Recycling Practices of Indiana Colleges and Universities

Honors Thesis (HONRS 499)

by

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Graduation Date:
May 1994
ABSTRACT

Following the example set by Fred T. Friedman in his 1992 survey of Northeastern colleges and universities, a research activity was conducted which involved assessment of the recycling practices of Indiana colleges and universities. A survey instrument was designed and sent to several Indiana colleges and universities. The results from the responding institutions were tabulated to form a profile of recycling practices of upper-educational facilities in the state of Indiana. A discussion of the programs includes rationale for recycling by colleges and universities.
HYPOTHESIS

Colleges and universities, as learning institutions, have a responsibility to act as role models for their students and the surrounding communities and to stay current with waste reduction goals. These institutions have therefore implemented recycling programs, which are typically far more intensive than the recycling programs of nearby communities and often operate at a loss.

INTRODUCTION

Solid waste management is of growing importance to our society with three-quarters of existing landfills threatening closure by the year 2000 (Griffin, 1992). While methods of waste disposal other than landfilling have increased in use recently (Franklin & Franklin, 1992), our national recycling rate is only 13%, far below the rates of other developed countries (Griffin, 1992). Recycling rates stay low in the United States due to the absence of markets for recycled products, the low cost-effectiveness of recycling, and the lack of funding to subsidize recycling programs (Khator & Huffman, 1993).

These are significant issues for college campuses where large amounts of waste accumulate due to large numbers of students concentrated into small areas. Fred T. Friedman in “Do We Practice What We Teach?” (1993) asserts that universities are in a unique position of teaching as well as practicing waste management. During the 1992-93 academic year, Friedman conducted a survey of colleges and universities regarding source reduction of waste, recycling, procurement of items with recycled content, and relevant classroom education. He conducted a mail survey using a standardized form which was sent to 100 colleges and universities of varying sizes. The study focused on the Northeast, with a few sent to other regions of the U.S. as a geographic control.

Sixty-one institutions responded to Friedman’s survey, all of which indicated they had recycling programs. The most commonly recycled materials were high-grade office and computer paper and aluminum cans. This concurs with the national average of materials being recovered from the municipal solid waste stream for recycling in which paper and paperboard garner the highest percentage of 62.6% and metals come in third with 11.1% (Figure 1) (Franklin &
Figure 1: Recovery of materials from the municipal solid waste stream: 1990

Newspaper was also widely recycled, despite the fact that the costs have dropped to the point that institutions must pay to have the newspaper removed (Griffin, 1992). Costs have dropped dramatically because the newspaper market is currently flooded due to mandatory recycling programs (Wingerter, 1992) and to the lack of de-inking facilities to utilize collected newsprint (Morton, 1992). Glass and steel cans were recycled in a majority of the institutions surveyed. Batteries, scrap appliances, and laser cartridges were recycled at a lower frequency than paper, metals, and glass. More than half the institutions collected yard wastes for composting. Friedman encountered very few programs which attempted to recycle motor oil, construction debris, and hazardous waste, technologically difficult items to recycle. Items such as batteries are difficult to dispose of because only a few facilities exist for the recycling of automotive batteries and only one facility exists for the recycling of household alkaline batteries (Wachtel, 1993). Appliances are difficult to dispose of because they may contain PCBs or CFCs which make them dangerous or expensive to handle (Griffin, 1992). Although up to twenty years ago most motor oil was re-refined and used again, motor oil is now considered difficult to dispose of due to the many new additives which make re-refining difficult (IRC & IDEM, 1991). Plastics are also considered difficult to dispose of because of they are expensive to recycle but relatively inexpensive to make (Griffin, 1992).

The majority of university recycling programs were run cooperatively by students and staff or administration. Most universities in the Friedman study did not have municipal involvement in their recycling programs. However, most of the communities in which the schools were located did recycle. Friedman found that an overall trend of creative disposal means existed, often including local recyclers and farmers, only requiring a small cost to the disposer. In the Northeast, where landfills are rapidly reaching their limits (Griffin, 1992) and tipping fees have reached as high as $160 per ton (IRC & IDEM, 1991), avoiding disposal costs became a motivator for recycling.

Most of the colleges and universities that Friedman surveyed had taken steps to reduce the amount of waste they generate. This mainly involved the use of reusable materials and double-sided copying. Several institutions also reported minimizing the amount of packaging they accepted from manufacturers. Most institutions purchased recycled office paper and sanitary paper with some recycled content. Additionally, several purchased recycled landscaping supplies and
recycled building materials (Friedman, 1993).

