal teaching kits, videos, and grooming tools, were presented and discussed for specific lessons. Mrs. Shepherd stood in front of the class, and students sat at tables facing her. When she used the overhead projector or wrote on the chalkboard, she would give students time to ask questions and take notes. From time to time, she would walk around the students’ tables to see that they were taking appropriate notes or if they needed more time to copy the materials from the overhead screen or chalkboard. The related classroom time was organized along the lines of a traditional high school classroom with one exception. Because related met from 12:15 p.m. to 1:15 p.m., students who had to drive or ride the school bus a long distance from their home high school to the career center missed their lunch period. These students were permitted to bring their lunches into the classroom and eat during the first 30 minutes of related.

Students were given AMT textbooks from which the teacher assigned weekly readings and homework, which was collected and reviewed each Monday. Written tests were given during related time. On occasion, the teacher also used related time to send students to the computer laboratory or library to do research on specific topics being covered in class. By varying teaching methods and introducing either new units or new topics in each unit on a weekly basis, the teacher held students’ interest.

An example of a student assignment presentation was observed during the unit regarding cats. The teacher assigned each student a poster project. Each student
picked one cat breed and made a poster explaining the history and different characteristics of that breed. After presenting the assignment, the teacher allowed students to use the computers in the laboratory or to go to the library to obtain information for their poster project from the Internet, library books, or magazines. Two weeks after the assignment was made, students presented their posters to the class during related. Paula especially liked this assignment and put a great deal of effort into her poster:

We had a cat unit. I was so happy with that. We had to study like all different breeds. We each picked one breed. We studied that breed, and we did a report, and we had a poster of it, and we did the presentation. And that was probably my favorite part of this year so far because I had fun doing the report, and doing all the [library] research and everything. It was really interesting. I didn’t know that much about that cat and now I want one; it’s called a Cornish rex. It’s the one [with] the wavy looking curly hair. (Paula, interview, March 16, 2001)

While every student agreed that they enjoyed the AMT program, not all students thought the pace was fast enough. Some students complained that the program was monotonous, repetitive, and not paced fast enough.

The good thing about it [AMT program] is that I like working with animals.... I don’t think that I have a bad thing to say about it; sometimes it’s boring, doing the same thing all of the time. But I have to get used to it. It’s boring and slow sometimes both in the lab and related because we just do the same thing. (Lovanda, interview, January 19, 2001)

What was taught in the classroom during related was practiced in the laboratory. After related, students moved across the hall into the AMT laboratory. The laboratory period began at 1:15 p.m. and ended at 3:20 p.m. Mrs. Shepherd
described the laboratory sessions as hands-on opportunities that enabled students to prepare for careers in the animal industry. The lab assignments were designed to imitate what students would have to do on the job. On Mondays, Mrs. Shepherd assigned each student a different laboratory or animal ward area—grooming, pet shop, reptiles, rodents—for the entire week. Some areas were assigned two or three students depending upon what needed to be accomplished in that particular area, such as trimming a bird’s wing feathers, weighing mice, or partialing fish tanks. Students seemed to like this arrangement of changing areas and partners each week. If a student assigned to a particular area would be absent, the teacher made adjustments in the area assignments if necessary.

The teacher planned work assignments ahead of time to not assign the same students to the same work group each week. She also carefully assigned IEP students. IEP students were required to work in every area, regardless of their IEP, but the teacher would closely supervise IEP students when they would be assigned to areas difficult for them. Because these AMT II students had gone through the AMT I program together the previous year, they knew each others’ strengths and weaknesses and would compensate for each other. By the time they started the AMT II program, group cohesiveness had developed. For example, one IEP student was especially helpful to other students assigned to the reptile ward area, while another IEP student was said to have a calming effect on some of the hyperactive dogs in the grooming area. Regardless of their abilities, the teacher constantly stressed and monitored safety in each area for all students.
Mrs. Shepherd managed the laboratory areas by circulating constantly throughout the ward areas, observing and assisting students when necessary. She was firm with assigning students to specific ward areas and the work they were to do. She incorporated opportunities for students to expand and demonstrate their abilities by assigning progressively more challenging work throughout the year. During this time of circulating throughout the laboratory areas, Mrs. Shepherd would inquire into each student’s academic and practical understanding of the assignment. She would also ask about each student’s family and talk with them on a personal level. She was genuinely interested in each student, and students responded to her out of respect for her small animal technical knowledge and her personal interest in them as individuals. Mrs. Shepherd displayed a collection of current and past student photos on her student bulletin board in her office area, and she encouraged students to bring in new photos to add to this collection. These personal efforts on Mrs. Shepherd’s behalf promoted positive teacher-student relationships that led to higher motivation among her students. Lightfoot (1983), Lipsitz (1984), and Rutter (1983) reported similar findings linking the importance of teachers liking and understanding adolescents and frequent teacher-student interactions to positive student academic achievement.

Student motivation seemed to rise when at the beginning of each week Mrs. Shepherd announced which student would be the student supervisor/pet shop manager of the week—the most coveted and prestigious assignment. Mrs. Shepherd viewed this position as an opportunity for a student to exercise leadership. The student assigned to this position was responsible for overseeing the work of the other students
and answering the telephone and phone message machine. The student manager scheduled grooming appointments with the general public, collected grooming costs from customers, prepared receipts, and recorded income/expenses in an accounting ledger. On Fridays, the student manager balanced the accounting ledger and filled out the bank deposit form. This deposit slip and money, usually checks but sometimes cash, were given to the career center’s secretary for deposit into the AMT account. This money was eventually used for approved AMT program purchases and AMT student activities. The student pet shop manager was also responsible for assisting any walk-in customers.

One Friday afternoon, Mrs. Shepherd was talking with Paula, the pet shop manager for the week. Mrs. Shepherd said, “Today, I want you to balance the books and prepare a deposit.” Paula replied, “I’ve never prepared a deposit before, but I know what one is.” Mrs. Shepherd gave Paula some brief instructions, and then for the next 45 minutes, Paula prepared the deposit intently. She was not distracted nor did she want to participate in any horseplay or side conversations with other students. She did not talk, except to ask Mrs. Shepherd for some additional directions in preparing the deposit. When she had finished, she took the deposit to the career center’s administrative secretary. Upon returning to the laboratory, Paula said, “That was fun. I liked making a deposit” (Paula, fieldnotes, November 24, 2000).

Conferring responsibility to students is another feature of a successful urban AMT program. Paula’s successful experience as a pet shop manager contributed to building her self-confidence as a student leader. Paula’s friendly and outgoing
personality contributed to her success in interfacing with other students and customers. Because AMT students liked Paula, they readily responded to her suggestions as their “temporary boss.” At the end of the week, Paula was proud of her accomplishments as a pet shop manager, and Mrs. Shepherd acknowledged her success with several compliments throughout the week.

Mrs. Shepherd noted that student pet shop managers had a unique opportunity to learn and practice banking, math, and personal communication. Students talked with pet shop customers on the phone and when they brought in and picked up their dogs for grooming. These customer relation experiences contributed to students learning effective public communication skills. “Good communication skills are essential [for students] as they can make the difference between the type of job and rate of pay the student will receive” (Mrs. Shepherd, fieldnotes, November 24, 2000).

Each day students assigned to the grooming area were specified a dog to groom. One student would be assigned to a small dog, and two students would be assigned to a large dog. Before beginning the grooming, all dogs were walked outside in a dog walk area. Dogs arrived at the AMT laboratory in the morning, and the AMT I students bathed and brushed them. Occasionally, if a dog arrived in the late morning, it would need to be bathed and brushed by AMT II students. Two large bathtubs were located in the bathing area. Dogs would be lifted into the tubs and attached to a leash on the tub. Special dog coat shampoo and conditioner were used. The dogs were then towel dried. Next, students would place the dog assigned to them on a grooming table. The dog would be attached to the table with a restraining leash.
Some dogs needed to be muzzled. If the dog’s coat had not completely dried, an electric drier was placed next to the dog, and a student brushed the dog’s coat dry. Long-haired dogs had to be brushed more vigorously and matted hair removed. If the dog was large or excited, one student would restrain the dog while a second student did the grooming. Students would take turns restraining and grooming. After brushing, the dog’s pads and genital area were trimmed. Next, students cleaned and plucked the dog’s ears and trimmed its nails. Students in AMT II were able to use scissors and electric clippers when grooming dogs. However, when dogs required special grooming techniques, such as poodles, one of the two teachers would review with the student the special scissoring or clipping techniques before the student began.

At the beginning of the year, the teacher would begin the scissoring or clipping. By the end of the year, the teacher asked the student first to explain the scissoring and clipping techniques needed and then would observe the student. If the student began correctly, the teacher left the student and went to another area, but if the student forgot or needed some help in getting started, the teacher asked the student probing questions on how to begin and then offered a hand-over-hand demonstration with the student. After the student completed clipping and scissoring, the student pet shop manager would comment on the grooming techniques. The student manager would either approve the work done or ask the student to do additional grooming. Once the student manager approved the grooming, the teacher would be asked to look at the dog. Mrs. Shepherd would then give feedback on the student’s work and would either approve the completion of the process or instruct the student in how and where
additional clipping and scissoring was needed. When the grooming was completed, the dog was returned to its kennel, and the student or students would complete the paperwork on what was done with the dog. The student pet shop manager needed this paperwork to correctly bill the dog’s owner. At the end of the school day, between 3:00 p.m. and 3:20 p.m., the dogs’ owners picked up their pets and settled their accounts.

Mrs. Shepherd noted that besides grooming skills, students handling pets were provided with first-hand opportunities in understanding animal behavior. Some dogs behaved very well, while others did not. Dog behavior changed depending on the student groomer and other dogs in the grooming area. Students were encouraged to note the dogs’ behavior in the kennel, in the dog walk, and in grooming areas. Students leaned to recognize aggressive dog behavior and how to control it. “Learning to restrain cooperative and uncooperative [aggressive] dogs can only be accomplished by practice.... On the job, students will need to restrain dogs for veterinarians or technicians as well as handle dogs in grooming shops, pet shops or boarding kennels” (Mrs. Shepherd, fieldnotes, November, 3, 2000).

Most students enjoyed working in the grooming area and learning about dog behavior and grooming techniques. Nevertheless, after two years in the AMT program, students did not always have a positive opinion about grooming dogs. “The best thing out of this program was the grooming part. I think I could do it [be a groomer], but it wouldn’t be my lifelong career choice, but it would be like a hobby or something” (Aisha, interview, May 21, 2001).
I really liked learning how to groom [dogs] the first year because I have a dog at home. And she [Mrs. Shepherd] taught us how to do that, like how to brush him out, clip his nails, and do his ears. I don’t like grooming now [my second year in AMT] as much as I used to. But only because I always get put with a bunch of large dogs. I mean I’ve always gotten the Golden Retrievers, the Labs ... but I love the little dogs.... [Last year] I was the only person who got to groom a cat. So I really liked that.... I suggest that we don’t have no big dogs. And we should also make sure that the dogs, they don’t have fleas and bring them in. The fleas would get on your clothes, on your hands, and on your hair sometimes, and so you’d have to go home and shower real good. And I don’t think that we should take any of those types of dogs. (Marie, interview, February 8, 2001)

Students in the laboratory ward areas had particular assignments and work, but none of the ward area assignments was as intense as the dog grooming area. In the ward areas, the AMT I students fed the animals and cleaned their cages. The AMT II students also did some of the feeding and cage cleaning but were solely responsible for the breeding, weaning, and recordkeeping of all ward animals. Paula noted that the AMT laboratory activities had grown from what she remembered her first year in the program. “There used to be a lot less stuff in here.... They haven’t kept the same volume. It seems like they keep growing” (Paula, interview, March 16, 2001).

Students assigned to the fish aquarium area daily recorded the water temperature and water acidity in the fish logbook. They added chemicals to adjust the pH if necessary, noted any fish which were ill, and removed and recorded any fish that may have died. Once a week they did a “partial” by removing and replacing approximately one-third to one-half of the water in each fish tank. At the beginning of the school year, AMT II students were partnered and assigned a fish tank. They selected the aquarium stones, ornaments, and two or three compatible types of fish for
their tank. After the tanks were set up and filled with water, a field trip was made to a local wholesale aquarium fish supplier. Students selected the fish that were shipped to the career center the following week. At the end of the school year, the fish were sold to students.

In addition to the fish aquarium area, there were three other ward areas—rodent, reptile, and bird. In the rodent ward area, students were assigned work similar to the type of work done by small animal technicians in a small animal research facility. Students were responsible for keeping cages clean. Students replaced food, water, and the bedding of wood chips as needed. Each day, students weighed, recorded, and monitored the growth of each mouse and rat. On a regular rotational basis, the students paired mice, rats, hamsters, guinea pigs, rabbits, and chinchillas. Mrs. Shepherd summarized the work in the rodent wards. “Students learn and follow established breeding systems and move animals to breeding cages, monitor breeding schedules, and move animals back to their permanent cages” (Mrs. Shepherd, fieldnotes, November 3, 2000). The rodent ward was Aisha’s least favorite ward area.

[Mrs. Shepherd] pushed me a lot this year in the rodent ward because I didn’t want to touch rats. Like I was all prissy and stuff.... She made us do it. She said, ‘If you don’t do it, you’re not going to get a good grade.’ So like, I said, okay. Because if you mess up here, it’s over. There’s no way really to make it up. It teaches you a lot. (Aisha, interview, May 21, 2001)

Students assigned to the reptile ward area, which included snakes and iguanas, checked the temperature of each cage, and adjusted lights, heating pads, or heating rocks as necessary. Wood chips were used as bedding and were changed once a week.
Each snake cage contained a bowl of water for the snake to lie in. The water was replenished as needed and changed once a week. The snakes were not fed every day. When they were fed, the date was recorded in each snake’s individual logbook. Mice and rats from the rodent area were used to feed the snakes. The iguanas were fed a mixture of dried foods. Water and food were replenished in the iguana cages as necessary. When asked what he had learned about snakes, Darrell responded, “I learned how to sex them, their breeds, and how to change and clean their cages, and what they need when they’re living in your house and stuff” (Darrell, fieldnotes, November 3, 2000).

Students assigned to the bird ward areas cleaned cages, and replenished feed and water. Students clipped wing feathers and beaks as needed.

Today, I’m doing the birds, cutting their nails and clipping their wings [feathers].... It’s hard catching the fricking birds. They’re hyper. They don’t want to be caught. This one went from one cage to another. Can’t get ‘em now. I have to sit down, I’m tired. (Paula, fieldnotes, January 19, 2001)

In the cockatiel breeding room, students recorded the room temperature, egg laying, and hatching of each pair of birds. Students candled eggs to monitor growth. Students scheduled the placement of male with female cockatiels and the removal of young cockatiels.

Mrs. Shepherd summed up the daily experiential and hands-on learning experiences of her AMT students in the laboratory. “Hands-on experience provides endless opportunities for students and creates a learning environment in which students can actively participate. With all the different learning styles and handicaps
students possess, hands-on experiences allow students to be successful and enjoy learning” (Mrs. Shepherd, interview, January 19, 2001).

Students also had their opinions about their experiential and hands-on learning experiences and did not equally appreciate all of these experiences. “What I would change about this program is we wouldn’t have to do birds; I don’t like them. I hate cleaning their cages. I would keep grooming; I like grooming” (Lovanda, interview, January 19, 2001). “I loved doing the fish last year…. And I don’t like the Guinea Pigs, and I don’t like the birds. I think the birds should be eliminated” (Marie, interview, February 8, 2001). “I wouldn’t take out anything. I would want them to do everything. Because it’s a good program, you learn a lot of stuff. They make you learn a lot of stuff even if you don’t want to learn. But I hate fish; I’d take out fish. The most interesting thing is everything, but the fish was my least favorite thing” (Aisha, interview, May 21, 2001).

Students worked together in groups of two or three in the different work areas. While grooming, cleaning, feeding, and recording, students would teach each other. Students worked together to practice different animal restraining techniques, to observe animal behaviors, or to discuss small animal health. Some students had part-time jobs in pet shops, while others had participated on internships or mentoring experiences at pet shops or veterinary clinics where they had learned valuable small animal care information that they shared with other students. During this time, in addition to content knowledge and skills, students also discussed their personal lives, their home high schools, their families, favorite TV shows, and movies. They talked
about the teachers and other students. While some of these conversations were social in nature, students were also learning valuable workplace skills, such as working on a team and how to get along with fellow students (future fellow employees).

In summary, the AMT teacher employed a variety of teaching methods in the classroom and laboratory. In addition to AMT small animal content, available resources in the laboratory and students’ academic levels influenced how Mrs. Shepherd accommodated students. While the AMT program had diverse students, the teacher provided unique opportunities to meet each of their academic needs. And although some negative classroom behaviors were noted, during a year of observations, most AMT students were well disciplined, considerate, and engaged in learning. Even though some students disliked specific activities in the AMT laboratory, they cooperated with their teacher and other students to learn content and employability skills, such as communicating effectively with customers and fellow students (future co-employees). On a personal level, it was obvious to the researcher that Mrs. Shepherd liked her job. She enjoyed teaching students about small animal care and production and being with students on a daily basis.

**Administrative Support**

As noted above, the administrative support given to the AMT program was generous. The school district provided student transportation to and from a well-maintained career center and supplied the AMT program with small animals, modern teaching aides and equipment. The career center’s director and staff provided the
AMT program with support for organizing field trips, disciplinary action, and record keeping—both attendance and bookkeeping. The career center’s academic guidance counselor and Vocational Special Education (VOSE) coordinator also played important supporting roles to the AMT teacher and program.

The career center’s director was responsible for overseeing the day-to-day activities and budget of the career center, providing security, overseeing transportation, and approving any out of building activities (e.g., field trips, FFA event participation). He also directed any discipline action taken with a student. His staff electronically submitted student attendance and other required paperwork to the district office. The administrative staff also provided secretarial and accounting support to the AMT program budget and pet shop accounting.

The career center’s guidance counselor supported the AMT program throughout the recruitment process. She organized career center teacher visits in high schools and 8th- and 10th-grade career center visitation. She assisted current AMT students with academic and career counseling. For those students seeking further education, she offered higher education and adult career-technical education counseling, including assistance with financial aid and scholarship applications.

The counselor here at the career center helped me get scholarship information stuff and college opportunities. She’s better than my counselor at my home school. I can talk with her. She has a lot of ideas and I can talk to her about stuff. You just have to go down to see her, you don’t need an appointment. Maybe she’s more available because there ain’t so many kids here who want to go to college. (Aisha, interview, May 21, 2001)
The VOSE coordinator was responsible for all students in the career center with Individualized Education Plans (IEPs). She assisted the AMT teachers with understanding individual IEPs, developing curricula, and modifying academic assessments for IEP students. She counseled IEP students and their families. She arranged meetings and follow-up activities for IEP students who were at risk of dropping out, for their families, and for county support services.

The administrative assistance that was provided to the AMT program permitted Mrs. Shepherd to concentrate on teaching and organizing the learning process for her students. While the administrative support systems put in place by the school district and career center functioned unobtrusively and unnoticed by most students, their benefit to the total AMT program was immeasurable. Without this support system, the AMT teacher and program would have struggled.

**Family Support**

In addition to the administrative support given to the AMT program by the school district and career center staff, the AMT teacher counted on support from each AMT student’s family. While most students in this study reported living with both their parents, some students lived with only their mother or their mother and stepfather. Recognizing the diverse family situations in which children in this school district lived (not all children lived with their biological parents—some lived with uncles, aunts, grandparents, or foster parents), the school district was sensitive to
addressing students’ home support as family support and not parental support. The
school district incorporated family support as key to student academic success.

Likewise, students’ families were considered an essential component to
accomplishing the mission of the career center. On the wall in the lobby of the career
center was a framed document of the career center’s mission statement. It read in part,
“The mission of the [Career] Center is to provide all students with skills, attitude, and
work ethic needed to succeed in today’s workforce with the help of the student’s
family, home school, and community” (Fieldnotes, October 5, 2000). Although the
student’s home school and the career center were required by law to closely monitor
each student’s academic progress and finding students suitable job placements, family
and community involvement in a student’s education were optional.

Research findings on family characteristics and student academic success have
been mixed. Strong supportive family relationships seem to make more of a positive
impact on student learning than demographic family characteristics, such as intact
biological families, family income, or parental educational levels (Dornbusch, 1986).
Epps (1983) noted that class position and income do not determine a family’s
educational competence. Rather, the quality of life within the family makes a
difference in student academic engagement and achievement. While strong supportive
family relationships have been associated with academic success, the nature and
amount of direct parental/guardian involvement in secondary school programs have
not been well documented in the literature. While anecdotal evidence and common
sense seem to suggest that family involvement would improve student success, no conclusive study was found to support this argument (Wilson & Corcoran, 1988):

Parental [family] involvement in the form of active participation in instruction or in determining school policies or programs in secondary schools is not common. While parental involvement is generally assumed to be a positive factor (Henderson, 1981), it has not been carefully examined in school effectiveness studies.... Experience demonstrates that parental support of their children’s academic efforts is important to school success but the case for or against parental involvement in secondary schools cannot be made on the basis of the [research] evidence reviewed here. Common sense suggests that it can be a strong positive factor but this may depend on the form of the involvement and the degree of consensus between the school staff and parents about goals, curriculum, methods, and standards. (p. 15)

While family support of individual students varied from family to family, direct family participation in the AMT program was not observed. Nevertheless, family support was considered an essential component to the AMT program. Indirect family involvement with the teacher and program was minimal and was observed to be initiated by the teacher through letters sent home and by phone calls. It was observed that the level of direct family involvement in the AMT program varied but was generally low. Three parents/guardians attended the parent-teacher evening conference and AMT workdays at the career center during Thanksgiving, Christmas, and Easter holiday breaks. Eight parents/guardians attended the end-of-year AMT awards luncheon and career center completion ceremony. Parents and guardians were reluctant to participate directly in this study. Only one parent agreed to be interviewed for the study.
These findings regarding the lack of home support for the urban AMT program and students were similar to Gless’ (1993) article describing the challenges that urban agriculture programs encounter. “Just like students in urban America, parents, family, and friends have either a misconception of agriculture or they lack [agriculture] knowledge.... It is very hard for them to support something they do not understand or lack the time to learn about” (p. 13). While direct observable family involvement with the AMT program was limited, students in the study reported that their families were involved with their decisions to enroll in the AMT program.

Students were hesitant when asked to talk about their families and how their families supported them in the AMT program. Students seemed to be uncomfortable talking about their families. While a few students said that their parents were not involved in any aspect of their education, others stated briefly that their parents supported their enrollment in the AMT program but did not elaborate on the type of support. When asked about her family, Lovanda gave a typical student response that was brief and vague. “[My parents] never really say anything about it [my being in the AMT program]” (Lovanda, interview, January 19, 2001). Aisha gave a similar response. “My mom, she’s a parent, so you know that she just supports me. But she knows I like it [AMT], so she supports me” (Aisha, interview, November 16, 2000).

None of my family members or friends are involved with small animal care. My mom thought it was okay [that I take the AMT program]. She really didn’t understand most of it until after she sat down with my counselor and my IEP teacher [at my home school] and talked to them about it; and they explained a little bit more to her about it. But my dad was really up for it because I’ve always wanted to be a veterinarian or a veterinary technician. And he’s like whatever helps you reach your
goals. He was very supportive and understanding. (Marie, interview, November 16, 2000)

Even though the AMT students were reluctant to talk about their families, the teacher had a different perspective on family involvement. Mrs. Shepherd was an advocate for family involvement with her students’ academic programs. She prodded parents and guardians through written correspondence and telephone messages to get involved with their children’s educations and the AMT program. She acknowledged that parents were essential to student and AMT program success. Nevertheless, most of the parental support that she described was ephemeral and difficult to categorize. Mrs. Shepherd believed that students with involved parents were more successful in the AMT program and in all of their academic courses and job placement, and that students without a supportive family tended to be less successful both academically and with their job placement. Mrs. Shepherd viewed student families dichotomously—involved or not involved with their children:

Kids whose parents are involved in their lives are 9 times out of 10 more successful. The parents that say, ‘Yes, I’ll come to open house. Yes, I’ll be there’; or the parents that you call and leave a message about attendance or something and you get a return phone call ... the kids [with those type of parents] are just, I use the word, connected. It’s like they are used to having someone in their lives being responsible for them, helping them out and being supportive.... We don’t do as many things like maybe a traditional ag program where the parents are involved and the parents are here or whatever, but we do things through communications, and open houses and stuff like that. And those kids whose parents come to our events are just a lot more, just better prepared. (Mrs. Shepherd, interview, January 17, 2001)

To encourage families to get involved with their students academically, the AMT teacher was a strong believer in communication. She weekly contacted the
families by sending newsletters, memos, or other written documentation home with students such as invitations to career center events, student academic progress reports, and field trip information. The AMT teacher was also proactive in telephoning parents/guardians. When parent/guardian permission signatures were required for a field trip, the teacher phoned homes, giving additional information on the letters that she had sent home. Mrs. Shepherd never gave up encouraging parents/guardians to get involved with their children’s academic success and work skill development, even if they responded negatively or not at all to her requests:

I do have lots of communication with parents by phone throughout the year, and it doesn’t have to be because their student was doing something necessarily bad. I may call just to say that [Mary] is participating in this public speaking contest or she’s going to be going to this national convention or state convention and I need to make sure that she has XYZ with her or we need to have this special permission slip filled out.... I don’t feel like I have a problem with parent communication or their involvement. Once in a while we’ll have a student [whose parents] I’ve called many times, ... but I could not get them to return my calls. But it is usually the same parents when you can’t get ’em, you can’t get ‘em. They’re not involved. But the other parents who are involved, it seems like they’re always involved. And you have no problem getting them to volunteer for things or be a part of things or participate or attend things. (Mrs. Shepherd, interview, January 17, 2001)

When a student misbehaved or performed poorly, Mrs. Shepherd preferred to first communicate by phone to parents/guardians, and then if behavioral or academic problems continued, family members were called and invited to make an appointment to meet with the teacher and career center administrators. The deference to using the telephone, in part, was because of the distance between the career center and students’ homes. Electronic mail (e-mail) was not used to communicate with parents/guardians
or students. Regardless of her herculean efforts to keep lines of communication open with her student’s families, some parents/guardians ignored Mrs. Shepherd’s efforts, and they refused to be involved.