METHODS

To determine if Indiana colleges and universities followed the overall trends Friedman (1993) discovered for Northeastern institutions regarding waste, a survey was developed based on the questions posed in his study (Appendix). This standardized survey, a letter explaining its purpose (Appendix) and a pre-addressed stamped envelope, were sent to the Public/University Relations officer of each of Indiana's four-year, residential institutions (Table 1) in November of 1993. Early in 1994, a second request was mailed to those schools not responding to the initial mailing. The results of the twenty-nine respondents were tabulated (Table 2). Overall trends and similarities to Friedman's research were examined.

RESULTS

All but one of the 29 respondents had some sort of recycling program at their school, most of which (25 of 29) received institutional support. This support was mainly financial (60%), but also included providing the labor to collect or sort materials (36%) and promoting the program on-campus (20%).

The 28 recycling institutions had a high percentage of participation from their students, staff (employees not including professors and instructors), faculty (professors and instructors), and administrators. Students participated at 100.0% of the schools recycling, staff at 96.4%, faculty at 89.3%, and administration at 89.3%. As in Friedman's study, the majority of programs (64.3%) were run cooperatively by students with administration or staff.

Collection of recyclables was accomplished mainly via drop-off bins located throughout campus, which were then emptied by campus maintenance or housekeeping staff. These recyclables, in most situations, were then hauled away by commercial recyclers. Several institutions, however, had their recyclables handled by local organizations or recyclers. For example, Purdue University sends its paper to L & J Waste Paper in Peru, Indiana where it is baled and sent to paper mills. Their cardboard is sent to the Jefferson Smurfit Mill three miles from
### Survey Recipients

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>University/College</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Katherine Sutchwill</td>
<td>Vice President for External Affairs</td>
<td>Saint Mary-of-the-Woods College</td>
<td>Saint Mary-of-the-Woods, IN 47876</td>
</tr>
<tr>
<td>Daniel Schipp</td>
<td>Vice President of Development</td>
<td>Saint Meinrad College</td>
<td>Saint Meinrad, IN 47577-1030</td>
</tr>
<tr>
<td>George Glass</td>
<td>Associate Vice President for Alumni and</td>
<td>Taylor University</td>
<td>Upland, IN 46989</td>
</tr>
<tr>
<td>Angela Chester</td>
<td>Interim Director of Public Information</td>
<td>Tristate University</td>
<td>Angola, IN 46703-0307</td>
</tr>
<tr>
<td>Dee J. Kalena</td>
<td>Director of University Relations</td>
<td>University of Evansville</td>
<td>Evansville, IN 47722</td>
</tr>
<tr>
<td>James L. Brummer</td>
<td>Dean of Institutional Advancement</td>
<td>University of Indianapolis</td>
<td>1400 E. Hanna Ave.</td>
</tr>
<tr>
<td>William P. Sexton</td>
<td>Vice President of University Relations</td>
<td>Notre Dame</td>
<td>Notre Dame, IN 46556</td>
</tr>
<tr>
<td>Sherrianne M. Standley</td>
<td>Vice President of University Relations</td>
<td>University of Southern Indiana</td>
<td>Evansville, IN 47712</td>
</tr>
<tr>
<td>Richard Maddox</td>
<td>Vice President of Institutional Advancement</td>
<td>Valparaiso University</td>
<td>US Highway 30</td>
</tr>
<tr>
<td>Phyllis Alder</td>
<td>Director of Marketing and Public Relations</td>
<td>Vincennes University</td>
<td>1002 N. First St.</td>
</tr>
<tr>
<td>Stanley R. McCulley</td>
<td>Vice President of Development and College</td>
<td>Wabash College</td>
<td>301 W. Wabash Ave., PO Box 352</td>
</tr>
<tr>
<td>Cheryl Gaus</td>
<td>Director of Public Relations</td>
<td>Hanover College</td>
<td>Hanover, IN 47243-0108</td>
</tr>
<tr>
<td>Kaye Ferguson-Patton</td>
<td>Vice President for College Relations</td>
<td>Saint Mary's College</td>
<td>Notre Dame, IN 46556-5001</td>
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<tr>
<td>Janelle Vernon</td>
<td>Director of Public Relations</td>
<td>Huntington College</td>
<td>Huntington, IN 46750-1299</td>
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<tr>
<td>Orin L. Dahl</td>
<td>Vice President for Public Affairs</td>
<td>Indiana State University</td>
<td>217 N. Sixth St.</td>
</tr>
<tr>
<td>Douglas Wilson</td>
<td>Vice President for University Relations</td>
<td>Indiana University</td>
<td>Indiana and Kirkwood, Bryan 300</td>
</tr>
<tr>
<td>Terry Munday</td>
<td>Vice President for University Advancement</td>
<td>Indiana Wesleyan University</td>
<td>4201 S. Washington St.</td>
</tr>
<tr>
<td>Anne Knapp</td>
<td>Vice President for Institutional Development</td>
<td>Manchester College</td>
<td>604 College Ave.</td>
</tr>
<tr>
<td>Della Pacheco</td>
<td>Director of Communications</td>
<td>Marian College</td>
<td>3200 Cold Spring Rd.</td>
</tr>
<tr>
<td>John Sherman</td>
<td>Director of Public Relations</td>
<td>Martin University</td>
<td>PO Box 18567</td>
</tr>
<tr>
<td>Joseph L. Bennett</td>
<td>Vice President for University Relations</td>
<td>Purdue University</td>
<td>House Hall 217</td>
</tr>
<tr>
<td>Ronald G. Reeves</td>
<td>Vice President for Public Relations</td>
<td>Rose-Hulman Institute of Technology</td>
<td>5500 Wabash Ave.</td>
</tr>
<tr>
<td>Thomas Scheer</td>
<td>Vice President for Institutional Advancement</td>
<td>Saint Francis College</td>
<td>2701 Spring St.</td>
</tr>
<tr>
<td>Jim K. Valentine</td>
<td>Vice President for Advancement</td>
<td>Saint Joseph's College</td>
<td>PO Box 869</td>
</tr>
<tr>
<td>Kaye Ferguson-Patton</td>
<td>Vice President for College Relations</td>
<td>Saint Mary's College</td>
<td>US 31</td>
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</table>

**Table 1**
## Survey Results

### Table 2

<table>
<thead>
<tr>
<th>2. Size of student body:</th>
<th>1-2000</th>
<th>2001-10000</th>
<th>10001+</th>
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<tbody>
<tr>
<td>Percent</td>
<td>58.6%</td>
<td>31.0%</td>
<td>10.3%</td>
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<table>
<thead>
<tr>
<th>3. Mandatory recycling program for community</th>
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</thead>
<tbody>
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<td>yes</td>
</tr>
<tr>
<td>no</td>
</tr>
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<table>
<thead>
<tr>
<th>4. Recycling program for school</th>
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</thead>
<tbody>
<tr>
<td>yes</td>
</tr>
<tr>
<td>no</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5. Institutional support of recycling program</th>
</tr>
</thead>
<tbody>
<tr>
<td>yes</td>
</tr>
<tr>
<td>no</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What kind?</th>
</tr>
</thead>
<tbody>
<tr>
<td>promotional</td>
</tr>
<tr>
<td>financial</td>
</tr>
<tr>
<td>labor</td>
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</table>

<table>
<thead>
<tr>
<th>6. Members of the campus community which participate in recycling</th>
</tr>
</thead>
<tbody>
<tr>
<td>students</td>
</tr>
<tr>
<td>staff</td>
</tr>
<tr>
<td>faculty</td>
</tr>
<tr>
<td>administration</td>
</tr>
<tr>
<td>other</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>7. Recycling program run by</th>
</tr>
</thead>
<tbody>
<tr>
<td>students only</td>
</tr>
<tr>
<td>administration only</td>
</tr>
<tr>
<td>cooperative</td>
</tr>
<tr>
<td>other</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>8. Materials recycled</th>
</tr>
</thead>
<tbody>
<tr>
<td>high grade office paper</td>
</tr>
<tr>
<td>computer paper</td>
</tr>
<tr>
<td>newspaper</td>
</tr>
<tr>
<td>cardboard</td>
</tr>
<tr>
<td>glass</td>
</tr>
<tr>
<td>aluminum cans</td>
</tr>
<tr>
<td>steel cans</td>
</tr>
<tr>
<td>plastics</td>
</tr>
<tr>
<td>batteries</td>
</tr>
<tr>
<td>scrap appliances</td>
</tr>
<tr>
<td>laser cartridges</td>
</tr>
<tr>
<td>motor oil</td>
</tr>
<tr>
<td>construction debris</td>
</tr>
<tr>
<td>tires</td>
</tr>
<tr>
<td>hazardous waste</td>
</tr>
<tr>
<td>clothing, reusable</td>
</tr>
<tr>
<td>composting</td>
</tr>
<tr>
<td>other</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>9. Collection of materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>drop-off bins</td>
</tr>
<tr>
<td>housekeeping pickup</td>
</tr>
<tr>
<td>off-campus drop-off</td>
</tr>
<tr>
<td>vender pick-up</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>10. Recycling of materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>commercial recyclers</td>
</tr>
<tr>
<td>local pick-up</td>
</tr>
<tr>
<td>local drop-off</td>
</tr>
<tr>
<td>waste removal service</td>
</tr>
<tr>
<td>laser cartridge service</td>
</tr>
<tr>
<td>given away</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>11. Program operate at a profit or loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>profit</td>
</tr>
<tr>
<td>loss</td>
</tr>
<tr>
<td>even</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>12. Avoided disposal costs a motivation for recycling</th>
</tr>
</thead>
<tbody>
<tr>
<td>yes</td>
</tr>
<tr>
<td>no</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>13. Community participation</th>
</tr>
</thead>
<tbody>
<tr>
<td>recycles</td>
</tr>
<tr>