We [teachers] can make comments on the back of the interim progress reports. And one of our frequent comments is ‘Please call me for a conference.’ Many times when students are doing poorly, I contact their parents this way. Sometimes there is no response, or an ‘Okay, I’ll talk to him or her about it’—end of subject. But I keep trying. I may make a phone call, I may send home more notes, or make stronger suggestions on the grade cards. If I call them [families] and say we have a parent-teacher conference coming up, would you like to come in, [and their response is] ‘Well, no,’ I’ll say, ‘Well I have some concerns or stuff like that.’ And then I’ll talk to them about it on the phone. For many of them, there is not the interest I guess in their kid’s academic success. The parents I get in for conferences are the parents of the A and B students. I mean 90% of the kids that you see at conferences with their parents are successful because their parents are involved with what is going on and stuff like that.

There are a couple of students whose parents are very involved, but their student aren’t achieving the most, but the parents are trying to work and help out and stuff like that. Then you have the student, I have one right now, whose attendance is horrible. She got an F the first grading period because of her work and because she missed more than nine days. I called her mom, I left messages, I sent letters—nothing. Another parent, similar to this parent, told me once that they’re [the student] 18 or close to 18, and they’re an adult, and if they can’t get there to school because they are sleeping, then that’s their responsibility. In other words, [the parents are saying that] I can’t control them [my children]; I wake them up; I do this, and nothing.... So unfortunately, I have to say that the poorer students have less parental involvement. (Mrs. Shepherd, interview, January 17, 2001)

Low-achieving AMT students did not have low potential, but their parents’ dispositions toward school and optional school attendance left the teacher with no choice but to fail these children. Low-achieving students seemed to have parents/guardians who were nonresponsive or gave minimal responses to the teacher’s
requests for additional home support. “Researchers have focused on ... ways in which the adolescent’s home may influence his or her level of achievement.... Studies have shown that adolescents’ achievement is directly related to the level of achievement their parents expect them to attain” (Steinberg, 1993, p. 399). If parents/guardians had circumvented school as a child and work as an adult, had a poor experience in school, or held a low level of expectation for the benefits of education, their children seemed to mirror this disinterest in education. Ultimately, some AMT students disengaged themselves from the academic process by over sleeping, cutting classes, or not doing their homework. The families did not discourage these behaviors.

Finally, the career center’s director weighed in on family support. He acknowledged that some students’ families were not involved with their children’s education but praised the AMT teachers for their tenacity in prompting parental/guardian involvement in their students’ academic achievements:

When students come here, the AMT teachers have done an excellent job of getting most of the parents involved in supporting their children’s efforts to be in school and to be working toward being a successful completer of the program. We still have a problem in [our school district] of not having enough parental involvement; for example, we’ve only had about 50% of our parents ever take advantage and see first hand what their children are doing [at this career center].... But they [AMT teachers] do a good job with having contact with parents and keeping the parents informed and involved. In some cases, we lose a few students in part because parents don’t want to be involved, or want to make excuses for their children, when either their children aren’t performing or even attending school. But we work very hard at it, and the AMT program has had more successes than failures in this regard. (Mr. Shely, interview, May 21, 2001)
In summary, family support for the AMT students and program was viewed by the teacher and career center as an essential component of the AMT program, but not all families equally supported their children and the AMT program. In general, very little family support for the AMT program was observed. Lack of family participation included parents’/guardians’ refusal to participate directly in this study. Anecdotal evidence from teachers, administrators, and students suggested that either parents/guardians were not interested in their child’s education or, if they were interested, they were occupied with work or involved in their child’s home school extracurricular activities. Additionally, because some parents/guardians did not have transportation, they could not easily participate in career center events. Students were reluctant to speak about their parents/guardians either out of embarrassment (Darrell’s father was in jail) or general adolescent desire to be independent from their families and to ignore them in public venues with their peers.

**Community Support**

In addition to administrative and family support, the AMT program and teacher were strengthened by a third element—community support. The research literature suggests that schools with high levels of community involvement and openness are associated with higher academic achievement (Wilson & Corcoran, 1988).

Community groups participate in the activities of the school, either by giving their time or by using school facilities for community events.... However, more important than specific activities are the feelings,
beliefs, and values that are generated... Local experiences demonstrate how people can be drawn effectively into the daily life of the school. Their involvement builds commitment and loyalty. It creates a special identity for the school that includes the surrounding community. The ethic of mutual caring that is created multiplies the effectiveness of the school and integrates the school into its community. (p. 112)

For the AMT program and teachers to remain current regarding industry standards and to provide students with quality experiences in the pet industry, community support of the AMT program was necessary. The community was involved with the AMT program on three levels—advisory board members, professional contacts, and customers. Both AMT teachers worked at making their programs known in the local animal care industry. They had professional contacts with several veterinarians, veterinary technicians, pet shop owners and managers, animal breeders, pet groomers, show dog owners, animal research technicians, animal kennels, county animal shelters, and pet supply wholesalers.

Several of these professional contacts were asked to be members of the AMT’s advisory board, which met twice a year. These board members gave advice and input to curricula updates and changes to reflect current job skills needed and trends in the animal industry. Board members served for one or two years. Mrs. Shepherd noted the advisory committee’s input in curriculum changes:

This program’s curriculum has been basically the same since 1981. Changes have evolved over the years to make the curriculum more specific to meet our local needs. In other words, talking with the advisory committee and employers, what the job market is, we’ve added a fish component, and other small additions.... Employers want us to teach small animal care basics like handling and restraining and normal versus abnormal animal behavior rather than a lot of technical information. (Mrs. Shepherd, interview, January 19, 2001)
In addition to serving on the advisory board, professional industry contacts were asked by the teachers to participate as local and state judges in FFA speaking and small animal skills contests. Local events were held at the career center, and state events were held on the Ohio State University campus. Additionally, professional contacts were asked to participate in the AMT program by providing their business as a site for 1- or 2-day mentoring experiences for students throughout the year and/or a 3-month student part-time job placement experience. Professional contacts were volunteers and were not remunerated for their services to the program.

Dog owners in the community participated in the AMT program as customers for the dog grooming component of the course. Many of these customers were staff members at the career center or lived in the nearby neighborhood. Customers called the AMT program to make a dog grooming appointment. Usually, customers left voice mail messages. During the AMT II laboratory session, the student pet shop manager would return the calls to make appointments with customers. Most AMT customers were repeat customers and were familiar with working with students. The minimal fees that were charged for dog grooming services did not reflect a profit but were recovery costs of materials used in this job training component of the course. All fees collected were reported weekly to the career center treasurer and deposited into the AMT operating account. Students were not permitted to receive tips from customers, but some customers occasionally brought cookies or a cake for students to enjoy. For example, one customer brought a birthday cake to the laboratory one
afternoon to celebrate her dog’s birthday with the AMT students. During the year, it was evident how relationships developed between students and customers who would call students by their first names and give positive feedback on students’ grooming techniques. The program offered a chance for mutual goodwill between local community customers and students. Similarly, students became familiar with many of the repeat customers and their animals. Students developed special relationships with some of these animals.

Last year my favorite thing was grooming Buffy.... Buffy was a Cocker Spaniel, and she was so funny. She was like an older dog, and one day she came in, and she started wagging her tail and going crazy. It was funny. She was really hyper. Her owner used to work here, and she either retired or something, and we never were able to get in contact with them again. I actually got my picture taken with Buffy last year when those people came for the school pictures. We got to take our animals down there, and have our pictures taken with them. Buffy, she’s so cute. I miss her. (Paula, interview, November 15, 2000)

In summary, community involvement in the AMT program included local small animal production and care industry leaders who served on the AMT advisory committee, local pet shop and veterinary clinic owners who provided SAE and job placement sites to AMT students, and school personnel and local neighbors who brought their pets to the AMT program for grooming. Administrative, family, and community support were three components or pillars of the AMT’s program that positively contributed to the program’s success and the success of its students.
**Participation in a Youth Organization—FFA**

A catalyst for the AMT curriculum and a component of the AMT program was FFA membership. All AMT students were members of the FFA, a career-technical student organization. While students were asked to be FFA leaders, the AMT teacher integrated many FFA activities into the AMT curriculum. FFA involvement in skills contests was evidenced by the many banners and trophies from previous years displayed throughout the AMT laboratory.

Success can be measured in a lot of ways. And you know that I have a problem with us as teachers, we tend to look at our peers and judge each other by the number of contests we win or trophies, or things that we have, and that’s fine if it is part of our curriculum, part of what we do on a day-to-day basis. Our banners, yes, are signs of success. To me they are not only signs of success and our ability to prepare students, but more of the students’ ability to take pride in their work and to try to work towards the goal, and to understand why they are spending time on this. (Mrs. Shepherd, interview, January 19, 2001)

During the academic year, AMT students participated in local and state FFA skills contests in which they performed well. At these events, students had time to interact with students from other parts of the state. Although the AMT students hadn’t attended this year’s national or state FFA convention, some had attended the previous year’s national convention in Louisville, Kentucky.

All that I remember that we did in FFA last year was, like the convention, the national convention in Kentucky. There were a lot of people from other states there. We went there, it was in several buildings. We had speakers like Danny Glover, talking about stuff. There were a whole lot of people. This year we didn’t go. (Lovanda, interview, January 19, 2001)

They [students] learn to work with different social groups because we do go to FFA activities and contests and things like that. I think that
they get exposed to a lot of diversity there. We go to FFA things where they have cowboys with big cowboy buckles on their belts; and the first time they [AMT students] see that, they just want to roll over and crack-up. But then all of a sudden they’ll go to a dance with these same people, and those people are teaching them the line dance, and then in turn our students are teaching them to do something, I don’t know, some popular dance that’s going on or how to rap or something like that. So I think that they do learn a lot of diversity, on how to interact with other groups, things that they don’t learn when they stay in their own high school with their own groups of students with their own circle of friends. (Ms. Shepherd, interview, January 19, 2001)

One of the FFA state officers spent a day at the career center in January. He spoke with both AMT I and AMT II students. He addressed leadership and had several participatory activities for students that demonstrated and supported their growth in leadership skills. Although all the students knew that he was a state FFA officer and participated in his interactive and group activities, students, including the FFA chapter president, found it difficult to identify with the FFA as an organization and the traditional farm-based curriculum and projects associated with the FFA formerly known as Future Farmers of America. To be more sensitive and inclusive of urban agricultural students, the FFA is no longer officially a “Farmers Club.” This stereotype and misconception are difficult to overcome for most urban students. Urban AMT students have an ambivalence toward the FFA and Mrs. Shepherd’s attempts to integrate FFA activities into the AMT curriculum.

This year I’m president [of FFA]. Last year I was student advisor. I don’t think that FFA was all that good for us. Because it is basically an agriculture thing, and we’re really not agriculture. I’m not really all into the agriculture, cows, meat and milk and all that [stuff]. But you learn a lot of leadership skills, but even though I didn’t get all involved in it; it’s cool. It’s just a lot of leadership stuff. Yeah, you learn about that stuff that the officers do by just doing it. I don’t know. Like the
president, you just think that you’re supposed to be the leader and this and that, and you have to set an example of what you’re supposed to do and not supposed to do ... because I’m president this year, it kind of makes me think like I’m the leader, and everybody’s looking up to me even though it doesn’t seem like it, I know they are. So, I have to be the bigger person, and I have to be the leader.... Last year, they went to Kentucky for a convention, but I didn’t go. We didn’t really do anything this year. [Mrs. Shepherd] scheduled the state secretary or state vice president to come in to talk to us, or someone, I don’t know who he was. This year it was a guy, it was a girl last year. We don’t really have FFA meetings, and now that everyone is out on job placement, we don’t have time, and we don’t do anything. We never had a meeting together with the junior and senior classes, but we did organize the blood drive for FFA, I mean it was our program, the junior and senior AMT classes. That was all we did this year. (Aisha, interview, May 21, 2001)

When asked why he had not taken on a leadership role in the FFA, Darrell responded, “I didn’t wanna be [an FFA officer] because there would’ve been a lot of responsibility, and I didn’t wanna take it.... The officers had a lot of responsibilities. All I did was sat in there and listened” (Darrell, interview, May 9, 2001).

Although the teachers supported and promoted the FFA, most students were ambivalent about their membership, viewing their membership in FFA as a class requirement for contest participation. Students did not wear FFA jackets to school or organize any FFA social events. There was no FFA alumni group at this career center. The teachers discussed FFA service activities, such as the annual blood drive, and prepared students for skills contests during related and laboratory time. No formal FFA meeting was observed. Students did not meet after school for FFA activities because of transportation issues or other school activities in which they were involved at their home schools.
The problem with our students is when we get them as a junior usually they have had no exposure to FFA.... It is very hard to get the FFA instilled in them, and understanding of what it is, and getting them to go to conferences ... and what they don’t understand though is just about everything we do is related to the FFA.... FFA, it enhances the program.... When my students elected their officer team, that’s FFA; when my students had an FFA meeting, of course that’s FFA. To get their committee work done, or have advertising or their treasurer’s report, or to decide if they’re going to do a fund raiser, that’s all FFA. When my students went and participated at state contests at OSU, when we had the awards banquet the next day, that’s all FFA. When they did job interview, public speaking contests, we had an employer come in ... that’s all FFA. hose are all leadership and workforce skills that we develop through FFA and our youth group. Now if we did not belong to the FFA, there are a lot of these things we wouldn’t do.... Because they [students] don’t have four years of FFA and they don’t have that grandfather who was an FFA officer, I don’t think they realize they don’t have that heritage, they don’t realize what FFA really is and how it is a part of and enhances the program. (Mrs. Shepherd, interview, January 17, 2001)

The AMT teachers permitted students to work on FFA service activities either individually or with committee members during the laboratory period after completing their area assignments. Although the service committee members suggested several service projects were suggested throughout the year, only the blood drive that was held at the beginning of the school year was conducted.

They [the teachers] taught us how to hold meetings. We learned that last year. Mrs. Shepherd taught us that. We get magazines from FFA in the mail. We don’t have to pay dues to be an FFA member.... This year I was an FFA chapter officer. I was the reporter. Mostly I just had to do, like if we were doing anything, like blood or giving blood or anything, I would write that in the newspaper saying when it is. At the meetings, we’d talk about things we had to do like have a party or whatever, collect donations. (Lovanda, interview, January 19, 2001)

We have meetings and try to, ah, we have different areas that we work on and we try to get motions passed to be able to do certain things in those areas. Last year we ... had that thing here at school, I forget what
it is called. I don’t remember. It was some type of a recreational thing and we tried to pass it this year to go to the place that has it. But it never worked out. Normally that’s all that happens. This year we haven’t done much. Everyone in the class is a member or an officer. Either a member or an officer. I mean, I didn’t really try to be an officer, actually. I was voting for everyone else. It’s not that I feel that I don’t have leadership skills because I do, but ... Lovanda is the vice president. Aisha is the president. (Paula, interview, March 16, 2001)

During the laboratory period, students worked together, studied together, and quizzed each other as they prepared for the state FFA skills contests that were held in March on the campus of The Ohio State University. Mrs. Shepherd stated that, for two months before the skills contests, “Students are all working on a topic we covered in the curriculum. It is like a kind of special project time studying a topic in depth that they would like to specialize in. For example, I’m not teaching aquarium to go to a contest—it’s a part of the curriculum.”

State skills contests also gave AMT students the opportunity to meet other high school students who were enrolled in similar AMT programs in Ohio, industry professionals who were contest judges, and state AMT leaders. The opportunity to compete with their peers regarding their AMT skills and knowledge motivated students to do their best to learn the curricula’s content.

I did dog obedience [last year at the state skills contest]. I did ok, it was like for me individually I was 50 out of 100, our team got 6th place, so it was ok, I kinda of messed up though, the dog.... This year, I’m on the animal management team. I am not really looking forward to going to the state skills contest this year, well maybe I am because, I think I’ll do pretty good on some of the things, like we have to memorize like dog breeds and cat breeds and stuff. I think that I’ll do pretty good on the dog breeds but the cat breeds, I’m not really a cat person, I might get those mixed up. There are fewer cats but lots of dog breeds. (Lovanda, interview, April 23, 2001)
Last year, I took the test [to participate in the state skills events], but I didn’t make it. Because it was hard and, I don’t know, I think I scored horribly. But I don’t remember really. Last year I did animal health, and this year I did animal management. And of course, I went to the state contest this year. I got fourth place at the local. And then I went to state. I didn't place there, but our team did. The team ended up fourth, yeah fourth place. I guess we weren’t that low because if we were that low we wouldn’t have placed that high. (Paula, interview, March 16, 2001)

And I personally don’t care if they [our AMT students] win or don’t win, as long as they gave 100%. If they work to the best of their ability and we’ve seen that in past years with our deaf students who have competed, our IEP students, our special needs students, they’ve worked and they were great, they gave a 100%. I kind of contradict myself when I say that the banners [and trophies in our AMT laboratory] are not signs of our program’s success, but that they are signs of individuals who have succeeded. (Mrs. Shepherd, interview, January 19, 2001)

The role that FFA played in the curricula of the AMT program was evident. Both teachers recognized that their personal involvement and their students’ involvement with FFA over the past years had declined. Although students had been given in-depth, quality experiences, they lacked the time to develop breadth in their state FFA awards portfolios. Because AMT students were finding it more difficult to compete in FFA state award competitions, teachers asked, “Why should students bother?” Likewise, the two teachers who had contributed many of their evenings and weekends preparing for and participating in these events without remuneration were asked, “Why should the teachers bother?” During the past 10 years, both teachers had been actively involved in organizing and managing logistics for many of the AMT state skills contests that took time away from their other teaching obligations. They
have now passed the responsibility of organizing the state AMT skills competitions to other AMT teachers in Ohio.

Part of it is, why go [to state FFA conventions] when [our students] are not going to get any award. They’re not being pushed for any state degree or anything like that. Especially now with two one year programs, it’s going to be even tougher, because you have to be in for more than one year to apply for any awards. So our kids can’t get any of those awards or anything.... The skills contest is the other big FFA thing, and we do participate. In the past, historically, we have been more involved. Both of us have taken a little bit of declining role, part of that comes from the whole issue of compensation, the pay back, no extended time, giving up your evenings, to do stuff, as time goes on, just dealing with kids and getting them to the point to do that, like struggling with that, just one more thing to do and with everything else going on you prioritize the things you have to get through and some to those things fall to the bottom. (Mrs. Shepherd, May 4, 2001)

The role that the FFA played in the AMT program was one of support to the curriculum. FFA contests provided opportunities for students to develop their workforce and leadership skills. While students were often reticent to acknowledge the importance of the FFA in the AMT program, the teachers viewed it as a means to strengthen students’ skills. Nevertheless, the extended hours without compensation required for FFA contest preparation were beginning to take a toll on the teachers’ enthusiasm for the role of the FFA in the AMT program.

**Supervised Agricultural Experiences (SAEs)**

Supervised Agriculture Experiences were a catalyst for the AMT curriculum and a component of the AMT program. SAEs were arranged by the AMT teacher and individual student, primarily during the summer months but also during the academic
SAEs are not the same as job placement, discussed in the next section, but both SAEs and job placement gave the AMT students opportunities to observe and participate in the “real world” small animal production and care industry. SAEs were usually short 1-day to 2-week experiences and included long-term home projects, such as when junior class students took animals home from the AMT laboratory and cared for them during the summer break because the AMT laboratory was closed during the summer months. The teacher checked on students and their AMT projects throughout the summer by telephone. Because summer programs were not included in the AMT program’s budget, Mrs. Shepherd did not visit student SAE projects at students’ homes. The AMT summer project animals were returned at the beginning of the school year in the fall. Students reported on their SAE in the form of a report or record book they kept.

The juniors have SAE projects over the summer. The students take the animals [from the AMT program’s ward areas] home over the summer. It’s like an FFA breeding project. They sign out an animal and have a contract with [our program] to take care of it. They [students] have to provide the feed and bedding materials. When we don’t have enough students to take all of our animals then some of the animals have to be signed out to others like our vendors, and we pay them. (Ms. Shepherd, interview, January 19, 2001)

Another SAE possibility was for students to request SAE internships at local veterinary clinics or pet shops during the summer or during the school year. If a student spent one or two supervised days at a business, then the experience was considered a mentoring SAE.

Because of curriculum, finances, equipment and time, there are skills we teach in related classes but do not have the opportunity to practice
in the lab. Mentoring solves this dilemma while giving students the opportunity to experience, first hand, what a typical day is like on the job. Several times a year, students complete mentoring assignments. On mentoring days, students report to an employer and spend their career center time with them rather than at school.... Upon completion, students fill out a mentoring assignment describing what they did and learned. (Mrs. Shepherd, interview, January 19, 2001)

I went on a mentoring assignment at a vet place. I would really like to work there. But all that they have there is like vet tech and veterinarians. I seen they had a big huge 15-pound cat that day when I was there. They were really nice there and they said I could come back and watch surgery sometime. I probably will go do that this summer. Just to see if I’m still interested. Because like I haven’t disowned that thing yet. Because I may still want to become a veterinarian. (Paula, interview, March 16, 2001)

I went to Reptile City for my internship. I would do everything there, clean the cages and stuff. I could feed the snakes and gators. Every once in awhile I’d have to go in there and pick up the stuff they didn’t eat. It’s not that hard to do. (Darrell, interview, November 8, 2000)

Both at-home AMT projects and mentoring experiences at AMT businesses constituted successful SAEs. AMT students participated in a variety of SAEs, including 1- and 2-day shadow experiences at veterinary clinics and caring for AMT laboratory animals at home. Unlike SAEs that were usually only one to two days, job placement lasted 3 months.

**Job Placement**

Another catalyst for the AMT curriculum and a component of the AMT program was job placement. During several AMT classes, the teacher reviewed job possibilities in the small animal care and production industry, encouraging students to talk about their SAE mentoring assignments and internship experiences with other
students. On several occasions, the teacher divided the class into smaller groups and encouraged the students to interact with each other about their different experiences so they could learn from each other’s experiences.

Mrs. Shepherd discussed with the AMT students how they were to apply for a job, including how to write a resume, fill out a job application, and conduct themselves during an interview. She discussed what students should put on their resumes and what to say during an interview about their training in the AMT program. Students were required to submit a word processed resume by the end of the first grading period, which the teacher reviewed and corrected. Student resumes were then used in a mock interview process. Advisory board members and friends of the program were invited to come to the career center to role play the interviewer for a pet store position. Students took turns being the interviewee. The researcher played the role of pet store owner and practiced with each student appropriate responses to interview questions.