<td>participates</td>
</tr>
<tr>
<td>separate</td>
</tr>
<tr>
<td>no recycling</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>14. Procurement of products with recycled content</th>
</tr>
</thead>
<tbody>
<tr>
<td>yes</td>
</tr>
<tr>
<td>no</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>What kind?</th>
</tr>
</thead>
<tbody>
<tr>
<td>paper</td>
</tr>
<tr>
<td>sanitary papers</td>
</tr>
<tr>
<td>plastics</td>
</tr>
<tr>
<td>trash containers</td>
</tr>
<tr>
<td>laser cartridges</td>
</tr>
<tr>
<td>cardboard</td>
</tr>
<tr>
<td>oil</td>
</tr>
<tr>
<td>rubber mats</td>
</tr>
<tr>
<td>aluminum cans</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>15. Source reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>reusable dishes, etc.</td>
</tr>
<tr>
<td>double-sided copies</td>
</tr>
<tr>
<td>minimize packaging</td>
</tr>
<tr>
<td>other</td>
</tr>
<tr>
<td>no</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>16. Relevant courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>social/political</td>
</tr>
<tr>
<td>scientific/engineering</td>
</tr>
<tr>
<td>agricultural</td>
</tr>
<tr>
<td>economic</td>
</tr>
<tr>
<td>other relevant</td>
</tr>
<tr>
<td>none</td>
</tr>
</tbody>
</table>
Aluminum cans were the most frequently recycled item at 96.4% of the recycling institutions. Of the other major waste stream components (paper, glass, metals), high-grade office and computer paper were recycled at 75.0% and 71.4% of the institutions, respectively. Cardboard was also recycled at 71.4% of the schools. Surprisingly, newspaper was recycled at 60.7% of the institutions placing it as the fourth most frequently recycled item. Also surprising, motor oil, a technologically difficult item to recycle (Friedman, 1993), was recycled at more than half (53.6%) of the recycling institutions, while glass and steel cans were only recycled at 50.0% and 46.4% of the institutions, respectively.

The remaining materials surveyed for recycling success at Indiana institutions are considered “hard to dispose of” and include (with the percentage of institutions recycling that item in parentheses): hazardous wastes (46.4%), batteries (42.9%), plastics (32.1%), tires (25.0%), white goods or scrap appliances (25.0%), laser printer toner cartridges (21.4%), and construction debris (10.7%). Also, of note, 32.1% of the institutions recycled clothing, reusable goods, and furniture and the majority of institutions (60.7%) practiced composting of their yard wastes.

Only 3 of 28 (10.7%) institutions operated their recycling programs at a profit. The majority operated at a loss, with a few breaking even. The majority of these programs (19 of 28) also claimed that avoided disposal costs are not a motivator for their recycling. Only 17 of the 28 recycling institutions were located in communities which recycle.

Twenty-six of the twenty-nine Indiana institutions (90.0%) purchased materials with recycled content. Paper was the most widely procured item with recycled content (24 of 26). Also, some schools mentioned that they procured items such as plastics, trash containers, sanitary papers (paper towels, napkins, and toilet paper), and motor oil with recycled content.

The majority of institutions practiced some form of source reduction of waste. Reusable dishes, glasses, and silverware and double-sided copying are the two most popular methods. Several institutions also minimized the amount of packaging they accepted from manufacturers.