At the end of the first grading period, the month of January, AMT students filled out job applications at pet stores, pet groomers, kennels, small animal research facilities, and veterinary clinics for their 3-month part-time job placement assignments that they began in March. Students generally applied for jobs close to their homes because transportation was a potential problem. If students had a difficult time finding a job placement site close to their home or were unsuccessful in their job application and interview process, the teacher helped to facilitate job applications and interviews at small animal care businesses where the teacher or advisory board
members had industry-related friends or contacts. Before beginning her job placement, Marie had two options and was excited:

I can’t wait. I want to go to either Petsmart, which is just up the road from my house, I’d probably be in the back with the animals most of the time. Even though I love people and I was a cashier for three years, I probably would end up in the back with the animals. If I don’t go there, then I want to go to my veterinarian’s office. It’s also down the street from where I live, about 5 minutes. (Marie, interview, February 8, 2001)

Beginning in March through the end of the school year in May, students worked part-time at their job placement sites in lieu of attending the career center. Although most of the job placements were paid positions, a few students opted for unpaid intern positions at veterinary clinics. Students attended the career center only one day per week. On Mondays, Mrs. Shepherd reviewed with the students what they were doing on the job placement site, answered questions, and reviewed their job placement record books. Mrs. Shepherd had weekly telephone contact with each student’s job placement supervisor and made one to three visits to each job placement site during this 3-month period. When on these site visits, she verified that the job placement site was a valid program-related site and that the student was regularly attending and working at the job placement site as reported by the student. Even though most students were successful at their job placement, a few were not. Mrs. Shepherd intervened on a regular basis for at-risk students who were not regularly reporting to their job placement site, who had problems completing their work, or who had problems with their supervisor. She played an active role in finding options for students at risk of losing their jobs.
Behind the scenes, Mrs. Shepherd contacted many people and services to keep each student at their job placement site. She committed several hours and whole days to student job placement issues. For example, she mediated conflicts between students and their supervisors, found alternative transportation for students from their home school to work, and offered ideas for alternative work schedules and work responsibilities for IEP students. Despite these teacher interventions, two students were released from their job placements before the end of May. They both returned to the career center Monday through Friday at the regularly scheduled class time. Mrs. Shepherd gave these students a variety of laboratory assignments to complete during the week.

At the end of May, students in good standing with their job placement supervisors were asked to continue working during the summer. Some students in this study continued working at their job placement sites, while others quit to take the summer off. In the fall, these students either went back to work, to college, or to other technical training schools. When talking about her job during the 3-month period of job placement, Paula, initially excited, grew disenchanted and ambivalent:

(March) I think it’s good that we can get paid for doing pretty much what we do here. There are just with a lot more customers there. The only thing that I really don’t like about it is that I have to close. And I’d rather work during the day than work at night. And the other thing that I don’t like about it is that there’s nobody there from here with me besides Marie, and we don’t work the same shift. I really don’t know anybody there, I mean I’m starting to know people there but I would have been more comfortable and liked it better sooner if there were people there from here. It just seems like it would be more comfortable that way. I don’t think that I get paid enough. (Paula, interview, March 16, 2001)
(End of March) I used to go to work [at my job placement] from 2 p.m. to close but that was too many hours. Because I was working like five days a week 2 to close, and that’s too much. So she [the store manager] changed my hours to 4:30 p.m. to close. It goes really fast now because I pretty much just bag fish and take care of customers. I operate the cash register, answer phones, clean tanks, bag fish, slope the gravel, partial tanks, shine tanks, the list goes on and on. We could be here all day. (Paula, interview, March, 26, 2001)

(April) The least favorite thing I do there is mopping when they close; I hate that. And partialing [fish tanks] is not one of my favorite things. I’m scared of the fish. [Laughs.] I don’t mind if there’s a net there between me and the fish, but if the net’s not there then I’m not touching it. Slimy. I like to answer phones, and work on the cash register; and play with the animals when we’re dead [slow]. Because we’re dead sometimes. Like Saturday, it was rainy, so we were pretty dead, but we sold a couple of cats that day, though. They were kittens, we have a Pekinese right now she is ten months old. She’s so cute. (Paula, interview, April, 9, 2001)

(Mid-April) I wanted to work with animals, but ever since I started my job placement – I’m around animals all the time – I don’t like it as much as I thought I would. (Paula, fieldnotes, April, 23, 2001)

(End of April) I quit my job placement because that woman [the store manager] was having me do everything. Mrs. Shepherd called me and said that this was the worse thing that I could do. So I went and talked to my boss, and she said that she’d give me a second chance. But it hasn’t gotten any better. I still have to do everything. (Paula, fieldnotes, April 30, 2001)

(May) Well, basically I believe I was fired [from my job placement] for no reason. But they, the bosses at my work, don’t feel that way. Mrs. Shepherd said the same thing. Whatever. (Paula, fieldnotes, May 7, 2001)

Paula, like many of the AMT students, was interested in making money at her job placement and meeting new people and friends. Paula was a very social person, and she expressed great joy in working with people, including customers. But like
several of the other AMT students, job placement gave Paula a rude awakening to what it means to have a job and to be expected to work and do monotonous jobs like cleaning. By the end of the school year, Paula had decided not to continue seeking employment in the AMT industry. At the end of May, students in good standing with their job placement supervisors were asked to continue working during the summer. Some students in this study continued working at their job placement sites, while others quit to take the summer off. In the fall, these students went back to work, to college, or to technical training schools.

The end of job placement and the end of the AMT program corresponded to the end of the AMT students’ high school careers. Many students became reflective on the future during this time and retrospectively viewed their participation in the AMT program in light of their future plans. While many students cited job placement as the capstone event of their AMT training, most students reflected nostalgically on the friends that they had made during their two years in the AMT program.

**Student View of the AMT Program and Their Future**

Students held mixed opinions of the AMT program. In general, students enjoyed the program and some wanted to continue in the field of Small Animal Care while others believed that the AMT course helped them realize that they did not want to continue in the industry.

I was working at a veterinary clinic because I was going to go to [the community college] to be a vet tech. But they had to put these dogs down, and I didn’t like it. Do you know those dogs twitch a lot before
they die? [Pause] I want to study nursing now. (Ronnetta, interview, April 30, 2001)

When I graduate from here, I don’t think that I’m going to work at a pet store because I don’t make enough money to move out.... And I don’t think that I want to be a veterinarian anymore. Because last year when I was in animal health, I did research about what the veterinarians have to know. And they pretty much have to know what doctors know, but just for animals. And I don’t think that I could handle the blood and the guts and all that. I think I’d be on the floor.... So I think I’m going to look into something else. I don’t have any idea. (Paula, interview March 16, 2001)

While most students held their teacher in high esteem, they regretted the actions of fellow students who negatively impacted their learning experience. They also disliked the day-to-day chores of cleaning cages. They believed that routine activities were boring and did not connect these activities to learning processes or job preparation practice.

For the first couple of months [last year], I was really disappointed in the [AMT ] program, ... because it just seemed like the only reason that we were there was to clean cages, and to feed and water the animals. I didn’t understand what that was supposed to teach me. I already knew how to do that.... And just like the same thing every day and everybody was sick of it. (Paula, interview, March 16, 2001)

I prefer the 3 hours I spend at my home school. I like my home school better than the career center. The good thing about this program is that I like working with animals. You know, sometimes they can be kinda mean. Like last year I was horsing around with the dogs, and I still do now, but I haven’t done it in a while. Bad thing, sometimes it is boring, doing the same thing all of the time. But I have to get used to it. [If I could change something in AMT program] I would change it so we wouldn’t have to do birds, I don’t like them. I hate cleaning their cages. I would keep grooming, I like grooming. (Lovanda, interview, April 23, 2001)
Because all of the students in this class were 12th-graders and would be graduating in the spring, some were concerned about where they would be working after graduation, and others were concerned about where they would be attending college. They used some of their free time during the laboratory period to surf the Internet to look at different college web pages, or to obtain information about jobs at different companies from the career center’s counselor.

Of those students planning to go on to higher education, most were seeking direction from their home high school counselors and the career center guidance counselor on how to proceed. The AMT teacher directed college bound students toward AMT scholarships and other resources for financial aid.

Marie had made her plans and was looking forward to a career in veterinary medicine. “Next year I want to go to the community college to take the veterinary tech program, and whatever classes I have to take like mathematics and chemistry to get into the veterinary medicine program at the university,” (Marie, interview, May 7, 2001). Aisha also had made plans to attend college in the fall. “I’m going to pre-vet medicine at Cincinnati University.... I will go to Cincinnati in the fall of this year.... They have an ROTC program at Cincinnati,” (Aisha, interview, May 21, 2001).

Lovanda and Paula were also making plans to attend college in the fall:

I’m hoping I’m going to get into a college and major in biology or something.... This class, I think might help me in a biology type classes a little bit maybe. I would like to study in this type of field, like grooming or something. I want to be a vet tech.... Like you have to learn certain parts of an animal, and I don’t think I’ll get that. I mean like remember the body parts, and bones, I don’t think I can do that. I mean maybe a little bit but not a lot. I would like to work with dogs.
and all the other animals that are here, like rabbits, guinea pigs. (Lovanda, interview, April 23, 2001)

I applied at [a local business school]. And I don’t know where else, I forget. I didn’t apply at [the community college] because I don’t have the application fee. I really don’t... I haven’t talked with the counselor yet, but I need to. Because at the beginning of this year I didn’t think, I mean, I guess I kinda of procrastinated really. I do that a lot. I really haven’t filled out for any scholarships because I didn’t know which college I was going to. I really need to talk to her [the counselor]. (Paula, interview, March 16, 2001)

For those students not going on to college in the fall, when asked what their future plans were, they replied at first hesitantly, and then almost resigned with a fatalistic note in their voice—“Work” (Darrell, interview, May 9, 2001). Ronnetta was more emphatic about looking for a job not associated with AMT:

I'm going to take a break from school and then go to [the community college] next fall. I don’t know what I’m going to major in. I’m not majoring in vet tech. No, no way! No more animals. I’m tired of animals. I’m tired of looking at ’em. I want to deliver babies. I love babies. (Ronnetta, interview, April 30, 2001)

Once students complete the AMT program, leave the career center, or graduate from high school, there is only minimal follow-up on their job placement or higher education career by the teacher or career center.

The only follow-up on students [once they leave the career center] is what the instructors do. Teachers have to fill out a report on the students who graduated last year, where they are working and things like that. In the home schools there is no follow-up after graduation, and they should, because how else do you know what you are doing is the right thing?... The only students that we might be able to do a follow-up of some sort are the students contracted with BVR or MRDD.... But if these kids are working for 60-90 days, then BVR will close their case file because they are considered a success.... If they are low functioning enough then MRDD will follow them up for a life time. (Ms. Brittney, interview, January 25, 2001)
In summary, AMT students had multiple interests at the end of their 2-year program at the career center. Well over half of the students were planning to continue in the AMT industry either as employees in pet shops or veterinary clinics, or they were college bound. The other half of the students acknowledged that they would not pursue a career or college education in the AMT field but that they would seek work in other areas, such as nursing or other nurturing careers. Little to no follow-up has been done on program completers.

**Research Questions #2 and #3**

How do students from different cultural perspectives describe and explain their experiences in a diverse urban agricultural education program? How do students articulate and express their ethnic and socioeconomic similarities and differences through “cultural productions” in an urban agricultural education program?

These two research questions address the salient cultural phenomena in the AMT classroom and laboratory, and the findings are reported as “cultural production portrayals.” This style of representation draws on the synthesis of the work done by Willis (1983) and Piantanida and Garman (1999). According to Willis (1983), cultural productions were “the active, collective use and explorations of received symbolic, ideological, and cultural resources to explain, make sense of, and positively respond to, ‘inherited’ structural and material conditions” (p. 112). Cultural productions give meaning to social realities. Consistent with the epistemology and
assumptions of interpretism, how the researcher “unpackaged” the events and interactions noted in the responses to Research Question #2 was dependent on the researcher’s cultural lenses (Geertz, 1983). Furthermore, qualitative research generates knowledge through a movement from the situational to the conceptual as proposed by Piantanida and Garman (1999). “Whereas the context is particular, concrete, situational, and idiosyncratic, a phenomenon of sufficient educational significance bridges the universal. The movement from the situational to the conceptual is accomplished through the crafting of portrayals” (p. 133). Through the intertwining of Willis’ (1983) and Piantanida and Garman’s (1999) constructs, the researcher observed, inductively analyzed, and then interpreted four cultural production portrayals in the AMT program. These portrayals illustrated four primary themes that emerged from the data corpus—AMT students were sensitive and nurturing individuals; AMT students identified with stereotypic gender roles in the classroom and laboratory; some students lied for attention and self-preservation; and AMT students were anxious, preoccupied, and sometimes terrified by their pending transition from high school to full-time work or college.

While the cultural production portrayals are student based, the researcher validated these responses through triangulation of other sources or failed to validate the responses as in the case of “students’ fictitious lives” below. While Research Question #2 sought to elicit direct descriptive and explanatory responses from students concerning their experiences, Research Question #3 sought to validate these student
responses through observations of students’ descriptions and further verification from other sources (i.e., teachers, counselors, administrators, and peers).

Student participants described specific incidences that occurred in the program from their different sociocultural perspectives and experiences. These descriptions were validated by what the researcher observed and heard in the AMT classroom along with what was reported by other sources. The student-focused cultural production portrayals were dependent on the diversity of the urban classroom and therefore differed from student to student. Nevertheless, there was overlap on what the students and their teacher reported. The findings consequently focused on four thematic interpretive descriptions that expressed homogeneity or a shared identity among the students: students’ need to belong, girls will be girls and boys will be boys syndrome, students’ fictitious lives, and students facing the world of work.

**Students’ Need to Belong**

Students wanted to belong. Being a part of and accepted by a peer group is an important component of adolescent development. Brown (1990) reported that students who are involved in adult directed peer group activities, clubs, or sports are more likely to be successful in school than were other students. This study supported Brown’s findings. The need to belong when channeled by the teacher in specific group activities, including FFA activities, contributed to students’ success in the classroom. Successful students daily demonstrated this need to belong in the AMT classroom. Although from diverse socioeconomic backgrounds, they wanted to be a
part of a group of other students, a team, and the class. Although peer groups were
gender specific, all students seemed to have an insatiable need to talk with each other.
The teacher facilitated this group need through organizing an open laboratory and
assigning students to work together in weekly assigned groups and in study groups for
FFA skills contests. In addition, the teacher required that all students wear a similar
uniform, either a purple work smock or blue clinical scrubs. Most students wore this
AMT “uniform” proudly.

Mrs. Shepherd was keenly aware of the social role her class played in her
urban students’ lives. Inner-city and suburban students worked together, as did
students with diverse academic levels. Perhaps AMT attracted students who were by
nature sensitive and nurturing. Mrs. Shepherd accommodated a transfer of this caring
and nurturing for pets and animals in general to a class ethos of care and concern for
the other students in the program.

The students all had different social levels this year, but this is no
different from any other year. We have students that come from all
over [the city]. Not just the inner-city kids but we also have some
suburban kids because of the different feeder schools that we have
contracts with. So their social backgrounds are usually very different;
their personalities are different. When they come together here at the
career center they tend to bond differently than what you might think in
a local high school where they have all known each other growing up
as kindergartners. It’s almost like a fresh start for some of them. I’ve
seen them come in maybe they weren’t the most accelerated in their
home high school or they didn’t have a lot of confidence, but once they
get here into a group of other students, I’ve seen some of them blossom
with a lot of self-confidence. But in my class socially, they do kind of
come up with a new social hierarchy if that is what you want to call it.
In this class for instance, I think that this class has been the most
sensitive class I’ve ever had with the disability issue of some of our
students.... I think that our IEP students have helped the other students
become more acceptable of others in the social arena. (Mrs. Shepherd, interview, January 19, 2001)

While most AMT students formed alliances and embraced peer groups, a few students resisted. Despite Mrs. Shepherd’s many efforts to facilitate belonging, there were some students who never connected with other students, resisted working in a group, sabotaged their participation in skills events, and found several excuses for not wearing their AMT smock or scrubs. When students resisted participating in AMT group activities or group work, their peers at first encouraged them, but if they persisted in their isolation or were rude, then the other students ignored them.

A couple of students in this class, I’ve never really gotten along with that well. People don’t bring me down that easy. So, they didn’t really bother me, I mean one way or the other. There are a couple of people in here that I don’t think that I could work well with. Because they’re just not cooperative at all. And they don’t work well as a team. But I like mostly everyone else in here, and we are very close, I mean we sit in a group and have a bunch of fun, just laughing and joking around when we have time, like I mean free time. (Paula, interview, November 15, 2000)

The annoying people in here, they bug you a lot. They are mean. There are a few mean people in our class.... I don’t know why they’re mean. They just act like they are mad at everybody or they don’t care. We try to be nice to them, but they won’t be nice to us. (Lovanda, interview, April 23, 2001)

Students who resisted belonging to a group had to work harder at being successful in the class. Although conspicuous loners in the AMT classroom, these individual students had the same belonging needs as the other students, so instead of identifying with peer AMT students, they would make it known how they were members of other peer groups at their home school. Bob’s excuse for not participating
more actively in organized AMT group activities was, “I am on the baseball team at my home school. That’s where my friends are” (Bob, fieldnotes, February 12, 2001). Aisha, who was successful in the AMT classroom but preferred to work alone, had a similar excuse, perhaps related to her learning style.

I am very independent. I don’t like working with other people like on grooming and stuff. Because like, I play tennis, too. I’m on my home school tennis team. I play singles, because like in doubles you can’t always depend on the other person to get the ball. Like here, you can’t always depend on the other student in here to do their half of the work. I just like to do everything by myself. I tried to do everything by myself in this program but she [Mrs. Shepherd] always made us work with someone. She always stuck me with other people. I wish she wouldn’t have done that and just let me work by myself. (Aisha, interview, May 21, 2001)

Unlike Bob and Aisha, most students strove to belong to one or another of the many AMT groups. These students wanted to please their teacher whom they held in high esteem. Because Mrs. Shepherd promoted group activities, most students willingly complied with her requests. Any positive feedback that the teacher offered these students was highly valued. These students had an unconscious desire to be noticed by the teacher. To be noticed and get positive feedback from Mrs. Shepherd, some students would try to monopolize her attention by asking questions repeatedly or feigning ignorance and asking for individual supervision. When they were interviewed, all students used first person possessive pronouns when talking about “my” teacher, “our” group, and “our” class. There was a strong underlying “I belong” sub-text to what students said when they spoke about their group and class activities. This notion of belonging and being a part of the AMT class was also apparent when
Mrs. Shepherd spoke both to the class as a whole and with individual students. She stressed teamwork, collaboration, and cooperation. She demanded that students take ownership and responsibility for their assigned ward areas and gave students leadership assignments that built trust and confidence among students.

Whether or not a student belonged to a peer group in the AMT program, just being a student in the AMT program was an important element of each student’s identity. All students agreed that at their home school, they were mostly average and unnoticed, but in the AMT program, they were seen and treated as being special. Coming from large urban inner-city public schools, where class sizes averaged 30 or more students per class, being a student in a relatively small class of 15 students made them visible, and they were proud to be associated with the AMT program and teachers. Mrs. Shepherd maintained control by being direct, firm, caring, and responsive. She became one of the first if not the first adult outside of their family who was involved with them on an intense personal level, unlike their other high school teachers. Students respected Mrs. Shepherd for her AMT knowledge, fairness, and approachability. She listened to their stories, asked them questions about their families, and rewarded them with justifiable praise for work well done. These observations were consistent with Steinberg et al.’s (1988) meta-analysis of noninstructional influences on high school student achievement:

There is tentative support in the literature for the notion that students achieve more in school when those around them, especially adults, are proactively involved in behaviors that lead to academic success. These behaviors include, among others, monitoring of academic progress, supervision of academic and nonacademic behavior, involvement in
school as an institution, and encouragement of higher levels of achievement. These behaviors are more effective when they occur in the context of an authoritative relationship characterized by warmth and demandingness [sic] on the part of the adult. (p. 47)

Because they spent three hours or more a day with the Mrs. Shepherd and, for some students, this was more time than what they spent with their own parents, Mrs. Shepherd was their bridge from adolescence to adulthood. Mrs. Shepherd taught them about getting a job and keeping it. She was the first adult who, for many of these students, explained the mysterious world of work to them. For others, it was the first time they had ever competed in an event where they received recognition or a trophy. Students attributed their success to Mrs. Shepherd: their mentor and friend.

Mrs. Shepherd treated her students as she would have treated her own children. She was never observed yelling at, talking down to, or belittling a student. Regardless of the student’s academic level or IEP, Mrs. Shepherd spoke respectfully and, most importantly, patiently with each student. She measured out discipline sparingly but with consistency and firmness. Students knew that their negative actions would have consequences that Mrs. Shepherd followed through with when warranted. These consequences ranged from lower marks for lab participation, to a 10-minute cool-down period and talk in the teacher’s office, to a visit to the assistant principal’s office. Because of the respect for their teacher, only two occasions were reported during the school year that entailed a student visit to the assistant principal’s office.

I do have my students in this class who have big mouths and who are more outspoken than the other students. They have always been a challenge for me because I consider myself a disciplinarian, and I do like to have structure in my classroom—orderly fashion. But this year
I had some students who liked to blurt out things here and there, but I think that we came to a compromise when it was appropriate and when it was too much.... I don’t know what to call it, it was almost like a contest of wills, between myself and [some of the students]. But they knew what my parameters were, and they figured out how they could fit into them.... I think we all had to work at it a long time this year. (Mrs. Shepherd, interview, May 4, 2001)

For the most part, teachers treated students as adults in a workplace. Students understood and respected their teachers for giving them this recognition. Students were given responsibilities in the laboratory, and for the most part they completed their assignments in a timely and professional manner. Students were encouraged to make decisions concerning the AMT program and FFA activities (e.g., when and where to go on field trips, designing fish aquariums, organizing community events). In this professional and democratic learning environment, some students developed into AMT student leaders and others followed, but they all worked together.

Students also expressed their sense of belonging and unique identity as AMT students through the use of animals. Students brought in pictures of their pets or the animals they would like to have as pets and put them up on the outside of their lockers. Darrell had his favorite animal, an anaconda, tattooed on his arm, and Lovanda wore dolphin jewelry and clothes with dolphins on them. The animals in the laboratory also became part of the extended AMT student group. Some students used laboratory animals as intermediary agents or calling cards to connect with and talk to their classmates. For example, one afternoon, Lovanda was carrying Thumper, one of the laboratory rabbits, behind her back when she approached two girls studying at a table. Lovanda said, “I have a present for you.” She pulled around Thumper and held
the rabbit up for each of the girls to kiss. The two girls responded immediately with, “Thumper!” Both girls kissed the rabbit on its nose and addressed it in the same tone as one would address a small child, “Oh, you precious thing, you.” The three girls talked together for a few minutes, and then Lovanda returned Thumper to her cage in the rabbit ward (fieldnotes, November 22, 2000).

When it was time for local and state FFA skills contests, students competed to be on different skill teams. They either chose the skill event to enter based on who else would be on the team or the teacher would assign them to a specific team. Once the skills event teams were selected, students worked hard studying and drilling each team member. A sense of pride and peer pressure developed for each team. Every member wanted to do well so that their team would place high in the rankings. They wanted their peers, their teachers, and their family members to be proud of them. The many trophies and team banners won by previous AMT students that were ubiquitously placed and hung throughout the AMT laboratory also motivated students. The teacher effectively used this student need to belong to a certain skills team and peer pressure to motivate students to do well on a team. The teacher used FFA skills contests as a means to enforce the curriculum for that particular skill area. During this intense 2-month preparation period, Mrs. Shepherd assigned each team additional readings, memory activities, problem solving activities, and presentation/speaking practice. Therefore, in addition to having students be engaged in learning activities that supported the curriculum during this time, skills contest preparation fostered a sense of belonging among the students and accelerated the learning process. Steinberg
et al. (1988) reported on the positive influence of this type of supervised peer work. “With respect to peer influence, studies suggest that although peers are not as influential as parents in shaping students’ academic efforts or aspirations, most peers seem to encourage, rather than discourage, academic success” (p. 5).

To support the integration of AMT content skills with academic skills, the teacher exploited this belonging or need to belong to a peer group. During the FFA skills contests, students had to demonstrate mastery of content knowledge, both through hands-on demonstrations, such as grooming a dog or restraining a rat, and problem solving skills, such as reading or calculating data to analyze specific animal health problems. Also, students were judged on their speaking skills, appropriate dress, and workplace attitude. Although individuals were awarded points, teams were awarded a placement based on the team’s collective individual point totals. Peer pressure and the sense of belonging to an FFA skills team facilitated the learning and assessment processes built into these event activities.

At the end of the FFA skills event, teams of students proudly received trophies and certificates at an awards breakfast at a banquet facility. For many AMT students, this was the first time that they had ever been recognized for an achievement in a public venue among their peers from across Ohio. At the end of the year, a similar but smaller awards luncheon was organized by the AMT class. Family members were invited to attend the luncheon. After lunch, teachers awarded each student an AMT certificate and trophy. For most students, this special recognition and treatment afforded them by the AMT teachers and program strengthened students’ self-esteem.
and their desire to continue be a part of collaborative team efforts after completing high school. By encouraging collaborative team efforts, Mrs. Shepherd was preparing students to participate in similar team efforts in their communities and eventually at their future work sites.

**Girls will be Girls and Boys will be Boys Syndrome**

Despite all the teachers’ efforts to support mixed boy and girl groups, most students rejected these teacher-initiated efforts. After their assigned laboratory project or activity of the day was completed, students would return to their self-selected peer groups, which were unequivocally girls with girls and boys by themselves individually. The boys did not form a peer group. After completing their group work, boys would sit alone or walk solitarily around the laboratory.

It was apparent in this class that the girls were more concerned with how they were viewed by the other girls in the class rather than what the three boys thought about them. Two of the boys constantly vied for the girls’ attention and were consistently rejected. Although the boys never formed a cohesive peer group, on occasion they did rally around each other. Once Bob made this comment, “See how we boys are outnumbered in here? It ain’t fair.” Pierre shot back, “Yeah, they’re always pickin’ on us [pause] because I’m a playgirl pick” (fieldnotes, November 20, 2000). The boys had the stereotypical boy conversations about “the girls,” while the girls held those stereotypical girl conversations about “the boys.” The teacher rejected the analysis of girls will be girls and boys will be boys and treated all of her students
fairly and equally. The teacher would not tolerate any of the stereotypic boy-girl bantering in the classroom or laboratory. Remark ing on an off-color remark Bob had made to one of the girls, Mrs. Shepherd reflected on why he would say such a thing:

Bob is a student who I think has very low self-esteem. And because of the familiarity he has with the other students in our class, I think he saw an opportunity to pop off and seem like he was important. I saw him as every now and then blurring out little comments for attention. I think that once I or one of the other students gave him some attention, or he blurted out something, he felt that we had given him some sort of stroke. Maybe he was getting points with the other students when he said these things, I don’t know; maybe by saying those things he was building his self-confidence. Sometimes I know that I deflated his confidence very quickly because I felt that some of his comments to the other students were inappropriate or the time was not appropriate. Once he figured out what his parameters were with me, he knew that there were certain things that I would accept and there were other things that were totally unacceptable.... I think that his case was a typical case of a senior feeling his oats; this was part of Bob’s personality, how he got some self-confidence and into that hierarchy of the class. (Mrs. Shepherd, interview, June 4, 2001).

After the boys had figured out the teacher’s position, they simply waited until the teacher was not looking or was out of ear shot in an adjacent work area before they made faces at the girls or commented sarcastically about the girls’ clothes or looks. Also, when the teacher was not looking, two of the boys would throw things at the girls such as wads of paper, or pet food. At least once a day, one of the boys was observed playfully hitting one of the girls on her back or arm. The girls ignored the boys’ comments and playful advances, or they would say very loudly, to get the teacher’s attention, “Stop it.” On the rare occasion that a girl would hit back, the two boys would seem to enjoy it and curl away, and in mock disbelief say, “Oh, she hit me,” or “Ouch, that hurt.” Girls were never observed starting a situation with one of
the boys. Every confrontation that was observed was started by one of two boys. The third boy in the class was never observed touching, hitting, or throwing anything at the girls. He kindly helped the girls with their laboratory assignments that they did not want to do, such as pick up snakes and clean snake cages.

The girl cliques were informally organized by their home schools and their perceived social order, more so than their ethnic background, IEP status, or GPA. Although there were two groups of the 12 girls in the class, some girls crossed over from group to group, while other girls only socialized with the girls in their group. The groups were not in any overt manner competitive. All the girls in this class seemed to go out of their way to maintain harmony among all the girls. There was one serious verbal and physical confrontation between two girls at the end of the school year. The girls’ conflicts in the classroom and laboratory were with the boys and occasionally with the teacher rather than among themselves. On occasion when a girl would challenge Mrs. Shepherd’s authority, she would back down once the teacher explained the situation. On the other hand, two of the boys were always testing Mrs. Shepherd’s limits and would not let up as quickly as the girls did. It seemed that the teacher was daily challenged to assert her authority with the two boys. During these times, the teacher was always firm and controlled. The boys were obviously baiting her, and she knew it.

Although the girls never showed any interest in the three boys in the class, their private conversations seemed to focus exclusively on boys—boys at their home schools, boys in other programs at the career center, boys at the FFA skills contests,
boyfriends, ex-boyfriends, and imaginary boyfriends. One example of an imaginary boyfriend was the wrestler the “Rock” from the World Wrestling Federation (WWF). Ronnetta often talked about her imaginary romantic relationship with the Rock. “Last year Mrs. Shepherd used to tell me to do the Rock, to do the eyebrow of the Rock. I can’t do it now, I lost it. It [my eyebrow] arches way up like the Rock’s.” Paula responded with, “Yeah, she loves the Rock. Last year I got her a Rock poster for her birthday, and she about did back flips. She was goin’ crazy.” Both girls laughed (Paula, fieldnotes, January 10, 2001).

Some girls were especially fond of commenting on the boys in uniform, fellow career center students in either the Police or Fire program. The girls compared notes about which boy looked at them in the career center’s commons area and which one smiled, winked, or flirted on the bus or in the parking lot. Somehow the AMT girls even managed to organize elaborate clandestine meetings with these boys. For example, one group of girls was self-congratulatory as they discussed how they had worked together to help one of the girls in their group meet with one of the boys in another program. The plan went something like this: At a predetermined time, one of the girls in the AMT program asked Mrs. Shepherd to use the restroom. At the same time, boy X asked his teacher in the Police program to use the restroom. The two students met in the hall and chitchatted by the restroom doors and fountain area for about 10 minutes. While the girl was out of the AMT laboratory area, the other girls distracted the teacher, so the teacher did not get suspicious when the girl had not
return in a reasonable amount of time. Keeping the teacher distracted, the girl was then able to sneak back into the laboratory without being noticed by the teacher.

Other boy talk revolved around who got a ride to or from the career center with which boy. These conversations were spoken in a tone of pride and conquest. Girls carried boys’ photos in their purses, taped them up inside their AMT lockers, and showed them off like trophies to the other girls. When the girls started on boy talk, the three boys in the classroom ignored them or moved to another area of the lab.

Girls who did not have a boyfriend, chase after boys, or have any interest in the “love” conquests of the other girls had their own group. This second group of girls referred to the boy-enamored group collectively as “the Barbies” and held strong opinions about them.

I didn’t like my junior year in AMT because there was this girl named [Sarah] here last year.... She wasn’t very sensitive. She and her group used to make fun of me because I didn’t have a boyfriend. But she didn’t come back this year, and that’s what made this year a lot better because I could come out of myself, out of my shell. Last year, I stayed in my own little shell, even though I wanted to beat her up. I stayed in my own little shell and concentrated on school. This year I don’t have any problems with anybody; well, except I’ve had a few problems with Barbie. Who has this obsession with me liking some guy in auto-tech. I think his name is [John] or something. I don’t even like him, but he goes to my home school, and we ride on the same bus to the career center. Barbie has her eye on him. And I’m like yeah, right, whatever. (Marie, interview, November 16, 2000)

On the occasion that this second group of girls did talk about boys, it was in reference to their imaginary boyfriends or how boys had mistreated them by calling them names or by doing mean things to them. These girls minimized the importance of boys in their high school careers. When asked why they did not go to their home
school dance or prom, they responded that it was not because a boy had not asked
them but because it cost too much money. They said that they either could not afford
or refused to buy a dress, shoes, or get their hair done, just for a boy.

I only went to one high school dance. Once I went to the Valentine’s
Day dance. I can’t go to the prom this year because I owe $60 on my
senior dues. And I can’t pay it, like for a week from this Friday, I don’t
have no money. Plus the tickets for the prom are $25. (Paula,
fieldnotes, January 10, 2001)

In summary, belonging to a peer group was important to all AMT students;
however, boys saw their peer group as only boys loosely bound together by their
individual external-actions mainly focused against the girls, while girls saw their peer
group of girls more tightly bound together by their intra-actions. Two of the boys,
either because they had low self-esteem or craved attention, were co-conspirators
endlessly teasing the AMT girls, while the third boy in the class befriended most of
the girls by helping them with their ward area assignments. Girls self-selected into
either one of two groups: interest or noninterest in boys. Girls were generally more
talkative and clandestine than the boys, who were often obnoxious and boisterous
behind the teacher’s back.

**Students’ Fictitious Lives: The Case of Faux Motherhood.**

Although one of the assumptions of this study was that students were telling
the truth, a limitation to the study was that students lied. Most of the students were
not very good liars, and false statements or claims were easily disproved by cross-
checking responses with other students or the teacher (triangulation). Another method
used to verify what students said or to catch them in a lie was to ask them the same question three or four times over a period of several weeks. It was difficult for most students to remember extemporaneous lies from week to week. However, premeditated and systematic lying was almost impossible to uncover if, for example, a student had duped her whole class, her teacher, and all her peers at her home school. Only by coincidence did such an elaborate lie, perpetuated for two years by one of the AMT students, come to light.

The fabrication that Ronnetta maintained may suggest many things, but certainly one may be a precarious sense of self-worth, even though she vocalized a strong and independent persona. By creating a false identity—motherhood—that she embellished throughout the year, she established a special status and a different relationship with Mrs. Shepherd and the other students. This faux identity could have either been a result of “self-protection” from threats of violence or perceived threats from boys at her home school or an attempt to receive special treatment from Mrs. Shepherd. Ronnetta may also have fabricated this story to belong to or fit in with a certain peer group at her home school and then perpetuated the lie at the career center. Whatever her reason for creating her faux motherhood identity, once it was taken away from her, she reacted violently. This violent reaction and ensuing noncommunication on her part could be interpreted as embarrassment or the importance of this fabrication in maintaining her self-worth. Because she did not come forward to explain her actions and lie, Mrs. Shepherd and the AMT students felt betrayed and confused. Instead of reaching out to Ronnetta as Mrs. Shepherd had
done with other students in the past, this unprecedented event caught her off guard, and Ronnetta was left to herself, alone.

Beginning the previous year, Ronnetta told her classmates and teacher that she was the mother of a 2-year-old daughter. Additionally, she told this researcher the same story. According to Mrs. Shepherd, Ronnetta was not the first AMT student to be a mother, so Ronnetta’s story was within the realm of possibility and believable. Ronnetta gave Mrs. Shepherd many photos of her “daughter” and shared very touching and emotional experiences about her “daughter” with the class.

Ronnetta’s deception was complete. This was Ronnetta’s second year in the AMT program. Everyone, including Mrs. Shepherd and the AMT students, believed her to be a single teenage parent. Mrs. Shepherd had even posted the child’s photo on her student photo board. Ronnetta’s story came apart at the end of the school year. Ronnetta was shopping with her brother and niece–her “daughter”–when they ran into a fellow AMT classmate. When the classmate recognized the child from the photos Ronnetta had shown her at the career center, she innocently made a comment in reference to Ronnetta’s daughter. Ronnetta’s brother was quick to say that the baby was his and that Ronnetta was the baby’s aunt, not her mother. The following day, as word of Ronnetta’s deception got back to other classmates at the career center, students were surprised. After school, Ronnetta followed the girl who had stumbled upon her charade into the career center’s parking lot. There, Ronnetta erupted into a violent outburst and physical aggression against the other girl and subsequently was suspended from school for fighting. When Ronnetta’s mother was called by the
assistant director to clarify the situation, Ronnetta’s mother confirmed that Ronnetta
did not have a daughter but did on occasion baby-sit and take care of her brother’s
daughter. Ronnetta returned to the career center for the end-of-year completion
ceremony but made no effort to explain her story. With her story exposed, the other
students in class ignored her. At the end of the school year, Mrs. Shepherd reflected
on Ronnetta’s deception:

Ronnetta surprised me this year. I never imagined that she would lie to
me about having a child like she did. She latched on to me from the
beginning of the school year, because she always addressed me as her
mom. She said things like, ‘Mrs. Shepherd, I wish you were my mom,’
or she’d walk into class and say to me, ‘Hi mom, how are you today?’
At first, this all seemed very strange to me, but I got used to it. I know
in an African-American family a lot of times they are very close knit
extended families sometimes, and they have a lot of bonding, so I
thought, I don’t know, maybe that’s where that came from. And then,
anytime that I would try to get Ronnetta’s mom in here for a
conference or leave messages at their home on the answering machine,
I never got a response, and so I always kind of thought that maybe she
really doesn’t have a mother figure at her home with her a lot and
maybe because I see her more than her mother does, that maybe she’s
just kind of carrying her personal family life into the classroom, that
I’m more of a mother figure to her, but I don’t know.... She played out
this little scenario that she had a child. I don’t know if it was for the
attention, or to have some type of excuse to be absent periodically.
Maybe it was to fit in, maybe a lot of her friends [at her home school]
have children, I am not sure. I can’t explain it. This has never
happened before. (Mrs. Shepherd, interview, June 4, 2001)

Ronnetta had been close to Mrs. Shepherd throughout the school year;
however, all of the girls had been close to Mrs. Shepherd. Mrs. Shepherd had
expressed genuine interest in them as students and as individuals, and they in turn
responded to her. Because Ronnetta had first-hand knowledge and experience of
taking care of her brother’s child, she was able to talk the talk about babies with Mrs.
Shepherd, which drew the two closer together. When Ronnetta told Mrs. Shepherd that she was too tired to clean up the bird ward area because her “daughter” had kept her awake the prior night, Mrs. Shepherd excused her. When Ronnetta brought in her “daughter’s” doctor check-up schedule, Mrs. Shepherd excused her for those days. Although being excused from tedious work and class time had obvious advantages, this did not seem to be Ronnetta’s primary reason for telling her lie.

After uncovering her lie, previous interview transcripts with Ronnetta were revisited. A collection of stories and facts Ronnetta had espoused that could not be documented or corroborated took on new meaning. Some of Ronnetta’s stories part fact-part fiction or all fiction became more evidence to explain her faux motherhood.

Ronnetta had often talked about violent boys in her home school. According to Ronnetta, these boys constantly fought over things such as shoes. In one incidence, Ronnetta said that there had been a boy who was murdered by another boy in her home school over a pair of shoes. The murder of a student in a public school would have been in the news, but only Ronnetta could confirm it. Obviously fictitious, Ronnetta’s intent on telling this story was not initially apparent. What was apparent was the zest with which she told the story:

I went to [ABC high school] for about a month. I don’t go there no more. They have fights everyday, and stuff and I was not into fighting, you know what I’m sayin’?... Once I went to this dance. Man, that was like the worst day I ever had. I’ll tell you. Like what is their problem. Like this girl was talkin’ to this guy and this other guy goes off like that. [Ronnetta slaps her hands together.] Do you know what I’m sayin’?... I can’t stand that school, man. That’s a ghetto school. My friend who used to go there had those Jordan shoes, those were expensive, you know the old ones how the old Jordan’s was like they
had the white stripe right here [pointing to her shoes] and the little bubbles. He got jacked; some kid killed him over those shoes. For steppin’ on his shoes, they got into a fight. It was after school.
(Ronnetta, interview, November 15, 2000)

Ronnetta’s perception of boys was negative. She never talked about a boyfriend other than “the Rock,” nor did she mention her “daughter’s” father. It was clear to Ronnetta that boys were trouble. If Ronnetta herself had been a victim of verbal or physical abuse from boys in her home school, she may have fabricated the story of having a child as a means of self-protection, because teenage mothers, according to her, were left alone by rough boys in her part of town. It was also true in the AMT classroom. The two mischievous boys who were constantly teasing the girls never teased Ronnetta.

In summary, a combination of protecting herself against her perceptions of “what boys wanted” and that she could claim she was different from the other AMT students—being a mother made her special—led Ronnetta to the perpetuate this lie. She did not want to give up the special attention she received from her teachers and peers. This special attention for an otherwise average student with a precarious sense of self-worth gave her a sense of empowerment. She seemingly was able to manipulate her situation, her classmates, and her teacher. Students in the classroom create stories about themselves so they can belong to a group or go unnoticed by that group; some also lie to receive some special recognition from their teachers.
Students Facing the World of Work

Students at the beginning of the school year in the AMT program seemed content to take each day one day at a time. However, during the last 5 months of school, students were more anxious and spoke often about their futures and what they would be doing after high school. While some students were planning to go to college, others were going to work. Dietz (1980) recognized the practicality of career-technical (vocational) education to the future of young people not planning on attending college:

Vocational education is the preparation of students to enter the world of work and must provide students with practical experiences that enable them to acquire attitudes, knowledge, and skills that will allow for successful, entry and advancement in their chose occupation. (p. 6)

Some AMT students agreed with Dietz and looked forward to the opportunities afforded by their job placement in preparing them to enter the workforce.

It [job placement] is very important because you only get some of the [AMT] experiences in here [AMT laboratory]. All you learn in here is cleaning and management skills. But then I mean you get to go out on job placement and you get all kinds of experiences. You can figure out what you really want to do or don’t want to do in the industry: you could do grooming or health or pet shops. The best is that you can get out of school for job placement. (Aisha, interview, November 16, 2000)

While most of the AMT students were eager for their job placement and school to end so that they could begin working full time, other students were minimally engaged in their job placement learning activities and seemed to be purposefully treading water, ambivalent to their situation. They were resisting the future when they would be in need of a job. Mrs. Shepherd struggled to help these students find their
place in the program, but they resisted her efforts. Some of these students were no longer interested in AMT as a career, in studying small animal care, or in having a job placement. Other students who had lost interest in AMT after the first year had changed career focus or returned to their home school full time to take more academic courses to be able to graduate with their classmates.

Some students were not interested in learning skills to prepare them for a job. They had lost interest in AMT after their first year but had returned to the program because it was easier to return to AMT II and what they knew and who they knew than to change programs or to take more academic courses at their home school. They showed up for class and their job placement. They went through the motions but put forth very little effort. By the end of the school year, these students passively resisted the teacher. Their actions on some occasions and lack of action on other occasions frustrated the teacher. Their strategies included intentionally slowing down their work pace in the laboratory and at their job placement. They would “play” with the animals, talk to the, and carry them around in their pockets or on their shoulders. They had a Peter Pan attitude toward their future—they did not want to grow up. These students would complain and make intentional mistakes so they could “linger” on one activity for an hour or two. Others got involved with sports or club activities at their home school. These activities made it easier for them to be excused early on some days or to explain why they were not available to assist in extracurricular AMT activities, such as FFA skills events. In essence, these students were resisting their future and were reluctant to face the world of work.
Although some students looked forward to working in pet shops and veterinary clinics after graduation, most students realized from their job placement experiences that they would not be able to make a lot of money in the AMT industry and were talking about alternatives. Other students found their job placement in a pet shop boring and monotonous. They were not interested in doing the same activities on the job day-in and day-out. Others saw their job placement as helping them decide on a different career choice, while possibly doing animal grooming as a sideline.

I don’t think I get paid enough [at my job placement].... I’m not going to stay at [the pet store] for a very long time because I don’t get paid enough money to move out.... So I think I’m going to look into something else. (Paula, interview, April 9, 2001)

I wanted to be a vet tech, but last year I was sick all the time when I worked with the rats and mice. I found out I’m allergic to them or the dust. Now I’m just going to work at Pet Smart in the retail end. (Marie, interview, February 8, 2001)

The weakness of our program is the job market in AMT. Our job market is comprised of a lot of small business owners who have pet shops, veterinary clinics, grooming shops, and so forth. Consequently, these small business owners don’t necessarily carry insurance for their workers, offer vacation days, or other employee benefits. And they are not paying much above minimum wage. They can hire the minimum wage kid, and therefore they don’t want to necessarily pay our kids more for having one or two years worth of training. (Mrs. Shepherd, interview, June 4, 2001)

Nevertheless, some of the AMT job placement sites were stepping-stones for students who were planning to continue in the small animal industry after high school graduation. Their aspirations were to continue working in local pet shops and hopefully with time move up into management or to open their own pet grooming business. The two teachers were very proud of these students who were highly skilled
and motivated. The teachers helped to facilitate employers who were interested in hiring these exceptional students.

Now we do have employers, because of the history of our program, who if we send them our kids, they are pretty interested in hiring them full-time because our kids know the material, and the employers know that if we recommend them that our students will have not only grooming skills, but employability skills, too. Lucky for us, we have some corporations involved with our program like the Petsmarts, and Petcos, and they have given our kids some good opportunities. For example, they took two of our kids they hired and sent them to a grooming school in Michigan to polish up their grooming skills and get them more grooming experience. They paid for the grooming school, but the kids are under contract to work there for two years.... So you can imagine how excited those kids were. (Mrs. Shepherd, interview, May 4, 2001)

Students who were planning a career in a veterinary clinic were planning to continue their education first. These students were actively engaged in completing college applications, scholarship applications, and college visits. One of these students spoke about joining the Army ROTC to help pay for her college degree in veterinary medicine.

After I graduate from here, Mrs. Shepherd is trying to get me a little job, so that I can do this [AMT] during college.... She’s talking about getting me a job at [a local research institute] or at [a research hospital] something like in an animal research lab.... I’m thinking about going into the ROTC, too. If I go into ROTC, they pay for my school. (Aisha, fieldnotes, January 24, 2001)

IEP students were of special concern to the teacher. Because of their reduced mental or physical capacities, their job placement options were limited. However, because of her years of experience and connections in the small animal industry, Mrs. Shepherd knew of several small and large businesses willing to work with special
needs students. Although it took more time and effort on her part to arrange and follow-up on job placements for these IEP students, she willingly put forth the extra effort to give every student the opportunity to be successful on job placement. In some cases, student job placement led to a permanent job position for the IEP student. In addition to placement, transportation to and from the job sites limited placement possibilities for some of these IEP students. While some parents and guardians were involved in arranging special transportation for job placement, others were financially not able or not available to do so. Trying to work with parents and guardians who were not involved with their children was frustrating for the AMT teachers. For those parents and guardians who were involved, Mrs. Shepherd and the VOSE coordinator explored all the possible school, county, and state programs available to IEP students to help them be successful on the job. This assistance included special transportation training such as how to use the bus, paying for a taxi service, or an on-site job coach who would follow the student at the job placement site while they adjusted to their new environment and responsibilities. These multiple services provided by county social agencies were not consistent from county to county. Because students in the career center came from different counties, not all IEP students were given the same social service assistance. While industry contacts, family members, and county social services were supportive of Mrs. Shepherd helping IEP students find job placement sites, not all IEP students were successful at job placement.

We were so used to getting all this stuff like a job coach and a bus trainer whenever we needed it for our kids, but then they were telling us that they wouldn’t do it for these kids from the other county.
MRDD is in every county and they are supposed to offer similar services, but they don’t; it may be due to how they [in the adjacent county] budget their money.... Whatever we provide in our school then our district pays for it; for things outside of school, like when our kids go on job placement, we contract with BVR or MRDD; those are state services in each county, and then the state of Ohio pays for those services. (Mrs. Brittney, interview, January 25, 2001)

For AMT students with severe IEPs who liked animals and wanted to work with them, the employment possibilities were limited. Because of their low functioning skills and ability to follow directions repeatedly and consistently or because of unreliable transportation, some of these students were not able to maintain their positions at the end of their job placement period and subsequently were not offered permanent employment. Although the teacher exhausted all her contacts and possibilities to place these IEP students and became frustrated with students when they quit or refused certain placements, she never gave up.

When after an exhaustive attempt to place one IEP student at an appropriate AMT job placement site failed, mainly because of a lack of transportation options, Mrs. Shepherd and the VOSE coordinator called for an IEP meeting with the student’s family. His mother came to the IEP job placement conference held at the career center. After exhausting several job placement possibilities, the mother said in frustration that the school system had failed her child. Although that was her perception, the career center’s staff and other school district personnel and county social service agencies continued to work with this student. Because the student had lost some interest in working with small animals, the career center staff recommended that the student receive additional vocational testing. The student was sent to the
Vision Center, a county testing, interviewing, and job placement service. The student was given time from his home school along with special transportation arrangements to complete a 2-week battery of tests and interviews with the Vision Center counselors. The recommendation of the Center was that the student explore a career in landscaping. However, as a senior in his last semester of high school, this recommendation came too late for him to transfer to the horticulture program offered at another career center in the district. He finished the AMT program but did not complete the job placement component of the AMT program.

In summary, most AMT students were initially excited about job placement and their future full-time jobs. While most of students benefited from this experience, some students, after an initial exposure to part-time work, were disenchanted about what they saw as boring and repetitive work and quit. Placing students in appropriate job placement sites is a time consuming and demanding part of the career technical teacher’s job. Finding job placement sites for IEP students is especially challenging for teachers. Teachers must have long-established industry connections and good will on the part of the employers to accommodate difficult-to-place students, including some IEP students. Coordinating and following-up of student job placement is an apparent stressful time for AMT teachers and students. Although one of the goals of job placement is to have students practice what they learned in a real-world situation, another goal is to expose them to a “real” work environment that may lead to a permanent job. Nevertheless, because AMT entry-level jobs are often low-paying
positions with few or no benefits, it is unrealistic to expect students to stay in these positions after graduation.

**Research Question #4**

How do students negotiate with their peers and teacher? What role does the teacher play in accommodating students’ learning styles?

While research (Bredemeir, 1988) has delineated several qualities and characteristics of a “good urban teacher,” effective teachers in urban AMT classrooms must have a nurturing and caring disposition toward students and animals, a high level of AMT knowledge and skills, and the skills to accommodate the learning process of diverse students. Some of these teacher qualities are inherent in the teacher’s character, while others are learned behaviors.

First, to be a successful teacher in an urban AMT program, teachers must demonstrate a nurturing and caring attitude toward all students. This teacher characteristic must be genuine and intense. Urban AMT teachers find themselves accommodating diverse students on a very personal level. Mrs. Shepherd went as deep into her students’ personal lives as they permitted her. To encourage her students to trust her, Mrs. Shepherd allowed several minutes each day during the laboratory period to speak personally to at least two or three of her students. After initiating these conversations, Mrs. Shepherd actively listened to each student. Preservice teachers must practice this skill of active listening to be effective in an urban AMT classroom. As these relationships developed, AMT students sought out
Mrs. Shepherd to discuss their problems or personal issues. By allowing for and encouraging time for each student, Mrs. Shepherd built a level of trust between herself and her students. Mrs. Shepherd was able to discuss some issues with her students, and for others, she referred the student to the career center’s counselor.

Second, urban AMT teachers must have a solid understanding and base of the AMT content knowledge and skills. Mrs. Shepherd seemed to be an endless source of AMT information and skills. Students respected Mrs. Shepherd for her knowledge and skills. Mrs. Shepherd had completed her university degree in animal science and had worked for several years in the small animal care industry before becoming a teacher. As an AMT teacher, she maintained her contacts in professional AMT organizations and with AMT-related businesses. She was a leader in organizing state AMT skills events and FFA gatherings. She proudly displayed many outstanding awards related to AMT and certificates of recognition for her AMT teaching. “Shingles” displayed in her office contributed to the perception students had of Mrs. Shepherd’s unquestionable AMT skills and knowledge and her commitment to the AMT program. Preservice teachers must have a broad and deep knowledge and skills base to teach in an urban classroom. Preservice teachers must establish professional and business contacts in the AMT industry that they can call upon once in the classroom. Preservice teachers must be taught and encouraged to become involved with professional AMT organizations and the community.

Third, urban AMT teachers must accommodate diverse students. Not only are urban AMT students ethnically, socially, and economically diverse, they are also
academically diverse. Each day, Mrs. Shepherd demonstrated her knowledge of working with diverse students and accommodating their learning styles and individual IEPs. Students responded to Mrs. Shepherd’s fair treatment of all her students regarding assignments, grades, discipline, and rewards. Mrs. Shepherd had neither a “favorite” student nor a “problem” student in her class: Mrs. Shepherd simply had 15 AMT students in her class. Perhaps because of her years of teaching experience, Mrs. Shepherd was adept at rotating responsibilities and distributing rewards fairly among her students. Preservice teachers must learn to accommodate students fairly. Clinical practice for preservice urban AMT teachers must provide these new teachers with the skills and dispositions to work with ethnic, cultural, and academic diverse students.

Negotiating in the AMT classroom was a daily occurrence. The teacher and students negotiated what was taught and what was learned. Because students were at different levels academically, the teacher was confronted with organizing lesson plans that progressed through the content fast enough to keep the interest and motivation of her high level students but not so fast that she lost her low level students. In addition to different academic levels, students had different experiential skill levels.

One of the things that has changed over the past 20 years that I have been teaching AMT is the overall quality of the students; in general their academic abilities have decreased. So as a teacher I have to teach differently and basically scale my lessons down so it’s academically easier for students to digest and more hands-on and fun.... And then we get those kids out there who are high achievers.... But I’ve noticed that we’ve had more and more students with IEPs apply. (Mrs. Shepherd, interview, January 17, 2001)
While all students in this study had one year of AMT education, only a few students brought pet-shop or veterinary clinic work experience with them to the classroom. This was the second year that these students had formally studied small animal management. Some skills and interests had developed the previous year, and students were familiar with the expectations of the program and their teacher. Nevertheless, students negotiated everything. Among other things, they negotiated with their teacher to be given or not given certain laboratory assignments, who would be their laboratory partner, who would get to go to the library, how much time they needed on certain tasks, what was considered acceptable work, and how they would be assessed. With their peers, they negotiated who was in whose work group, who would get to walk the dogs, who would clean and feed the snakes, who would restrain a large dog, and who would do the grooming.

Mrs. Shepherd was required to make special accommodations in the classroom, laboratory, and on-job placement for IEP students. She was assisted by the career center VOSE coordinator to ensure that each IEP student was provided appropriate accommodations. The VOSE coordinator was the person in the career center responsible for monitoring the implementation of IEPs and their follow through. The number of competencies that these students needed to master to be successful in the AMT program was negotiated with the student, teacher, VOSE coordinator, and home school IEP teacher/counselor. Ms. Brittney, the VOSE coordinator at this career center supported the AMT teachers in their accommodating of IEP students:
For instance, if an IEP is written, and it says for example, we’ve had hearing impaired students in the AMT program, that the student has to have a note taker, and we agree when we take that student to follow those objectives, then we would have to provide a note taker for that student. And I would be the one that sets that up. Typically what we’ve done in the past is coordinate with another student in the class to take notes. And we’ve done things, which we don’t have to do in house for those [note taking] students like buy them lunch or something like that. Because it’s a volunteer thing, we can’t make them do that, but it has always worked out. (Ms. Brittney, interview, January 25, 2001)

The teacher negotiated within her prescribed parameters how much time students could spend on a particular task, how much time she spent with each individual or group of students, how much information she gave students, and how much information they had to find on their own. Within her parameters, the teacher made accommodations for student classroom and laboratory expectations based on an individual student’s IEP, past performance, and her expectations. From her high performing students, she demanded that they go beyond the lesson materials presented in their textbooks and classroom recitation. She assigned these students extra computer time, library time, and special projects. After identifying the special areas of interest of low achievers in the classroom, the teacher allowed these students extra time in those laboratory ward areas after they had completed their required assignments. She was flexible but insistent that students perform to the best of their ability or better. She did not allow students to languor in mediocrity. She was in constant movement around the classroom and through the laboratory checking on students’ progress. She was keenly aware of each student’s level of ability. If a student was not making progress, she either stood over that student until he or she was
back on task. If the student was not able to perform the assignment, the teacher paired
the student with another student or group of students who had completed this lab
assignment previously and encouraged them to work together.

I had three students who were very low functioning this year, to the
point they needed basic step-by-step instruction and a lot of extra
special attention. And then, on the other hand, I had three or four
students who were definitely college material. They were very high
functioning and needed to be challenged. It has been very difficult to
teach this class; but then I find this the biggest challenge every year I
teach, and this is my eleventh year of teaching. It’s hard to teach one
class to all the different academic and skill levels of students that we
have in our classes.... Trying to teach to that big a span and keep them
all interested and motivated has always been a big challenge for me.
(Mrs. Shepherd, interview, June 4, 2001)

In summary, the teacher and students negotiated assignments and homework
because of the diverse academic needs of students. The teacher was in control of the
negotiation process, but students were empowered to make choices based on options
or parameters that the teacher presented. Students with IEPs were of special concern
for the teacher, and it was her responsibility to accommodate their learning styles and
assess them based on their IEPs. Both high achievers and low achievers were
challenged to go to the next step in their learning process. Students were often paired
or grouped by the teacher to facilitate diverse learning styles and needs.

**Dynamic Teacher Students Accommodation Model**

Educational program models such as those offered by Hollins (1996) and
Phelan et al. (1998), offer “static” models to describe the relationship between the
teacher and students in a classroom. Current educational models assume a
homogenous student body, which is not the case in urban career centers. Instead of one circle representing a classroom of students, observations in this case study revealed 15 individual “dynamic” circles interacting and intersecting with each other, and a larger more fluid, amoebic-like circle representing the teacher.

The teacher amoebic-like figure is dynamic, not static. It is represented in the model with a broken line to symbolize the semi-permeability and dynamic nature of an urban teacher who is always taking in new information about students, student performance, and the environment to adjust the curriculum and her teaching styles. In the classroom, the teacher attempts to interact with all her students simultaneously. In the laboratory, the teacher amoebic-like figure shifts constantly either overlapping or engulfing one or more student at a time before moving on to another student or group of students. In addition to physically shifting among students, the dynamic teacher is constantly shifting teaching style to accommodate individual student and group learning styles. Because students are working on different assignments or projects in different sections of the laboratory, this model more effectively portrays and describes how the teacher is able to overlap with one or more student circles at a time, while other students are working independently or in groups throughout the laboratory. Being dynamic, the model can accommodate the teacher adjusting quickly to get daydreaming students or socializing students back on task. The teaching methods used by the teacher are also fluid depending on the student or group of students the teacher is with at the time (Figure 5).
While the model shows the teacher and students interacting within the context of the AMT program represented by the rectangular figure, it also shows that the program is supported by three triangular pillars—the family, school administration,
and community. The size of these triangular pillars could be adjusted to show varying degrees of support from these three areas. In other words, the model itself is dynamic.

The Dynamic Teacher Students Accommodation Model considers four external components that influence the teaching and learning paradigm. These four components are portrayed in the model as enzymatic in nature. In other words, four elements outside the actual program paradigm influence the teaching and learning processes. Like enzymes, these four components energize the teaching and learning processes in that they facilitate, speed up, and enhance the curriculum and learning processes. These enzymatic components are depicted in the model as reflective arrows and include school facilities, the FFA student organization activities, SAEs, and job placement. While these elements enhance the teaching and learning processes, they are extraneous or supplementary to the core pedagogy of the AMT classroom. Although successful learning and teaching could occur without these four enzymatic components, the processes would occur at a much slower and reduced rate.

In this study, the Dynamic Teacher Students Accommodating Model demanded that the teacher be thoroughly familiar with each work area and the abilities and limitations of each student. The teacher had to be organized and yet sensitive to the learning objectives of each student. When students worked in small groups, it was sometimes apparent that students were learning from each other. For example, when the teacher would demonstrate a new technique to a group if one student in the group grasped the technique or idea, the teacher would ask that student to continue to demonstrate the technique to the other students, and the teacher would move to
another group of students. This was especially noticeable with IEP students who required extensive repetition as part of the pedagogy.

During the laboratory period, the teacher was like a production floor foreman—in constant movement, sometimes teaching, sometimes demonstrating, sometimes observing, sometimes listening, sometimes answering questions, sometimes facilitating problem solving, sometimes evaluating and assessing, sometimes disciplining, but always maintaining order and an environment conducive to learning.

Sensitivity to the emotional development stage of each student was also important in keeping students on task. When some students would start to drift into conversations of boyfriends or weekend plans, the teacher would acknowledge these conversations and then refocus the students. Because of her good report with the students, she did not need to raise her voice or threaten students to refocus their attention. When a student’s personal life outside the classroom erupted into tears or a burst of anger, the teacher would invite the student into her office and allow the student to talk about the situation for a 10-minute “cooling-off” period. During this time, the teacher was an empathetic listener and, if needed, referred her students to the career center’s personal counselors. By allowing her students to vent their anger or frustrations in short 10-minute cooling-off periods, students were able to return to and complete their laboratory assignments without disciplinary action.

In summary, the AMT teacher accommodated her urban students. While some research (Phelan et al., 1998) has reported that students must make accommodations in
diverse classrooms to be academically successful, other research (Hollins, 1996) reported that the teacher must facilitate diverse learning styles by accommodating students. This research supports Hollins’ Accommodating Model of academic success. Mrs. Shepherd was actively engaged with each of her students on a personal level. Mrs. Shepherd demonstrated a nurturing and caring nature toward her students and the AMT program. Her excellent competencies in AMT knowledge and skills plus her ability to effectively use the resources that the school district provided earned her the respect of all her students. Interweaving these competencies and resources has been described in the Dynamic Teacher Students Accommodation Model. Finally, Mrs. Shepherd’s ability to confer responsibilities to each student at an appropriate level and to treat each student fairly provided the professional context of transitioning her students from the classroom to the real world of work.

**Research Question #5**

What factors attract and retain urban students in an agricultural education program?

Sutphin and Newson-Stewart (1995) reported that enrollment in secondary agricultural programs was associated with a student’s perception of how the agricultural program was organized and the opportunities the program would provide. They noted four positive perceptions that attracted students to enroll in agricultural programs—activity-centered learning, opportunities for work experience, teamwork, and life skills. Although students in this study did not articulate all of these reasons
for their attraction to the AMT program, they did give similar reasons for staying in the program—their past experiences with small animals and their perception that the program was an animal activity-centered program as they saw it during their 10th-grade visit of the career center. These reasons also contributed to the students remaining in the program. Another reason that students reported for completing the AMT program was that they had friends and peers enrolled in the program and they wanted to remain in the program to be with them.

**Attraction to the AMT Program**

The career center’s director noted that students continue to be attracted to the AMT program because of their interest in small animals. He spoke highly of the AMT program, its ability to attract students, and its future in the career center program offerings:

> Overall they [AMT] have a great group of kids, and both teachers are very strong, and they do a great job with the kids. It’s always a very strong draw in the district; it’s one of the more popular programs too because a lot of kids like animals. I think that there will always be an interest in the Small Animal Care Program [AMT]. It is a very popular program. When we have recruiting, the program fills up with students wanting to visit the program. They are interested in it and excited by it. (Mr. Shelty, interview, May 21, 2001)

To attract students to this program, the school district follows a process that ensures all students in the district are exposed to and have the potential to enroll in career technical education programs. Mrs. Shepherd summarized the process:

> Every student in the 7th and 8th grades, over the period of those two years will visit each of the four career centers [in the district]. And
they’ll all get to walk through and see all of the vocational programs. While they are 9th-graders, we’re out doing what we call cluster visits. We’re out at their schools, meeting with like all of their English classes, talking about vocational education. In 10th grade, every 10th-grader in the district has the opportunity to visit each career center again. Students are given applications at their home school, and they sign up for the career center program or programs they want; they can mark different choices on the application. And then the selection process starts: first round, second round, third round. (Mrs. Shepherd, interview, January 19, 2001)

These 8th- and 10th-grade visits to the career center were positive factors that students articulated when discussing their decisions to enroll in the AMT program. “My school came and visited [the career center] when I was a sophomore.... Because I saw all the neat animals that they deal with here, I liked it” (Darrell, interview, November 8, 2000). However, most students expressed a disposition to enroll in such programs based on their prior interests and experiences with small animals, adding that their career center visits reinforced their decision to enroll by giving them a positive impression of the AMT program, teachers, and other students. Visits by 10th-graders were designed to highlight the activity-centered nature of the teaching style used in the AMT program. Visiting students saw many small animals and touched, picked up, weighed, and fed the animals. This physical encounter with the animals was very meaningful to many of the 10th-graders participating in the visit.

An overwhelming interest in animals as pets attracted most AMT students to list the AMT program as one of their choices for a site visit in the first place during career exploration in 8th and 10th grades. Either they had family pets that they remembered fondly, or their family did not permit them to have pets for various
economic or health reasons (someone in the family had allergies). Students who were
denied pets as younger children noted that, when they saw or heard that their friends
had pets, they seemed deprived. By enrolling in the AMT program these self-
described pet deprived students were able to fulfill a childhood wish by being
surrogate pet caretakers in the AMT program. One student had a family member in
the AMT industry—she was the exception. She was planning to enter a program for
veterinarian medicine after high school. Lovanda gave a typical response to what
attracted her to the AMT program:

I like the small animals. I love hamsters. I used to have three of them.
So after my first visit here as a sophomore, I think, yeah as a
sophomore, I saw the hamsters here, and I decided then that I wanted to
come back here to see all the small animals they have here and play
with them. (Lovanda, interview, January 19, 2001)

When Darrell was asked why he enrolled in the AMT program, he began a
long recollection of his fascination with snakes, which he attributed to his experiences
as a small child growing up in Texas:

I’ve always wanted to work with snakes in a reptile place since I was
little. When I was little, I slept with a banana python, it was my dad’s,
that’s why I’m not afraid of them. I wanna shot of that stuff in your
blood, so if I get bit by a snake, it won’t hurt me like a rattle snake. I
have a tattoo of an anaconda on my arm. An anaconda has freckles on
it just like me; I have freckles. I used to live in Texas, and that’s when
I had a boa constrictor. I want more tattoos of snakes like pythons and
boas crawling up my arms. (Darrell, interview, November 8, 2000)

Childhood recollections of having pets differed from student to student. Some
recollections were marked by a traumatic experience with pets. Students who told
traumatic stories of having pets were similar to Paula and Marie’s accounts below:
I used to live in a trailer over on the south side.... And anyway, we were living in this trailer, and I had a hamster and two cats. And one day I was at school and my mom came to pick me up early; and I don’t know what’s wrong or whatever. And we went over to my trailer, and it was burning.... I was around like 9 years old. I lost my hamster and cats in the fire. And then right after that, I don’t know, I had a draw to be drawn to cats, mostly. (Marie, interview, November 16, 2000)

What made me want to become a veterinarian was when my cat Bandit, which is a big fluffy cat, he is precious, got sick with a urinary track infection. And we took him to the vet, and what they did for him, made me really want to become a veterinarian. I was in 6th grade when that happened. That’s why I signed up for this [AMT]. I want to be a vet so I can help animals. I don’t know how I’ll handle the blood, but I still want to be a vet. (Marie, interview, November 16, 2000)

Mrs. Shepherd also recognized this desire to care for and nurture animals among most of her students. While girls are stereotyped to be nurturers, boys attracted to AMT also have several nurturing qualities about them or are stereotyped as the outdoorsman type. Caring for another living thing was the common thread or interest of all AMT students:

Gender wise, girls are generally, you always get in trouble when you generalize, but girls are usually more nurturing than boys. Girls say things like, ‘Oh, I want to hold the bunny,’ or ‘Oh, the poor thing.’ But as a group, AMT students both girls and boys, tend to be nurturing people, they have a lot of similarities in their personalities; they are nurturing, or have a nurturing side to them. The boys, too, they are the type of boys you think about who will be nurses, doctors, EMTs, kids who want to help people.... Yeah, it’s true that the guys in our program tend to gravitate to the reptiles, kinda of like the natural resources type, outdoors type of guys. And we’ve had a few of our students who have gone on to explore careers in natural resources, but that would be another generality. (Mrs. Shepherd, interview, May 4, 2001)

While most AMT students had pets growing up, some students noted that they were not allowed to have cats or dogs as pets when they were children. These
students looked forward to being in the AMT program so they could be around the small animals they could not have as pets while growing up.

Nobody in my family is interested in animals. They hate dogs. But when I was little I wanted to play with animals, I mean I always liked dogs, and I wanted to play with them like the other kids. But my mom wouldn’t let me have a dog. She got me a stupid fish. I had fish. I told her I hate fish, and finally, she got me a dog; I had a dog for a few months, but it shed and my mom made me get rid of it ’cause she’s allergic. Now, my dad said I could have a dog. I have a dog now, but it stays with my dad at his house. I don’t get over there to see him very often. I like all the dogs that come here for grooming that’s the only time I get to play with dogs. (Aisha, interview, May 21, 2001)

One student recalled being given a career aptitude test in 10th grade as part of the career center process, but no other student recalled such a test. Regardless of the efforts of career counselors in the high schools and career center visits, it appeared that most AMT students self-selected into the program based primarily on their interest in small animals as pets and their career center visit experience. Some students had little to no support from their family when deciding to join the AMT program, while others were genuinely encouraged by their families. “When I signed up, my parents asked me about the program, and I told them. They asked me if I thought I’d like it, that’s all they said” (Lovanda, interview, January 19, 2001). “My mom didn’t really say anything to me when I told her that I was accepted in the [AMT] program” (Ronnetta, interview, November 15, 2000).

At our high school, we have like a career center counselor type person in our school, and she came around and talked to us when I was in the 10th grade. And we were supposed to take this test to see like what we were most interested in.... And I chose this [AMT] because I love animals. The test said that I would be good in this program because it was asking questions like what are your hobbies? Like, do you like
animals? And it was asking questions like that. And I just thought it would be a fun thing.  (Paula, interview, November 15, 2000)

They always thought it was a great idea for me to take this program, my family did. They knew I liked snakes, and they had snakes in this program, that I’d learn a bunch of stuff about snakes. That’s when my mom let me get a snake tattoo on my arm [shows me his tattoo].... Right now, they all let me groom all the dogs in our family. They bring ’em over to our house, and I give ’em all grooming. And I take care of all their animals for ’em. (Darrell, interview, November 8, 2000)

All students noted that they had visited the program during the 10th grade before enrollment in the AMT program. Some students remarked that either their friends had recommended AMT; others said that they had talked with students from their home school who were taking AMT at the time and that these students had spoken positively about the program. Two students said they enrolled in AMT as they believed that it would give them a head start in their pre-veterinary and veterinarian program in college.

I took this program because I want to go into the animal business. I’m not sure, I mean I want to be a veterinarian, but I don’t know what field in veterinary I want to go into yet.... I came in knowing nothing ’bout animals. But this is a good program to learn stuff about animals could do. (Aisha, interview, May 21, 2001)

When asked if she would recommend this program to another student in her home school, Lovanda responded, “If they are interested in animals and they think it would be fun, I’d say come. I would tell them what we learned.... It was an OK program, I liked it” (Lovanda, interview, January 19, 2001). Marie said, “If there was someone trying to get into this industry, yeah this [AMT] program is a good start. If it
was somebody trying to get out of a half-day of school then it’s not worth it” (Marie, interview, February 8, 2001).

Mrs. Shepherd attempted to recruit students of diverse backgrounds. Recruitment was conducted both on visits to local high schools and during career center visits by students. While there were students of diverse ethnic and socioeconomic groups represented in the AMT class, Mrs. Shepherd explained why she believed lower economic class students were underrepresented in the program:

There are some students who I’ve observed when I go out and visit high schools to talk about our program, that these students don’t like dogs, that they are really afraid of dogs. I notice this more with African-American students, but I think it is more of a socioeconomic factor, not an ethnic factor that they are always afraid of dogs, and they’ll say something like, ‘Well, I’ve been bitten by a dog.’ And I think that part of it is, if you go back to their culture, in some of these cultures, there are a lot of guard dogs and pit bulls that are guarding homes or used for illegal reasons. I’ve found that especially among young male African-Americans, it’s a macho thing, and maybe other ethnic groups have it too, that it’s macho to have aggressive dogs around. I think that in some of those lower economical cultures, if those people have dogs, the dogs are tied to a chain and out back. They’re not kept as a social animal and not part of the household. So those kids with those experiences in their culture, there are a lot of them, you don’t get them in our program because they don’t view or value careers working with animals, especially dogs. (Mrs. Shepherd, interview, January 19, 2001)

**Retention in the AMT Program**

Once in the AMT program, most students finished the program, but students had the option of discontinuing the program and returning to their home school at any time during the school year. In this AMT class, there had been 3 first-year students who did not sign up for the second year and 2 students who withdrew during the
school year. Mrs. Shepherd offered some reasons why students chose not to return for the second year of the program. “They found out the program wasn’t what they thought it would be; they didn’t get along with their classmates who would be the same people the second year; mom didn’t want them to do this; all kinds of things” (interview, January 19, 2001). Among the students who had returned, most cited their peers in the class as the major reasons they returned. It was apparent that many students from various high schools throughout the district had established new friendships at the career center during their first year, and so the career center would be the only place where they could continue to see each other.

I came back this year because I... Well, I didn’t wanna come back at the beginning of the year, but I had to come back here the first day and drop the course, or whatever you want to call it. So I got on the bus and came here, and when I got here and I seen all my friends back here, I stayed. I didn’t drop it like I thought I was gonna do.... I missed the people here. I didn't miss “the” program. I missed some of the people. Marie, Lovanda, Ronnetta, and Aisha that was our clique.... I missed Darrell, too. And when we graduate, I’m gonna miss everyone, and I’ll miss the teachers, too. (Paula, interview, November 15, 2000)

I was interested in animals, so I picked this program my sophomore year. I was going to drop out after my junior year, but I couldn’t get into the college prep alternative school.... My home school counselor told me to stay here my senior year, so here I am. I came back. (Marie, interview, November 16, 2000)

Students also cited their teacher as a reason for returning and staying in the AMT program the second year.

I like Mrs. Shepherd because she seems easy going and she laughs at all of our silly jokes. And she has a really nice personality. Mrs. Shepherd is laid back and easy going, not like the teachers at my home school. I mean, not like she’s not strict, because, I mean I wouldn’t want her to be like do whatever you want to do because that’s not
going to learn us anything. But she lets us goof-off sometimes, and don’t get all up tight with us. (Paula, interview, November 15, 2000)

Some students noted the boring routine, other students, and the long bus ride as reasons for dropping out of the AMT program:

I was really disappointed in the program my first year, along with everybody else. It just seemed like the only reason that we were there was to clean cages and to feed and water the animals. I didn’t understand what that was supposed to teach me. I already knew how to do that. And everybody else knew how to do that too.... We learned some but mostly what we did every day was the same like we just had a different area to clean. And all we did in grooming was like clip nails, clean ears, and throw the dogs in the tub. And just like the same thing every day and everybody was sick of it. And that’s how come we had like five people that dropped out over the summer. (Paula, interview, November 15, 2000)

Maybe if there had been a few different students in here I think it would have been better. Some of these people are annoying. The annoying people, they bug you a lot. They’re mean to you. There are a few mean people in this class. I don’t know, they just act like they are mad at everybody or they don’t care. We try to be nice to them but they won’t be nice to us. (Lovanda, interview May 23, 2001)

I almost quit because it takes me about an hour to get home after school. The school bus takes me from here [career center] to my home school in about 40 minutes if there isn’t too much traffic. I usually get home at around 4:30 p.m. because I live about 20 minutes from my home school. (Marie, interview, November 16, 2000)

Another reason given by the teachers and some students why students dropped out was that, during the course of the year, the students realized that AMT was not the career they thought it might be. “I’m not going too make a lot of money doing this [the AMT industry]” (Lovanda, interview, May 23, 2001).

Permanent job placement is a little bit of a concern from the standpoint that, if we’re training students for a career, there isn’t a real solid high paying career in the animal grooming or the Petland type retail
businesses, in my opinion. People entering this industry don’t have a lot of potential for advancement. (Mr. Shelty, interview, May 21, 2001)

Other factors that students cited for dropping out of the program included academics—students who needed additional academic course work to graduate from high school—and discipline. When Paula and Ronnetta were asked why one of the students had left the program during the school year, Paula remarked, “Pierre dropped out of AMT because he missed too many days. And he knew he wasn’t going to graduate from his home school. He probably didn’t graduate.” Ronnetta added, “I think he dropped out because he didn’t pay his [AMT] dues. He wasn’t nice, and he didn’t really apply himself to learn nothing in here” (fieldnotes, January 10, 2001).

Students who were discipline problems or who would not follow safety procedures either dropped out or were not asked to return to the AMT program for the second year.

Teachers must have some reason for kicking students out of the program or not accepting discipline problem students for a second year.... If a student was always constantly causing strife in the classroom and laboratory, and the teacher could document it, then that student could be kicked out of the program.... Another example would be a clear example of removing a student if they consistently refused to follow the safety rules, if they are threatening the safety of the dogs in the grooming area or any other animal, another student, the teacher, or themselves, then they would be kicked out. (Mrs. Shepherd, interview, January 19, 2001)

Retaining students in the AMT program, like other 2-year career technical programs, was of concern for the teachers. Students dropped out of the program during the course of the school year and also between year 1 and year 2 of the
program. Because of this attrition factor and other reasons, the district decided to split the AMT 2-year program into two 1-year nonconsecutive programs. Mrs. Shepherd agreed that two 1-year programs would better suit the needs of the students in the district and would avoid smaller second-year classes.

[The AMT program] was split into two 1-year programs so they can be independent of each other because of all the high school graduation requirements students are having a harder time to commit to one 2-year program at the career center; so now they can choose one part or both parts of the program. The pet shop management course will be the same. The vet-tech program will be more academic for students who want to prepare for a more in-depth pre-veterinarian or vet tech career. (Mrs. Shepherd, interview, June 4, 2001)

In summary, students were attracted to the AMT program because of their interest in small animals and pets. Many students had positive experiences with pets as young children, while others for one reason or another were denied pets as children and looked forward to working with pets and small animals in the AMT program. Eighth- and 10th-grade students who visited the AMT program during career center visitation were excited to apply for this program after seeing all the animals and laboratory facilities. Retaining AMT students in the program from year to year had been problematic; students left the program for a variety of reasons between their first and second year. Some students dropped out so they could take additional academic core classes they needed to graduate from high school, others had negative experiences with other students in the program, while others simply lost interest in AMT as a career. To adjust to student attrition rates from year to year, the AMT program changed its format from one 2-year program to two 1-year programs.
CHAPTER 5
CONCLUSIONS AND RECOMMENDATIONS

Conclusions

While national and state career-technical education leaders sought to expand opportunities and accessibility to secondary agricultural programs for all secondary students, the number of urban agricultural programs in Ohio remained relatively stable. Because agricultural education programs had a rural tradition linked to farming and rural communities in Ohio, approximately 80% of all secondary agricultural education programs in Ohio were located in rural counties in 1999. Conversely, 20% of secondary agricultural education programs were located in the 12 largest metro-urban counties in Ohio that served 56% of Ohio’s public school K-12 students.

Two reasons for not expanding urban agricultural programs, such as horticulture and small animal care in metro-urban areas of Ohio, were lack of funds and a rural image of agriculture held by the urban public and policy makers. Increased funding for urban agricultural programs was dependent on expressed community and industry needs, support of local school districts, and research. This study addressed the need for an increased research base that documents a successful
The purposes of the study were to describe a successful secondary urban agricultural education program using the case study method and to articulate the best practices of this program in relation to existing theories and models of education. Specifically, the researcher used Hollins’ (1996) theory and models of Cultural Mediation, Accommodation and Immersion in Instruction, and Phelan et al.’s (1998) theory and model of Students’ Multiple Worlds as the framework for this study. During the study, Brown’s (1990) model for Mapping the Social World of Adolescent Peer Groups was also incorporated into the study’s findings regarding the role of student organizations and peer groups in students’ academic development. As the study progressed, an urban education model emerged from the data collected—the Dynamic Teacher Students Accommodation Model for Urban Agricultural Education.

The research methods for this study were outlined in ethnographic case study research design. This study followed Geertz’s (1973) description of ethnographic research as “interpretive of the flow of social discourse” (p. 21) and Zaharlick’s (1992) proposal that ethnographic education research leads to the “understanding of beliefs, attitudes, and behaviors of sociocultural groups to design more effective strategies for bringing about educational improvement” (p. 122). The case for this study was a metro-urban secondary agricultural education program in Ohio.

The study was conducted during the 2000-2001 school year with the senior class of a two consecutive-year small animal care and production programs entitled.
locally as Animal Management Technician (AMT). This site was chosen because of its accessibility to the researcher, the two AMT teachers’ recognition for teaching excellence, and the school district’s and administrators’ cooperation to permit data collection at this site for one academic year.

There were 15 students of diverse ethnic and socioeconomic backgrounds in the class. Seven students consented with their parents’ or guardians’ permission to participate in this study. To ensure the anonymity of the participants, the researcher assigned pseudonyms to them. The AMT program had two teachers, one for each of the two AMT classes—junior class and senior class. Both teachers participated with valuable input and insight to this study. The two teachers were represented by one composite teacher—“Mrs. Shepherd.” School administrators, including the career center director, academic counselor, and VOSE coordinator, also participated. Although the study initially sought the participation of students’ parents/guardians and students’ peers from home schools, the researcher was unable to include these two groups in the data collection process. When seeking parental consent at the beginning of the study, only one parent agreed to participate directly in the study. The student’s peers from home schools were located in several high schools throughout the district and access to them would have required supplemental consent and delay of the study. Additionally, employers of students on job placement were to be included in this study, but because of several factors, the researcher’s access to these employers proved to be impractical. Although problematic and time consuming, future research
studies should seek to incorporate these three groups: parents/guardians, peers at home schools, and employers.

Qualitative methods were used to gather data for this study. Standardized interview and observational protocols for students, teachers, and administrators were reviewed and approved by the researcher’s graduate committee, the Institutional Review Board (IRB) of The Ohio State University, and the [ABC] public school district’s administration, including the teachers’ union. In addition to individual interviews, students were observed during both their classroom session, referred to as “related,” during their laboratory period, and during extracurricular events. The research methods were emergent (Glasser & Strauss, 1967). As the researcher and participants became more familiar with each other, more informal interviews and discussions were conducted. Qualitative research procedures outlined by Lincoln and Guba (1985) stated that the researcher, after gaining access to a given group, would become an active member of the group but remain somewhat apart and neutral. The researcher was privileged to have access and participate in the 3½-hour weekday program two to three times each week during the school year. This access was sufficient time to allow the researcher to observe every aspect of the program as experienced by the students.

The trustworthiness and dependability of the data collected were accomplished through member checking done by participants during the transcription process of interviews and observations and by peer debriefing accomplished at the end of the study when the researcher’s graduate committee members and AMT teachers
confirmed that the constructs and theory developed were consistent with the data collected. The issue of representation refers to the integrity of the final report and whose story is reported. Representation was accomplished by including as much of the original (raw) data as possible into the final report so that the data given by participants were in context. Data analysis followed the recommendations of Miles and Huberman (1994). Data were initially sorted and categorized using concepts and constructs gleaned from the literature and theoretical framework. As data were collected and analyzed, new constructs and model emerged. Additionally, through the analysis of the data and participants’ storytelling, four cultural productions (Willis, 1983) were developed from the situational to the conceptual. The purpose of these cultural productions or portrayals was to articulate particular social meaning and to respond to particular social conditions and yet bridge the universal (Piantanida & Garman, 1999).

**Research Question #1** - What are the components of a successful urban secondary agricultural education program in Ohio, with regard to enrollment, transportation, classroom facilities, students, teachers, administrative support, students’ families, community involvement, Supervised Agricultural Experiences (SAEs), participation in a youth organization (FFA), job placement, and the students’ views of program components?

The Career Exploration program developed in this school district included a well-defined and coordinated process of career center visitations by 8th- and 10th-graders and the visitation of career center teachers to district high schools to promote
career-technical education. Students in this study specifically cited Career Exploration program visits as reasons for their interest and eventual enrollment in the AMT program. While the school district provided bus transportation to and from the career center for every public school student, students attending the career center from private schools and adjacent school districts were not provided by their institution or school district. Some students used private transportation, either driving a private vehicle or riding with another student to and from the career center. The school district provided a modern well-equipped learning and teaching facility for the AMT program. The AMT advisory committee members, who were AMT industry representatives, approved the facility and equipment. Teachers were highly skilled and had several years of experience in AMT content, knowledge, and pedagogy. While academic achievement varied among the students in this study, the teachers and VOSE coordinator accommodated every AMT student regardless of IEP status. The teachers incorporated FFA activities into their program to support the curriculum. FFA activities were used to promote the development of personal skills in leadership, communication, and problem solving. FFA activities also promoted the development of workforce skills such as job interviewing simulations, industry-based skills competition, and workforce readiness record bookkeeping. Both teachers invested many personal unpaid hours to these FFA extracurricular activities. Supervised Agricultural Experiences (SAEs) either at home or in local AMT industries were limited because teachers were not given travel budgets, nor were they employed over the summer months when there would be a greater opportunity for conducting SAE
activities. During the summer months, the AMT laboratory was closed, which meant that the many laboratory animals were either placed with AMT students as SAE summer projects or were subcontracted to private pet stores and pet keepers.

Job placement occurred during the last three months of school. Students had mixed experiences with their job placements. While some students viewed job placement as an opportunity to be noticed by a potential employer for a future full-time job, other students viewed job placement in the AMT industry as the opportunity to obtain valuable experience before they began a pre-vet or vet-tech higher education program. A few students who for one reason or another had negative job placement experiences noted their job placement as a reason to change their career goals.

The community supported the AMT program by bringing their pets to the AMT program for grooming, serving on the advisory board, or providing job placement opportunities for students. The career center’s administrative staff gave immeasurable support to the AMT program, teachers, and students. The career center’s director actively promoted the AMT program and teachers, the career center’s VOSE coordinator and academic counselor supported the AMT teachers and students, and the career center’s office staff assisted with AMT accounts receivable.

Research Questions #2 and #3 - How do students from different cultural perspectives describe and explain their experiences in a diverse urban agricultural education program? How do students articulate and express their ethnic and socioeconomic similarities and differences through “cultural productions” in an urban agricultural education program?
Students described their experiences in the AMT program from their different cultural perspectives. Although students represented a variety of ethnic and socioeconomic backgrounds, they were united in the general pursuit of knowledge about small animals. Four cultural production portrayals emerged from the data and were reported to articulate similarities and differences among students. Students’ similarities included their need to belong to a peer group, the “Students’ Need to Belong.”

The importance of peers and peer group affiliation in adolescent development is well documented. Brown (1990) developed a model for mapping the social worlds of adolescent peer groups in educational settings. His theory espoused that adolescents who were involved with peer groups in school that were adult-controlled and -organized, such as sports teams, band, extracurricular clubs and organizations, were more academically successful than students not involved with peer groups, the loners, or students involved with peer groups that were not adult-controlled, such as the party crowd and gangs. The role of the FFA organization in the AMT program supported Brown’s theory of adolescent group affiliation. FFA activities, especially state skills contests, were bonding experiences for all AMT students who participated. Similarly, AMT students formed peer groups within the AMT classroom to study and practice hands-on work assigned to them by the teacher. The AMT teachers promoted group work in the laboratory and facilitated peer study sessions.

Students’ differences were portrayed in how the students associated in peer groups, girls with girls, boys with boys, or boys by themselves—“Girls will be Girls
and Boys will be Boys.” Although the teacher rejected gender segregation in the classroom and laboratory assignments, after students had completed their work in a mixed group, they would always regroup in gender-specific groups. Girls together often talked about boys, and the boys together often talked about girls. The boys had a tendency to tease and pick on the girls. The teacher did not tolerate any name calling or bantering between boys and girls in the classroom or laboratory, but once the boys understood the teacher’s position, they waited until the teacher was in another ward area of the laboratory before teasing, playfully hitting, or throwing things at the girls.

Another difference among students was the amount and extent students lied to their teachers and other students. It seemed that students who lied to the teacher sought some advantage over other students in the class and had a precarious sense of self-worth. The most extreme case of a student telling a lie was uncovered at the end of the school year. One of the students had perpetuated a story for the two years she had been in the program that she was the mother of a 2-year-old child—“Students’ Fictitious Lives: The Case of Faux Motherhood.” The teacher recalled times in the past when this student had used the excuse that, because she was the mother, she needed to be excused to take the child to the doctor, or the reason why she was so tired on a certain day and could not do her work well was because her child had kept her awake the night before. When her charade was uncovered by another student in the AMT program, the student caught in her lie physically confronted the other student in the career center’s parking lot and then withdrew into herself. Not all students lied to
their teachers or fellow students, but some students created elaborate stories for various reasons. What are other lies that students fabricate, why they believe they have a need to tell their teacher these lies, and how teachers can contribute to student self-worth may be of interest for further research.

Another difference among the AMT students was how they faced their future career—“Students Facing the World of Work.” While some students embraced their job placements and opportunity to have a part-time job in the small animal industry, other students dreaded it. Job placement resulted in some students deciding that small animal care and production was indeed their future careers, while others decided that they were not going to be satisfied with a career working in a pet shop making minimum wage or working in a veterinary clinic where they would be exposed to “blood and guts” or the need to put an animal down. They were searching for a different career.

**Research Question #4** - How do students negotiate with their peers and teacher? What role does the teacher play in accommodating students’ learning styles?

Students negotiated everything in the AMT classroom and laboratory with their teacher and fellow students. The teacher maintained discipline but allowed for a certain controlled amount of creative energy to invade the classroom and laboratory. She was firm on the rules, procedures, and expectations that she had for each student. She treated students fairly and according to their abilities. Because of her years of experience in the AMT industry and teaching, the teacher accommodated her students’ diverse learning styles. The teacher demonstrated a nurturing and caring attitude
toward all her students, and she related to each student on a personal level. She actively moved throughout the classroom and laboratory, teaching, prodding, coaching, supervising, and keeping students on task. While some students took advantage of the teacher not being in every ward with every student at every moment, most of the students performed well and came to appreciate a semi-independent work environment. The teacher was the key in integrating all aspects of the curriculum into a holistic package of instruction. The AMT program and teacher received strong and constant support from the school administration, students’ families, and community support. She successfully synchronized this support with FFA activities, SAE activities, school facilities, and job placement. This learning and teaching model was described in the study as the Dynamic Teacher Students Accommodating Model for Agricultural Education.

**Research Question #5 -** What factors attract and retain urban students in an agricultural education program?

When asked what attracted them to the AMT program, students overwhelmingly responded that they applied to the AMT program because of their love for animals. All students expressed either a positive experience as a young child with a pet, a traumatic experience with a pet as a young child, or denial of pet ownership as a young child. They also noted without exception their positive impression of the AMT program when they visited the career center as a 10th-grader.

Students also indicated that, as they became familiar with the AMT program, they chose to stay in the program because of their passion to work with small animals,
the friendships that they had developed with other AMT students, and the relationship that had developed between the student and teacher. In contrast, reasons given why some students left the program included: students moved, a growing disinterest in small animals, a dislike of other students in the program, the work was hard, the need to complete additional academic classes at their home school to graduate, their parents/guardians did not want them to continue in the program, or two years was too long a period of time to commit to the program.

**Recommendations**

1. **Career Exploration** - The district wide Career Exploration program that coordinates and promotes career center visitations by 8th- and 10th-graders and the visitation of career center teachers to district high schools to promote career-technical education should continue.

   Students in this study specifically indicated that their 10th-grade career center visit was a factor in deciding to enroll in the AMT program. Each year the school district organizes both 8th- and 10th-grade visits to the four career centers in the district. Additionally, career center teachers visit all district high schools once a year to promote career center programs and to meet with interested students.

   These visitation programs appear to be the only career center promotional activities in the district. The cost and impact of these visits should be further analyzed. Do these visits make a difference in the number of students who apply for enrollment in the AMT program? Anecdotally, a higher number of students appear to
be applying to the AMT program than are accepted on an annual basis. The actual number of students applying for enrollment and the number accepted into the program should be reported. It appears that not all interested students are accepted into the AMT program.

Further studies should report the industry’s needs for AMT trained students in the metro-urban area on an annual basis. Again, anecdotal evidence suggests that career opportunities in the pet industry and small research animal care are growing. A needs assessment and analysis of the industry and industry’s growing personnel needs in this metro-urban area would be further evidence for expanding the AMT program at this or one of the other career centers in the district.

Although a veterinary technician program is offered at the local community college, would a district sponsored adult AMT program be beneficial for adults in the metro-urban area interested in a small animal care career? Further study would highlight the role this AMT program could play in a related adult education program.

2. **Student Selection Process** - The screening and selection process of high school students indicating a desire to enroll in the AMT program should be enhanced to better attract students. A systematic process that included a selection committee would avoid potential future litigation.

Presently, students self-select when applying for the AMT program. Although students must have parental permission to apply to a career center program, they are not actively recruited by career center teachers. Once students apply to the AMT program, AMT teachers select the students based on number of available seats,
student GPA, and a personal interview. Other criteria, such as gender and ethnicity, IEP status, geographic location of home school, student’s nondistrict status, may also be factors in student selection. The burden of selecting students for a limited number of places in the AMT program should fall upon a committee, not a single individual—the teacher. It is not clear by using the current student selection process whether the best qualified or most-in-need students are selected for this program. A further study could examine how career centers or their counterpart institutions (i.e., JVS, magnet schools) in other Ohio school districts select students for programs with limited enrollment. A more transparent, systematic, and collaborative student selection process would remove a single teacher from the annual burden of selecting future AMT students and possibly rejecting a deserving student. An improved student selection process would also proactively remove any future liability issue that may arise from an unselected student claiming discrimination in the selection process.

3. **Multiple-Year AMT Programs** - Multiple year AMT programs should be separated into nonconsecutive 1-year programs in metro-urban areas.

Consecutive-year AMT programs are doing a disservice to students and districts. The number of students placed in urban AMT programs is limited. If placement is further limited by an additional prerequisite (i.e., to enroll in AMT II, students must have completed AMT I), valuable resources would be wasted. In the past, when students who completed AMT I chose not to enroll in AMT II, empty seats left by those students went unfilled. A smaller AMT II class resulted in a lower student-teacher ratio and under-utilized facilities and equipment.
It has been reported that some AMT I students who needed additional academic courses to graduate at their home high school did not enroll in the AMT II class their senior year; other AMT I students after completing AMT I moved out of the district; other AMT I students lost interest in small animals or changed their future career focus. These are only three reasons given for why some students who had completed AMT I did not enroll in AMT II, but there could be other reasons.

To provide the maximum number of opportunities for district students to enroll in an AMT program and to fully utilize district resources, AMT teachers proposed that the AMT 2-year program be nonconsecutive. Their proposal was accepted by the school district, to have AMT-Pet Shop Management and AMT-Small Animal Health, two nonsequential curricular and nonconsecutive programs. This decision is consistent with other urban agricultural programs were students cannot commit to two consecutive-year programs. Nevertheless, under nonconsecutive year programs, students can still choose to enroll in both AMT programs in consecutive years but are not required to do so.

4. **Summer Programs** - AMT teachers should be hired for 12-month programs and provided budgets and incentives to promote job placements and supervised summer AMT activities either at the career center, students’ homes, or at industry-related job sites.

While there are few AMT-related summer program opportunities for current AMT students, summer opportunities could be expanded if AMT teachers were employed during the summer months. Presently, the AMT learning laboratory must
be closed during the summer and the AMT laboratory animals placed either with AMT students as SAE projects or subcontracted to nonstudents until the fall term begins when the career center reopens. If AMT teachers were able to offer summer AMT programs to secondary students or adults, the laboratory animals would not have to be displaced, and the number of animals that get ill or die during the summer because of a change of environment, stress-related illnesses, and/or poor care would be reduced.

If AMT teachers were on 12-month contracts and were provided travel expenses, they would be able to visit students either at their homes or at their summer job placement sites to follow-up on animal care of SAE projects, record books, homework, and individualized instruction. Teachers would also be able to visit with parents/guardians and job placement employers/potential employers.

AMT teachers on 12-month contracts could also develop additional summer short courses for students who did not do well during the regular term, IEP students, adults, or industry personnel. To address the public image of the AMT program and offer community service opportunities, teachers could organize their students to provide summer AMT camps for middle school children or IEP students. Depending on the interests of the AMT teachers and students, teachers could organize inner-city day camps at various recreation centers and parks, including dog agility clinics and workshops. Inter-generational AMT programs at nursing homes or convalescent facilities with at-risk students could be possible service learning opportunities for students. During the summer, AMT teachers could develop new curricula, including
expanding articulation agreements with local community colleges, and could write experiential- or research-based related professional magazine or journal articles about their AMT program. Teachers at this AMT program have been developing a textbook for secondary AMT programs throughout the United States and should be encouraged to finish this process.

By expanding 9-month AMT programs to 12-month programs, AMT teachers could be more programmatically involved with their students over the summer months, develop new curricula, expand AMT educational program offerings, organize professional development courses for industry personnel, and provide community AMT-based services and programs to promote the AMT program to the general public. A summer contract would allow AMT teachers to pursue in-depth personal professional development course work, seminars, or workshops.

5. **Urban Agricultural Education Case Studies** - Additional case studies of AMT programs throughout Ohio and the United States should be developed that record student-teacher cultural production portrayals and programmatic idiosyncrasies. These urban agricultural education case studies should be published to contribute to the knowledge base for urban secondary agricultural education and should be assembled into a training manual to be used in agricultural education teacher preparation programs.

Urban agricultural education case studies are useful for agriculture teacher candidates. When preparing students for a career in teaching agricultural in urban settings, few resources or examples that directly relate to urban AMT or agricultural
programs are available. The unique content of an AMT program should be recorded and presented to teacher education students unfamiliar with urban agriculture programs. The growing number of metro-urban school districts in Ohio and throughout the United States offers many opportunities for expanding agricultural programs in general and AMT programs in particular into these areas. In the future, more agricultural teachers will be needed in these metro-urban school districts. A collection of current case studies and cultural production portrayals of urban AMT programs will provide unique windows to these programs and students. Although this study provided four cultural production portrayals from the data, additional case studies are needed. Further qualitative research studies could purposively be designed to generate specific urban AMT or urban agricultural program portrayals.

6. **The Dynamic Teacher Students Accommodation Model for Agricultural Education** - This education model should be developed through further research and offered as an alternative educational model to teacher candidates in agricultural education programs.

Agricultural education in general and AMT programs in particular lack a program model that incorporates the components of a successful urban agricultural AMT program. Through further research, studies, and discussion, Agricultural Education leaders as an alternative model to other education models currently used in teacher education programs could adopt the proposed Dynamic Teacher Students Accommodation Model for Agricultural Education. This model could be used to assist teacher candidates better visualize and understand the different components and
interrelationships of these components in a successful program. The model could also be used to assist teacher candidates in exploring their individual needs to acquire or improve their cultural accommodation skills.

Summary

Many aspects of this AMT program, including the AMT teacher, merit recognition. In addition to the excellent education and workforce training AMT students received, the community was served through offering grooming services for pets and the education of future skilled AMT industry personnel. In addition to this education and training, AMT students received excellent guidance from their teachers and career center staff as they transitioned from adolescence to adult and from school to work. Students were given additional opportunities to develop their skills as leaders through laboratory activities (pet shop manager) and FFA events. These opportunities of conferral of responsibility and team collaboration helped students develop into caring and responsible community citizens and leaders.

The [ABC] school district had invested in excellent teachers, staff, facilities, and procedures, of which they are justifiably proud. The district’s career exploration programs for 8th- and 10th-graders should be modeled in other districts throughout Ohio and the United States.

The [ABC] school district could benefit from a more systematic student selection process for career center students. Criteria for student selection could be developed with input from students, teachers, parents/guardians, administrative staff,
and career center advisory board members. The [ABC] school district could evaluate its student selection process with similar programs throughout Ohio to better serve students applying to the AMT and other career center programs.

As student testing increases and academic requirements become more rigorous at Ohio high schools, career-technical students will be better served with multiple year career technical programs rather than consecutive year programs. Multiple year programs will allow for greater flexibility for students, teachers, and administrators.

AMT students and teachers could benefit from AMT summer programs. The [ABC] school district should investigate the educational and financial benefits of year-round or 12-month career-technical programs for cost efficiency, academic integrity, and increased opportunities for AMT teachers to serve students and should participate in professional development, such as writing educational curricula or writing for education magazines, journals, and textbooks.

Finally, preservice urban AMT teacher candidates could benefit from studying this and other urban secondary agricultural education case studies and the Dynamic Teacher Students Accommodation Model for Agricultural Education. This study was the first of many future case studies in urban secondary agricultural education and will serve as a model in future preservice teacher preparation programs.
Appendix A

Letter of Support from Teachers
May 3, 2000

Re: Letter of Support for Dissertation Research by John Soloninka

To: Janet L. Henderson
Human and Community Resource Development
Room 208 Agricultural Administration Building
Ohio State University
2120 Fyffe Road
Columbus, Ohio 43210

Dear Dr. Henderson,

John Soloninka, a PhD candidate from The Ohio State University, and your advisee to conduct research in our classroom, Small Animal Care, with our students at the **redacted**, has approached us. Mr. Soloninka has visited us on two separate occasions and presented us with his dissertation proposal: Negotiating an Urban Agricultural Classroom: A Case Study. We understand that Mr. Soloninka wishes to spend several months with us and our students during the end of this academic year, 1999-2000; this summer, 2000; and possibly during the autumn and winter months of the 2000-2001 academic year. We have read and discussed the research proposal with Mr. Soloninka. We have given Mr. Soloninka several of our suggestions for improving the process of his data collection.

We understand that the data collection process for this dissertation will be spread over several months, at which time Mr. Soloninka intends to observe our students; participate in some of their classroom and SAE activities; and to interview (audio tape) twelve student participants, their parents/guardians, and us as teachers, each interview lasting from 30-45 minutes. We have also been informed that Mr. Soloninka wishes to videotape and photograph three classroom sessions.

Having discussed this research proposal with our acting Career Center director, we offer our tentative support to Mr. Soloninka’s request to have access to our classroom and students as outlined in his proposal. We understand that Mr. Soloninka is in the process of having this proposal approved by The Ohio State University Human Subjects Review Committee, The OSU Office of Professional Practices, and the **redacted** School District.

Furthermore, we understand that our students’ participation is voluntary, and that any student may discontinue their participation in the study at any time without prejudice.

Sincerely,

Animal Management Instructor

Animal Management Instructor
Appendix B

OSU Institutional Review Board
Dear Investigator,

Your protocol has been reviewed by the Behavioral and Social Sciences Institutional Review Board (IRB), and has been APPROVED WITH CONDITIONS. The IRB has requested that you make revisions to specific portions of your protocol. These revisions are detailed on the form that accompanies this letter.

Research cannot begin until your response has been reviewed and approved. The final approval letter will be issued to the Principal Investigator.

Your response must be in writing, and should contain the following items:
- Response form (attached) with original signatures of all investigators.
- Responses to each of the items listed.
- Copies of revised documents as requested. Changes to documents should be highlighted for the reviewers.

You do not need to revise your entire protocol or submit a new protocol. You do not need five copies of your response; one copy is sufficient.

Failure to respond to conditions will result in withdrawal of your protocol. If you are not able to respond within two weeks of the meeting date listed on the form, please contact Jane Kelsey, Office of Research Risks Protection by phone (292-6950) or e-mail (kelsey.18@osu.edu).

The information in this letter refers to the investigator’s responses to the conditions of the IRB. If you wish to make changes to the protocol other than those suggested by the IRB, please submit an amendment request for review prior to implementation of the changes.

---

Submit your response to

| Chair, Behavioral and Social Sciences IRB |
| Office of Research Risks Protection |
| Room 300, Research Foundation Building |
| 1960 Kenny Road |
| Columbus OH 43210 |

Questions? Please contact

| Jane Kelsey |
| Administrative Assistant |
| Behavioral and Social Sciences IRB |
| Phone: 292-6950 |
| E-mail: kelsey.18@osu.edu |
BEHAVIORAL AND SOCIAL SCIENCES
HUMAN SUBJECTS INSTITUTIONAL REVIEW BOARD (IRB)
THE OHIO STATE UNIVERSITY

Research Involving Human Subjects

ACTION OF THE INSTITUTIONAL REVIEW BOARD

With regard to the employment of human subjects in the proposed research protocol:

00B0075 NEGOTIATING AN URBAN AGRICULTURAL CLASSROOM: A CASE STUDY, Janet L.
Henderson, John W. Soloninka, Human and Community Resource Development

THE BEHAVIORAL AND SOCIAL SCIENCES HUMAN SUBJECTS IRB HAS TAKEN THE FOLLOWING ACTION:

_____ APPROVED            _____ DISAPPROVED
X   APPROVED WITH CONDITIONS*  _____ WAIVER OF WRITTEN CONSENT GRANTED

* Conditions stated by the IRB have been met by the Investigator and, therefore, the protocol is APPROVED.

It is the responsibility of the principal investigator to retain a copy of each signed consent form for at least three (3) years beyond the termination of the subject’s participation in the proposed activity. Should the principal investigator leave the University, signed consent forms are to be transferred to the Human Subjects IRB for the required retention period. This application has been approved for the period of one year. You are reminded that you must promptly report any problems to the IRB, and that no procedural changes may be made without prior review and approval. You are also reminded that the identity of the research participants must be kept confidential.

Date: April 14, 2000
Signed: ___________________________
(Chairperson)
RESEARCH PROTOCOL:

00B0075 NEGOTIATING AN URBAN AGRICULTURAL CLASSROOM: A CASE STUDY,
Janet L. Henderson, John W. Soloninka, Human and Community Resource Development

was presented for review by the Behavioral and Social Sciences IRB to ensure proper protection of the rights and welfare of the individuals involved with consideration of the methods used to obtain informed consent and the justification of risks in terms of potential benefits to be gained, the IRB action was:

______ APPROVED  ______ DEFERRED*

X  ______ APPROVED WITH CONDITIONS*  ______ DISAPPROVED

________ NO REVIEW NECESSARY

* Research cannot begin until conditions have been met.

*CONDITIONS/COMMENTS:

Subjects were deemed NOT AT RISK and the protocol was unanimously APPROVED WITH THE FOLLOWING CONDITIONS:

1. Revise your response to the following items on the summary sheets, and provide a copy to the IRB.
   • Describe your recruitment process. The Institutional Review Board agrees that you can ask students if they are interested in participating, but you cannot ask for their agreement to participate until after the parents have signed a consent form.

2. Revise the parent letter as follows, and provide a copy to the IRB.
   • Revise the first sentence ("Your [child’s] classroom has been selected to participate"). It should read instead that their child has expressed an interest in participating in the study.
   • Print the letter on OSU departmental letterhead stationary.
   • The Principal Investigator and the Co-Investigator should sign the letter.

3. Revise the consent form as follows, and provide a copy to the IRB.
   • Print the consent form on OSU departmental letterhead stationary.
   • The Principal Investigator and the Co-Investigator should sign the consent form.

4. Provide a letter of support from the career center.

5. Clarify the nature of the relationship between the career center and the various sites where students work. Does the center have an arrangement with the employers that allows other persons (such as the investigators) to be present and to observe the students while they are working? If not, provide letters of support from the employers.

If you agree to the above conditions, PLEASE SIGN THIS FORM IN THE SPACE PROVIDED BELOW AND RETURN WITH ANY ADDITIONAL INFORMATION REQUESTED TO THE HUMAN SUBJECTS REVIEW DESK, 300 Research Foundation, 1960 Kenny Road, Campus, within one week. Upon such compliance, the approval form will be mailed to you. (In case of a deferred protocol, please submit the requested information at your earliest convenience. The next meeting of the IRB will be two weeks from the meeting date indicated above.)

Date: 5-3-00

[Signature]

(signatures of principal investigator and all co-investigators)

HS-025A
Rev. 3/92
(Conditions/Comments)
Appendix C

OSU Office of Professional Practices (OPP)
August 2, 2000

Don Cramer
Office of Professional Practices
137 Arps Hall
Ohio State University
Columbus, OH 43210

re: Research Request

Dear Sir,

I am a PhD candidate in the Human and Community Resource Development Department, School of Food, Agricultural and Environmental Sciences. My major area of study is Agricultural Education.

I am writing to request approval to conduct my dissertation research in the [Redacted] system for the 2000-2001 school year. Please find enclosed my completed College of Education Research Format Form, and IRB forms.

My research will focus on urban high school students enrolled in an agricultural program. Specifically, I would like to conduct this research in the [Redacted]. I have contacted the two teachers involved and the interim director of the [Redacted] regarding this research. A letter is attached.

Thank you for your attention to this request.

Sincerely,

[Signature]

John W. Soloninka
Appendix D

OSU OPP Letter to School District
August 2, 2000

Enclosed is a copy of a research proposal, "Negotiating an Urban Agricultural Classroom: A Case Study," which is submitted by one of our graduate students, John Soloninka in the School of Food, Agricultural and Environmental Sciences. John has requested that we send this proposal to your District for review and possible participation. He would like to conduct his research at [redacted].

After reviewing this proposal, please notify me as soon as possible if your district would like to participate. Our students are aware that the results of their studies are to be shared with your district. If additional information is needed, please feel free to contact John at 261-0578.

Participation in this project will earn approximately 17 fee waiver hours for your school district.

Sincerely,

Don Cramer
Office of Professional Development

Encl.
cc: file
Appendix E

School District Request
September 7, 2000

Don Cramer
The Ohio State University
College of Education
110 Arps Hall
1945 North High Street
Columbus, OH 43210-1172

Dear Mr. Cramer:

I write to inform you that the Research Proposal Review Committee has reviewed the research proposal of John Scioninka.

Please ask the researcher to address the following “feedback” issues, in writing:

- Value of data collection
- Effective plans for dissemination of findings to school personnel
- Implications of the findings for [ ] are effectively and clearly explicited

Thank you.

Sincerely,

[Redacted]

cc: [Redacted]
John W. Soloninka  
Columbus, OH 43202

Don Cramer  
The Ohio State University  
College of Education  
110 Arps Hall  
1945 North High Street  
Columbus, OH 43210-1172

October 20, 2000

re: [Redacted] Request - September 7, 2000

Dear Mr. Cramer:

I am writing to you with my response to the [Redacted] request for “feedback” issues regarding my research proposal as outlined in their letter dated September 7, 2000. Please forward my response to the appropriate person(s).

[Redacted]

Value of Data Collection: My data collection will be done throughout the school year. I have chosen to collect my data by observing and actively participating in the classroom two days per week. I will also be conducting one on one interviews with students, teachers, and parents. I also plan to observe and interview students at their job placement sites during the Spring. My data collection procedures are based on the qualitative research methods as outlined by Lincoln and Cuba. The value of this form of data collection over a questionnaire or other quantitative methods of data collection will allow me to have a broader scope in order to address my research questions. By conducting my data collection over a period of several months, I will be able to reformulate questions and dig deeper as new information becomes available to me. Also, I believe that a prolonged relationship with the researcher (myself) will permit the students to be more open and forthcoming with information than they would be with a researcher who was only briefly involved with them. The nature of my research questions necessitates prolonged contact with the students, as I wish to document the process that seniors undergo as they prepare to enter the job.
market upon graduation from high school. The transitional phase from high school to work, and the support networks that successful students build, and how they build these networks, is of interest to educators, counselors, and employers. I will specifically be looking at urban students who have chosen to enter agricultural-related employment and how they were able to do this successfully. I will also want to collect data from students in this agricultural program who upon graduation do not enter agricultural related employment. In order to elicit this information from students I will obviously have to develop report and confidence over a period of time.

Effective plans for dissemination of findings to school personnel: Preliminary findings will be shared with the instructors at the [redacted]. A final version of the research, including findings and recommendations, will be forwarded by the researcher to the [redacted] for dissemination. Articles based on the research and findings will be submitted to appropriate journals of education, including The Journal of Agricultural Education, and Theory and Practice in Education.

Implications of the findings for [redacted] are effectively and clearly explicated: The implications of the findings of this study for [redacted] are 1) a well documented qualitative study of a successful vocational program operating within the district; 2) a case study of [redacted] vocational students making the transition from school to work; 3) the role they play and the extent to which school, peers, and family either support or hinder a vocational student’s career choice; and 4) student characteristics that could predict success in an urban agricultural related program and career.

Sincerely,

[Signature]

John W. Soloninka
Appendix F

School District Approval
November 10, 2000

Dear Administrator:

I write this letter to introduce John Solonika, a researcher from The Ohio State University. The research proposal “Negotiating an Urban Agricultural Classroom: A Case Study,” has been reviewed and approved by the Research Proposal Review Committee.

This letter does not obligate you to participate in the study. Rather, it serves as an introduction and official notification that the researcher has followed established procedures and has been granted permission to solicit subjects to participate in the study.

If you have any questions or concerns, please contact my office.

Sincerely,
Appendix G

Student Permission Letter & Consent Form
December 6, 2000

Dear student's name:

As was explained in class today by teacher's name, your classroom has been selected to participate in a study which will examine how students who are enrolled in the Animal Management Technician vocational program during either their Junior or Senior year of high school benefit from such a program. The study is entitled: Negotiating an Urban Agricultural Classroom: A Case Study. I believe that this study is important to the understanding of how students perceive an urban agricultural program and of what personal advantage (or disadvantage) it is to them; which in turn will assist guidance counselors and teachers in recruiting and retaining the students who best benefit from such a program. This letter explains some of the details of the research.

I am a doctoral candidate in the Human and Community Resource Development Department at The Ohio State University. My dissertation research focuses on how students in an urban agricultural program internalize this educational experience. It is my intent to discuss at length with each student participant what Animal Management Technician means to them, how they came to be enrolled in the Animal Management Technician program, how this program is impacting their lives, and their current and future aspirations to obtain a job. During the months of January, thru June 2001, I will continue to visit your Animal Management Technician classroom and lab at the school's name. I will be observing what happens in the classroom, specifically the interactions which occur among student/teachers and student/students. I will ask participants to meet with me for an initial 45 minute interview, a second 30-45 minute informal interview with one or two peers present, and to participate in one forty-five minute interview with their parent/guardian(s). I will also spend two to three days with each participant at their job placement site. I will be video taping one or two days in the classroom; additionally, I will be audio-taping each interview which will later be transcribed to facilitate the recording of the collected data.

You are not obligated to participate in this study. Your participation is voluntary. Your instructor will not penalize you in any way for your participation or non-participation in this study. Furthermore, your instructor will not penalize you if after agreeing to participate in this study, you decide at some future time to not continue with the study.

All audio and video tape transcriptions, forms and other documents used in this study (with the exception of this permission/consent form) will contain pseudonyms for each participant. The school's name will not be directly identified in any final report. This coding will be done in order to protect the confidentiality of each participant and the school. All tapes and transcriptions will be destroyed at the end of the study. A final report of this study will be submitted to you instructor and the XXXX School District. A journal article about this study will be submitted for publication to two educational research journals.

If you would have any questions or concerns about this study, please contact me at home (614) 261-0578 or at my e-mail address: soleninka.1@osu.edu Thanking you in advance for your consideration to participate in this study.

Sincerely,

James Connors, OSU Assistant Professor
Principal Investigator

John W. Soleninka, Doctoral Candidate,
Co-Investigator

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Please check the following statements to which your give your consent:

_______ I understand that my daughter or son has consented to participate in the research study entitled: Negotiating an Urban Agricultural Classroom: A Case Study. As parent or legal guardian, I give my consent to my daughter's or son's participation in this research study.

_______ I do not give my consent to my daughter's or son's participation in the research study entitled: Negotiating an Urban Agricultural Classroom: A Case Study.

_______ I am willing to participate in a forty-five minute interview with my daughter or son and the researcher.

_______ I am not willing to participate in an interview with my daughter or son and the researcher.

Student participant in this study is voluntary. Instructors in the Animal Management Technician program will not penalize any student for participation or non-participation in this study. Furthermore, they will not penalize any student who after agreeing to participate in this study, decides at some future time not to continue with the study.

By signing this form, I acknowledge that I have had the opportunity to ask for additional information regarding this study. I further acknowledge that any questions that I have raised have been answered to my full satisfaction. I have read and fully understand that by signing this letter that I am granting consent that my daughter or son may participate in the research study as outlined above. I understand that either my daughter or I am free to withdraw this consent at any future time and to discontinue my daughter's participation in the study. I have signed this letter freely and voluntarily.

Two copies of this letter are enclosed; return one letter to the school, and keep a copy for your records.

Date: ______________ Daughters or sons name: ______________________

Signature: ____________________________ Signature: ____________________________

(Parent or guardian) (Student participant)

Home phone number of parent or guardian: ______________________________

(Requested in order to schedule a home interview)

Witness: ____________________________ OSU Protocol # 00080075

(Teacher)

We appreciate your cooperation. Please contact us if you would have any further questions or concerns about this research study.

Sincerely,

James Connors, OSU Assistant Professor
Principal Investigator

John W. Soloninka, Doctoral Candidate,
Co-Investigator

Agricultural Communication  •  Agricultural Education  •  Extension Education  •  Rural Sociology  •  Vocational Education

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Appendix H

Parental/Guardian Letter & Consent Form
December 6, 2000

Dear Parents/Guardians of Student Name:

Your child has expressed an interest in participating in a study which will involve several students in the Animal Management Technician program at school's name. The study is entitled: Negotiating an Urban Agricultural Classroom: A Case Study. I believe that this study is important to the understanding of how students perceive this urban agricultural program and of what personal advantage (or disadvantage) it is to them; which in turn will assist guidance counselors and teachers in recruiting and retaining students who best benefit from such a program. This letter briefly explains the study. Two copies are included. Since your child has expressed an interest in participating in this study, your written consent is required. If you agree that your daughter has your permission to participate, please sign the attached consent forms and return one to school as soon as possible. Keep the second signed form for your records.

I am a doctoral candidate in the Department of Human and Community Resource Development at The Ohio State University. My dissertation research is focusing on how students in an urban agricultural program internalize their educational experience. It is my intent to discuss at length with each student participant what agriculture in general and Animal Management Technician in particular, means to them, how they came to choose to participate in this program, how it is impacting their lives, who have been and are the influential people in their choosing and continuing in this program, and their current and future aspirations to continue working in this field. During the months of January through June 2001, I will be visiting the Animal Management Technician classroom and lab at the school's name and observing what happens in the classroom, specifically the interactions which occur among student/teachers and student/students. I will ask each student participant to have an initial 45 minute interview with me, a second 30-45 minute informal interview with one or two of their peers present, and the forty-five minute interview with you as parent(s)/guardian(s) concerning your child's program and career choice. I will also spend two to three days with each student participant at their job placement site.

With your permission and consent from the student participant, I will be video taping one or two days in the classroom; additionally, I will be audio-taping each interview which will facilitate transcription of the collected data.

The instructors, teachers' names, in this program are facilitating my study. They will not obligate any student to participate in this study. Student participation is voluntary with parental consent required. The instructors will not penalize your child in any way for her participation or non-participation in this study. Furthermore, the instructors will not penalize any student who, after agreeing to participate in this study, decides at some future time to not continue with the study.

All audio and video tape transcriptions, forms and other documents used in this study (with the exception of this permission/consent form) will contain pseudonyms for each participant and the school will not be directly identified in any final report. This coding will be done in order to protect the confidentiality of each participant and the school.

If you would have any questions or concerns about this study, please contact me at home [contact information] or at my e-mail address: [contact information]. Thank you in advance for your consideration to allow your daughter to participate in this study.

Sincerely,

James Connors, OSU Assistant Professor
Principal Investigator

John W. Soloninka, Doctoral Candidate,
Co-Investigator
Please check the following statements to which your give your consent:

_____ I understand that my daughter or son has consented to participate in the research study entitled: Negotiating an Urban Agricultural Classroom: A Case Study. As parent or legal guardian, I give my consent to my daughter’s or son’s participation in this research study.

_____ I do not give my consent to my daughter’s or son’s participation in the research study entitled: Negotiating an Urban Agricultural Classroom: A Case Study.

_____ I am willing to participate in a forty-five minute interview with my daughter or son and the researcher.

_____ I am not willing to participate in an interview with my daughter or son and the researcher.

Student participant in this study is voluntary. Instructors in the Animal Management Technician program will not penalize any student for participation or non-participation in this study. Furthermore, they will not penalize any student who after agreeing to participate in this study, decides at some future time to not continue with the study.

By signing this form, I acknowledge that I have had the opportunity to ask for additional information regarding this study. I further acknowledge that any questions that I have raised have been answered to my full satisfaction. I have read and fully understand that by signing this letter that I am granting consent that my daughter or son may participate in the research study as outlined above. I understand that either my daughter or I am free to withdraw this consent at any future time and to discontinue my daughter’s participation in the study. I have signed this letter freely and voluntarily.

Two copies of this letter are enclosed; return one letter to the school, and keep a copy for your records.

Date: ________________ Daughter’s or son’s name: ______________________

Signature: ________________________ Signature: ________________________

(Parent or guardian) (Student participant)

Home phone number of parent or guardian: ________________________ (Requested in order to schedule a home interview)

Witness: ________________________ OSU Protocol # 00B0075

(Teacher)

We appreciate your cooperation. Please contact us if you would have any further questions or concerns about this research study.

Sincerely,

James Connors, OSU Assistant Professor
Principal Investigator

John W. Soloninka, Doctoral Candidate,
Co-Investigator
Appendix I

Job Placement Letter & Consent Form
Dear Employer:

I am a doctoral candidate in the Department of Human and Community Resource Development at The Ohio State University. My dissertation research is focusing on how students in an urban agricultural program internalize this educational experience. It is my intent to discuss at length with each student participant what agriculture in general and small animal care in particular, means to them, how their current agricultural program was chosen, how it is impacting their lives, who have been and are the influential people in their choosing this program, and their current and future aspirations in the field of agriculture/small animal care. During the months of xxxx, and xxxx, I will be visiting the Small Animal Care classroom at the school's name and observing what happens in the classroom, specifically the interactions which occur among student/teachers and student/students. I will ask each student participant to have an initial 45 minute interview with me, a second 30-45 minute informal interview with one or two of their peers present (preferably at their home school), and one forty-five minute interview with you as parent(s)/guardian(s) concerning your child's program and career choice. With your permission and consent, I would also like to spend two to three days with each student participant at their work experience site. I will be audio-taping each interview which will later be transcribed to facilitate the recording of the collected data.

The instructors in this program are facilitating my study. They will not obligate any student to participate in this study. Student participation is voluntary with parental consent required.

Two copies of this letter are included. Since "name" has expressed an interest in participating in this study, your written consent is required in order that I may interview and observe him/her at your business. If you agree that I may observe and interview "name" at your business, please sign these letters and return one of them in the enclosed stamped addressed envelope as soon as possible. Keep the second copy for your records.

If you would have any questions or concerns about this study, please contact me at home [contact information] or at my e-mail address [contact information]. You may also wish to call the chair of my dissertation committee with any concerns that may arise during the course of the research data collection period, Dr. Janet Henderson, at [contact information]. Thanking you in advance for your consideration.

Sincerely,

Janet L. Henderson, OSU Assistant Professor, Principal Investigator

John W. Soloninka, Doctoral Candidate, Co-Investigator
Please check the following statement to which you agree:

I understand that “name” has given his/her consent and has parental consent to participate in the research study entitled: Negotiating an Urban Agricultural Classroom: A Case Study. As supervisor of “name”’s work experience, I give my consent to having John Soloninka, observe and interview “name” at “name of business” on (date) and (date).

I understand that “name” has given his/her consent and has parental consent to participate in the research study entitled: Negotiating an Urban Agricultural Classroom: A Case Study. As supervisor of “name”’s work experience, I do not give my consent to having John Soloninka, observe and interview “name” at “name of business.”

I acknowledge that I have had the opportunity to ask for additional information regarding this study. I further acknowledge that any questions that I have raised have been answered to my full satisfaction.

I understand that participation in this study is voluntary. Instructors in the Small Animal Care program will not penalize any student for participation or non-participation in this study. Furthermore, they will not penalize any student who after agreeing to participate in this study, decides at some future time to not continue with the study. The instructors will not penalize any student if their supervisor for their SAE does not agree to having them observed and interviewed by John Soloninka during their allocated time at “name of business.”

Date: ___________________ Participant’s name: ________________________________

Supervised Agricultural Experience Supervisor’s Name: ____________________________

Signature: ___________________ Signature: __________________ (Student participant)

(Supervisor)

Witness: ___________________ OSU Protocol # __________________________

We appreciate your cooperation. Please contact us if you would have any further questions or concerns about this research study.

Sincerely,

Janet L. Henderson, Associate Professor, OSU
Principal Investigator

John W. Soloninka, Doctoral Candidate, Co-Investigator

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Appendix J

Verbal Instructions to Student Participants
Verbal Instructions to Student Participants

Instructions to be given by the instructors of the Animal Technician Program at the school’s name by teacher’s name.

We have with us today, John Soloninka, from the Ohio State University. Mr. Soloninka is a PhD student at Ohio State. He is studying Agricultural Education programs and has asked if he could study our program here at the school’s name. He is interested in meeting with you as students, your parents, your peers, and also with us. He will be coming to observe our classes for the next couple of months. He will also be video-taping two or three class sessions. He also wants to interview you as the students in this program.

Mr. Soloninka wants to write about urban kids who take agricultural classes like our Animal Management Technician program. He wants to describe your experiences in this program, what value if any this experience is to you and how you plan to use this education to further your careers in agriculture or another field. He wants to find out how you interpret what you are doing in our class to your family members and to your peers. He wants to find out about your ‘Job Placement’ experiences, and what you think about going out to work as part of this program. He hopes that by writing about your experiences here that guidance counselors and we as instructors will be better at recruiting and retaining students in this program.

Mr. Soloninka’s study is called “Negotiating an Urban Agricultural Classroom: A Case Study.” He plans on writing about his findings here using different names for you as students and even giving a pseudo name to our school. He is doing this to protect your confidentiality and that of our school.

If you would like to participate in this study, we, as your instructors, want you to know that your participation is voluntary. That means that you can choose to participate or not participate. We will not penalize you in any way, either through grades or assignments, if you choose to participate or not participate. Also we want you to know, that even if you would choose to participate that any time during the study you could tell us or Mr. Soloninka that you don’t want to participate anymore and we would not penalize you.

If you agree to participate in this study then we want you to read this letter that we are passing out. We will then give you another letter to take home for your parents/guardians to read. If you want to participate in the study, then you and your parents/guardians must sign the letter agreeing to allow you to participate. Bring a signed copy of the letter back to school, and then Mr. Soloninka will ask you to participate in two interviews. At a later date, Mr. Soloninka will visit your job placement site and ask to interview you there. He will also ask to interview your parents/guardians. He will be taking audio and video recordings of our class and individual interviews.

Does anyone have any questions about the study that they would like to ask us, or Mr. Soloninka?
Appendix K

Student Observation Schedule
<table>
<thead>
<tr>
<th>Type of Action or Interaction (e.g., grooming a dog, cleaning a cage, bookkeeping)</th>
<th>Is student alone or working with another student? teacher?</th>
<th>Description of what is being done.</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
</tbody>
</table>
## List of Coding Categories

<table>
<thead>
<tr>
<th>Location</th>
<th>Students (S)</th>
<th>Teacher (T)</th>
<th>Families (F)</th>
<th>School (CC)</th>
<th>Community (CM)</th>
<th>Facilities (FC)</th>
<th>FFA (FFA)</th>
<th>SAE (SAE)</th>
<th>Job Placement (JP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CL: Related Traditional Classroom</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LB: Laboratory</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>HL: Hallway</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>DW: Dogwalk</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>LIB: Library</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMPT: Computer Lab</td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>CAFE: Cafeteria</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>OFF: Other Office</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>OTHS: Other Sites (Skills Contests)</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>ST: Individual</td>
<td>TCL: Teacher in the Classroom</td>
<td>TFL: Teacher in the Laboratory</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>SWP: Student with Peers</td>
<td>TWI: Teacher with Individual Student</td>
<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>SIEP: Student with IEP</td>
<td>SOT: Student on Task</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOFFT: Student off Task</td>
<td>SPRE: Student Pre Enrollment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FPRE: Family Pre Enrollment</td>
<td>TAC: Accommodating Students</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CCDR: Support of School Director</td>
<td>CCAC: Support of School Academic Counselor</td>
<td></td>
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<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>CMCL: Clients for Grooming</td>
<td>CMAV: Advisory Committee</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>FFAMB: FFA Membership</td>
<td>FFACLUB: FFA Student Organization Activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FFAMC: FFA Special Projects</td>
<td>FFACUR: FFA related Curriculum</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JPPRE: Pre Job Placement</td>
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<td></td>
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<tr>
<td>JPDOC: During Job Placement</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>JPPON: Problem with Job Placement</td>
<td></td>
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<td></td>
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<tr>
<td>JPPSUC: Success with Job Placement</td>
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</tr>
</tbody>
</table>
Appendix L

Interview Schedule for Student Participants
1. Student’s Name: _____ (Pseudonym)
2. Gender: _____
3. Age: _____
4. How would you describe your race/ethnicity? _____
5. How would you describe your family’s socio-economic status? _____
6. What part of name of city do you live in? How long have you lived here? Where did you live before moving to name of city?
7. Class rank: _____
8a. What is your current cumulative Grade Point Average? _____
8b. What is your current Grade Point Average in your Small Animal Care program? _____
9. How many hours a week do you study for your classes outside the classroom? Small Animal Care: _____ All other classes: _____
10. What is your home school: _____
11. How does your home school compare to name of school?
12. How far is your home school from name of school? _____ (miles)
13. How long is the bus/car ride from your home school to name of school? _____
14. Besides your classroom activities in the Small Animal Care Program, what else do you do at name of school?
15. Could you describe your role as a student in the Small Animal Care Program at name of school.
16. What is your relationship with the other students in this program? Would you consider them your best friends, just friends, just classmates, other?
17. How would you describe the instructors in this program? How would you describe your relationship with your instructor?
18. How did you come to be enrolled in this program? Please start back as far as you can remember? How long have you been interested in caring for animals? How were you recruited to participate in this program? (If you are a Junior, are you enrolled in this program again next year?)
19. Did any particular person in your memory encourage you in caring for animals? Could you describe this encouragement? Do you still have contact with this person or another person who encourages you to continue in a small animal care career?

20. Is there anyone outside of the small animal care program who you talk to about your course work here who understands and can help you with your homework and small animal care assignments?

21. What do your friends at your home school think about you participating in the Small Animal Care Program?

22. What do your parents/guardians and other family members think about you participating in the Small Animal Care Program?

23. Have you participated in the FFA while a student at name of school? Could you describe your experiences as a member of FFA?

24. Have you had a supervised work experience while at name of school? Could you describe your supervised work experience(s)?

25. Do you believe that you have learned something in this program? What have you learned?

26. Is there something that you thought that you should have learned in this course that thus far you have not yet learned?

27. For you personally, what has been the most rewarding part of the Small Animal Care Program?

28. For you personally, what has been the least rewarding part of the Small Animal Care Program?

29. Do you think that you will continue to follow a career path in small animal care or an agricultural related career? Could you describe your plans upon graduation from this program?

30. All things being equal, if you would have to do it all over, would you select to participate in this Small Animal Care Program again?

31. Is there anything else about the Small Animal Care Program and your involvement with this program that you would like to share with me?
Appendix M

Interview Schedule for Parents/Guardians of Student Participants
1. Parent/Guardian’s Name: _____ (Pseudonym)

2. Gender: _____

3. Age: _____

4. How would you describe your race/ethnicity? _____

5. How would you describe your family’s socio-economic status? _____

6. What part of name of city do you live in? How long have you lived here? Where did you live before moving to name of city?

7. Were there ever any of your family members or family friends active in an agricultural career? Could you briefly describe their involvement with agriculture? Specifically small animal care?

8a. What is your son’s (daughter’s) current Grade Point Average? _____

8b. What is your son’s (daughter’s) current Grade Point Average in the Small Animal Care Program? _____

9. How many hours a week does he (she) study outside the classroom? Small Animal Care _____ All other classes _____

10a. What does your son (daughter) think about this program?

10b. What do you think of your son (daughter) being enrolled in the Small Animal Care Program at name of school? Has this been a positive or negative experience for your son (daughter)?

11. Would you care to elaborate on what aspects of the program that you approve or disapprove?

12. Have you ever been asked either by your son (daughter) or his (her) instructor to participate in any Small Animal Care Program activities? Did you choose to become directly involved with any of your son’s (daughter’s) small animal care program activities? Could you describe your involvement?

13. Since enrolling in the Small Animal Care Program, have you noticed any increase in the use of agriculturally related vocabulary by your son (daughter) around the home? Specifically, has your son (daughter) expressed to you more of an interest in small animals than before he (she) was enrolled in this program?

14. Has your son (daughter) expressed an interest to you in continuing in either a Small Animal Care Program in higher education or a career in small animal care after
graduating from high school? What was your response? Would you support your son (daughter) if they chose to continue in a small animal care career?

15. To your knowledge, who gives your son (daughter) encouragement to continue in the Small Animal Care Program, and/or career path? How do you feel about this person encouraging your son (daughter)?

16. Is there anything else that you would like to share with me about the Small Animal Care Program and/or your son’s (daughter’s) involvement with this program?
Appendix N

Interview Schedule for Teacher Participants
1. Name: _____ (Pseudonym)
2. Gender: _____
3. Age: _____
4. How would you describe your race/ethnicity? _____
5. How would you describe your family’s socio-economic status? _____
6a. What part of name of city do you live in? How long have you lived here? Where did you live before moving to name of city?
6b. Were there any family members active in an agricultural career before you began your career? Could you briefly describe their involvement with agriculture?
7. Could you describe your personal history with regard to how you came to be the instructor in this small animal care program? What did your family think about you entering this field? While you were studying to become a small animal care instructor, did you have a mentor or person in the field who encouraged you in caring for animals? Could you describe this encouragement? Do you still have contact with this person or another person who encourages you to continue in a small animal care career?
8. How long have you been teaching? ________ In the Small Animal Care Program? _________
9a. Could you briefly describe the Small Animal Care Program at name of school and how it compares to similar programs in Ohio/USA?
9b. Could you describe the FFA component of this program?
9c. Could you describe the SAE component of this program?
10. Could you describe how students are recruited for this program?
11a. Could you describe “in general terms” the students who have been enrolled in this program?
11b. Could you describe “in general terms” the students who drop out of this program, or do not chose to continue for the second year?
11c. Could you describe “in general terms” the students who have been successful in this program? What factors do you think contributed to their success?

12a. How involved are family members (parents or guardians) in the overall Small Animal Care Program? How are they involved?

12b. To the best of your knowledge, in what ways are your students’ peers/friends involved with this program?

13a. After students have completed two years of this Small Animal Care Program, is there any official or personal follow-up of students on your part?

13b. Could you give some examples of what careers students have entered after completing this program?

13c. To the best of your knowledge, what percentage of the graduated students from your program remain in name of city? Do you know of any graduated students who have left name of city?

14. Is there anything else that you would like to share with me about either your students or the small animal care program here at name of school?
Appendix O

Process of Identifying Students with Suspected Handicaps
(Established by School District)
I. Who may refer
   Parent or legal guardian
   Teacher
   Student (him or herself)

II. Parental consent - for assessments to proceed
   Psychologist
   Physical Therapist
   Teacher
   Occupational Therapist
   Nurse
   Speech and Language Therapist
   Special Education Consultant

III. Eligibility Review Team
   Meets within 90 days from signed parental consent
   Determines disability and eligibility
   Professionals involved in multi-factor evaluation may include the psychologist,
   teachers, nurse, special education consultant. Parent is invited. Student may be invited.

IV. Diagnosis and Services

   SLD – Specific Learning Disability
   A processing disorder in one or more of the basic psychological processes involved in
   understanding or in using language, spoken or written, that may manifest itself in an
   imperfect ability to listen, think, speak, write, spell or to do mathematical calculations.
   The term does not include children from environmental, cultural, or economic
   disadvantages (e.g., immigrants.)
   Services – tutorial services, inclusion, mainstreaming, high incidence resource room.

   DH – Developmentally Handicapped
   Mental retardation exists that includes significantly sub average intellectual ability [I.Q.
   below 70] along with sub average social and adaptive skills [e.g., Can not use public
   transportation, can not read a map.]
   Services – tutorial services, inclusion, mainstreaming, high incidence resource room.

   ED – Emotionally Disturbed
   A condition exhibiting one or more of the following characteristics over a long period of
   time and to a marked degree that adversely affects a child's educational performance:
   - An inability to learn that cannot be explained by intellectual, sensory, or health factors.
   - An inability to build or maintain satisfactory interpersonal relationship with peers and
     teacher.
   - Inappropriate types of behavior or feelings under normal circumstances.
   - A general pervasive mood of unhappiness or depression.
   - A tendency to develop physical symptoms or fears associated with personal or school
     problems.
   Services – Satellite class, mainstreaming, cross-categorical, separate facility.
OH – Orthopedically Handicapped
Impairments may be caused by birth defects (spina bifida), disease (polio, bone tuberculosis, muscular dystrophy) or other causes (amputation, cerebral palsy, and fractures or burns that cause contractures).
Services – Probably one floor plan school.

HI – Hearing Impaired
Hearing impairment that is so severe that the child is impaired in processing linguistic information through hearing, with or without amplification.
Services – self-contained class, mainstreaming with sign language interpreter.

VI – Visually Impaired
Visual process so impaired, with or without correction adversely affects educational process.
Services – self-contained class, mainstreaming with auditory processing.

MD – Multiple Disabilities
Means concomitant impairments (such as mental retardation-blindness, mental retardation-orthopedic impairment, etc.) The combination of which causes such severe educational problems that they cannot be accommodated in special education programs solely for one of the impairments. The term does not include deaf-blindness.
Services – resource room, inclusion, mainstreaming.

OHI – Other Health Impaired
Limited strength, vitality, or alertness because of chronic or acute health problems such as asthma, attention deficit disorder, diabetes, epilepsy, a heart condition, hemophilia, lead poisoning, leukemia, rheumatic fever, sickle cell anemia, [or trauma].
Services – high incidence resource room, inclusion, home instruction.

TBI – Traumatic Brain Injury
An acquired injury to the brain caused by external physical force, resulting in total or partial functional disability or psycho social impairment, or both. The term applies to open or closed head injuries resulting in impairments in one or more areas, such as cognition; language; memory; attention; reasoning; abstract thinking; judgment; problem-solving; sensory, perceptual, and motor abilities psycho social behavior.
Services – high incidence resource room, tutoring, home instruction.

V. Educational Plan – Individualized Education Plan (I.E.P.)
Initial I.E.P.s are developed by the regular education teachers, special education teacher, special education consultant, parent or any other appropriate professional. Vision statement, present levels of performance, student's needs, annual goals are established with objectives and criteria. Must be reviewed annually. Multi-factored evaluations are completed every three years to determine if student remains eligible for services.
Appendix P

Member Check Form
Memorandum

To: name of participant
From: John W. Soloninka
Date: June 25, 2003

Re: Dissertation Case Study Findings

Thank you for participating in my dissertation research study on “Accommodating Students in an Urban Agricultural Education Program.” I appreciated the opportunity to interview you and to observe the Animal Management Technician Program at name of school during the 2000-2001 school year. Since then, I have analyzed all of the data I collected from the interviews, my observational notes, and the literature I reviewed. I wrote a case study, focusing on how the AMT teacher accommodates diverse students. I summarized the data collected around my five research questions: components of an urban agricultural program; student perspectives of the program; “cultural productions or portrayals” of diverse students; teacher accommodation of diverse students; and factors that attract and retain urban students in an agricultural education program.

The next step in the research process is to give you and other colleagues at name of school the opportunity to review the study. The purpose of this review is to check for accuracy, fairness, and validity. While you are reading the attached findings, please note your comments in the margins of the text. If you note any inaccuracies, please correct them. If there are any inappropriate materials in the study, you now have the opportunity to remove them by drawing a line through the materials that you wish to have removed.

As you read the case study findings, please keep the following in mind:

1. This case study was organized to capture students’, teachers’, and school administrators’ points-of-view. I would have liked to have included the parents’, students’, peers’ (from their home schools), and job placement employers’ points-of-view but was unable to collect that information.

2. There are many long quotes from the interviews that I conducted. I tried to incorporate as much of the interviews as I could to capture the context of the comments that were made and to give the participants a “voice” in my findings section.

3. One of the objectives of this study was to document the different components of a successful AMT program. Would you please verify that I have included all of the essential components of the AMT program.

4. Pseudonyms were used for the names of individual participants. In the final draft of this dissertation all references to individuals, the name of school, and school district will be removed. If you feel that the participant pseudonyms that I chose were inappropriate, or if you have other concerns about how I addressed the privacy of the participants, would you please address your concerns on the attached form.

After I have received your feedback and the feedback from other participants, I will finalize the final draft of this study and hopefully defend my dissertation by the end of July 2003. Therefore, I would ask that you return the attached form and draft of the findings in the
enclosed stamped, addressed envelope at your earliest convenience. Once the document is approved by my dissertation committee, I will send you a personal copy.

Again, thank you for your assistance. If you have any questions or concerns about the response form, do not hesitate to call me at home [xx] or contact me via e-mail at [xx].

**Member Check Form**

Member Check done by: *name of participant*  
(please put your initials here after you have completed this form):

Title: *name of title, name of school*

Date: ______________________

I have reviewed the attached findings section (Chapter 4) of the case study conducted in the AMT program at the *name of school* during the 2000-2001 school year: CULTURAL ACCOMMODATION IN AN URBAN AGRICULTURAL EDUCATION PROGRAM IN OHIO: A CASE STUDY.

I understand that my name, and all other participants’ names have been changed to protect their identity. I further understand that my name and all references to *name of school* and school district will be removed from the final draft of the study.

After reading the draft version of the findings sections (Chapter 4), I have indicated, by drawing a line through the text, what information that I want removed from the study.

After reading the draft version, I have made corrections to the best of my knowledge by indicating these corrections in the margins of the text.

After reading the draft version, I believe that the **components of our AMT program** have (not) been identified and addressed. (Please add your comments here):

After reading the draft version, I believe that the **pseudonyms** that were used were (not) appropriate. (Please add your comments here):

After reading the draft version, I have the following **additional comments** that I would like to draw your attention to:

**Thanks again for your participation.**
Appendix Q

Research Constructs
<table>
<thead>
<tr>
<th>Component</th>
<th>Tendency</th>
<th>Significance to Students and Student Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students</td>
<td>Diversity</td>
<td>Acceptance/Collegiality</td>
</tr>
<tr>
<td>Teacher</td>
<td>Accommodating</td>
<td>Respect for Authority</td>
</tr>
<tr>
<td>Classroom</td>
<td>Well-maintained</td>
<td>Importance of Safety</td>
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<tr>
<td>Facilities</td>
<td>Modern and Varied</td>
<td>Value Cutting-edge Technology</td>
</tr>
<tr>
<td>FFA</td>
<td>Group Goals</td>
<td>Leadership Development and Team Membership</td>
</tr>
<tr>
<td>SAE</td>
<td>Individualization</td>
<td>Personal Technical Interests</td>
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<td>Administration</td>
<td>Standardization</td>
<td>Fair Treatment/Justice</td>
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<td>Family</td>
<td>Withdrawing</td>
<td>Individual Responsibility</td>
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<td>Community</td>
<td>More Involved</td>
<td>Civic Involvement/Pride</td>
</tr>
<tr>
<td>Job Placement</td>
<td>Independence</td>
<td>Reflection on Work vs. College</td>
</tr>
</tbody>
</table>

Matrix of Ten Components of an Urban Secondary Agricultural Education Program and Their Tendency and Significance to Students and Student Outcomes.
<table>
<thead>
<tr>
<th>Student</th>
<th>Primary Peers (Secondary Peers)</th>
<th>Teacher</th>
<th>FFA</th>
<th>SAE</th>
<th>Classroom</th>
<th>Laboratory Ward Areas</th>
<th>Family</th>
<th>Community</th>
<th>Administration</th>
<th>Job Placement</th>
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</thead>
<tbody>
<tr>
<td>Aisha</td>
<td>Home School (Lovanda)</td>
<td>President of FFA and Career Center Senior Class</td>
<td>Positive Exper.</td>
<td>Quiet; responds to questions</td>
<td>Works alone; likes grooming</td>
<td>Involved</td>
<td>Works after school in an AMT job</td>
<td>Class president relates to administration</td>
<td>Liked job placement wants to go to college</td>
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</tr>
<tr>
<td>Paula</td>
<td>Ronnetta Lovanda Marie (Darrell)</td>
<td>Occasionally calls on Paula.</td>
<td>Not involved</td>
<td>Positive Exper.</td>
<td>Asks Questions.</td>
<td>Likes to work with others; does not like birds</td>
<td>Not involved</td>
<td>Likes talking with grooming customers</td>
<td>No contact</td>
<td>Didn’t like job placement</td>
</tr>
<tr>
<td>Lovanda</td>
<td>Marie Paula (Aisha)</td>
<td>Seldom calls on Lovanda</td>
<td>Minimally involved</td>
<td>Positive Exper.</td>
<td>Asks Questions.</td>
<td>Likes to work with others</td>
<td>Minimally involved</td>
<td>Likes talking with grooming customers</td>
<td>No contact</td>
<td>Liked job placement</td>
</tr>
<tr>
<td>Marie</td>
<td>Lovanda Paula (Darrell)</td>
<td>Seldom calls on Marie</td>
<td>Not involved</td>
<td>Neutral</td>
<td>Quiet; does not respond to questions</td>
<td>Likes to work with others but works alone</td>
<td>Involved</td>
<td>Minimally involved</td>
<td>IEP contact only</td>
<td>Didn’t like job placement</td>
</tr>
<tr>
<td>Ronnetta</td>
<td>Paula (Darrell)</td>
<td>Occasionally calls on Ronnetta</td>
<td>Not involved</td>
<td>Negative</td>
<td>Asks Questions</td>
<td>Works with others; talks a lot</td>
<td>Not involved</td>
<td>Minimally involved</td>
<td>Discipline</td>
<td>Didn’t like job placement</td>
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<tr>
<td>Bob</td>
<td>Home School (Darell)</td>
<td>Occasionally calls on Bob</td>
<td>Minimally involved</td>
<td>Negative</td>
<td>Quite; responds to questions</td>
<td>Works alone</td>
<td>Minimally involved</td>
<td>Minimally involved</td>
<td>No contact</td>
<td>Didn’t have an opinion on his job placement</td>
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<tr>
<td>Darrell</td>
<td>(Paula Ronnetta Marie Bob)</td>
<td>Seldom calls on Darrell</td>
<td>Not involved</td>
<td>Positive Exper.</td>
<td>Quite; does not respond to questions</td>
<td>Works with others; likes snakes</td>
<td>Minimally involved</td>
<td>Likes talking with grooming customers</td>
<td>IEP contact only</td>
<td>No job placement</td>
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<tr>
<td>Attribute/Disposition</td>
<td>Nurturing Nature</td>
<td>Love of Animals</td>
<td>Personal Interests</td>
<td>Value Academic Skills</td>
<td>Value AMT Skills</td>
<td>Value Workforce Skills</td>
<td>Value Participation in SAEs and Job Placement</td>
<td>Value Participation in Work</td>
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<td><strong>Major Influence</strong></td>
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<td></td>
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<td>or Early</td>
<td>Middle School</td>
<td>Teachers, Peers, &amp;</td>
<td>Teachers, Peers, &amp;</td>
<td>Family</td>
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<td>with Animals</td>
<td>Peers, &amp; Family</td>
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<td><strong>Age</strong></td>
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<td>Childhood</td>
<td>Childhood &amp;</td>
<td>Adolescence</td>
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<td>Adolescence &amp; Adulthood</td>
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REFERENCES


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