Regarding courses taught concerning hazardous and solid waste management or natural resource use and development, the majority of universities and colleges (15) did not have such programs or courses. Five schools had courses on the social and political aspects of hazardous and solid waste management. Six had courses on the scientific and engineering aspects of
hazardous and solid waste management. Three had courses on the agricultural aspects of hazardous and solid waste management and seven had courses on the economic aspects of natural resource use and development.

The results of the reported research reflected the overall trends discovered by Friedman (1993). Major waste stream components such as paper, aluminum cans, glass, and steel, were recycled in a high percentage of the responding institutions. Attempts were also being made to recycle "hard to dispose of" items. Composting was practiced at a majority of the universities. Also following Friedman's trends were the tendencies for cooperatively-run recycling programs, source reduction of waste, and the procurement of materials with a recycled content.

DISCUSSION

The results of the present research support the original hypothesis, although it is clear that other reasons for recycling exist. The major components of the waste stream are recyclable or compostable (Figure 2) (Griffin, 1992). Recycling has been shown to be more cost-effective than other disposal methods for aluminum, glass, paper, and cardboard (Griffin, 1992). Indiana universities tended to recycle these items, which already have a recycling infrastructure and can prove profitable. This is not surprising, as it is in the school's economic self-interest to gain money from the recycling of these items rather than to pay for their disposal. Items which are difficult to dispose of, however, may not have an existing recycling infrastructure or may incur a cost in their recycling. Yet, many institutions still tended to recycle these items. This caused most recycling programs to operate at a loss. Why would these institutions continue an activity that is clearly not within their economic self-interest? The survey reveals it is not for avoided disposal costs in Indiana's case. Landfill disposal is still relatively inexpensive in the Midwest, as compared to the East Coast (IRC & IDEM, 1991).

Pressure from the state in the form of laws and mandates is an impetus for recycling. In Indiana, HEA 1240 sets a waste reduction/recycling goal of 35% by 1996 and 50% by 2000 (IRC & IDEM, 1991). Universities recycled in an attempt to meet these standards. In 1989 the Indiana General Assembly enacted a law regulating the disposal and handling of used motor oil (IRC & IDEM, 1991). This could account for the high percentage of universities recycling motor oil.
Figure 2: Average composition of U.S. waste

Laws and mandates are also a motivation for procurement of items with recycled content. Indiana law states that state agencies must purchase items with 50% recycled content when the price differential is no more than 10% (IRC & IDEM, 1991). Similar laws exist in all states (Wingerter, 1992). State-sponsored universities must follow this mandate.

It is proposed, however, that universities undertake recycling, source reduction, and procurement of recycled materials for broader social and environmental reasons, as well. These learning institutions have a responsibility to act in a manner beneficial to society and to encourage and educate their students to do the same. Recycling is an environmentally friendly measure which benefits society and the living environment. The impact of the universities' behavior is clearly beneficial. The recycling of a significant amount of waste occurs. As more items which are difficult to dispose of are recycled by universities, research and innovations to make their recycling technologically easier and profitable can take place.

The purchasing of materials with a recycled content ensures a market for recyclables, which then provides an economic value for the materials. This encourages firms which are more cost-conscious to recycle. Recycling's biggest problem is a lack of markets (Griffin, 1992). The American marketplace is driven by a demand for products. By giving preference to recycled goods through their procurement codes, universities can use their buying power to create an immediate demand that will expand markets for recycling (Griffin, 1992).

Students which matriculate through these universities grow to see recycling as an easy effort which will help the environment. The universities' public images are improved as their recycling, waste reduction, and recycled purchases are seen as "environmentally friendly," a growing concern in our society.

For an institution wishing to take a positive step toward improving its public image, educating its students, and being environmentally responsible, recycling of solid and hazardous waste is suggested. From the present research and from the research of Friedman (1993), the following is a compilation of suggestions for a basic university recycling program.

An ideal university program recycles the basics of high and low-grade papers (office paper, computer paper, newspaper), glass, aluminum, and other metals. They should also attempt to recycle at least one item which is difficult to dispose of to encourage innovation in recycling technology. For example, a high number of institutions have begun recycling motor oil from the
university fleet of vehicles. A campus-wide attempt at source reduction of waste should be undertaken. This could include the use of reusable dishes, glasses, and silverware at on-campus dining facilities and double-sided copying in offices. Also, an attempt should be made to procure items with some recycled content, the most popular being various forms of paper.

Several of the responding institutions already have such programs. Of note are the programs at Marion College, Grace College & Seminary, St. Francis College, Goshen College, and Manchester College. These schools met all of the above requirements in their recycling programs. Of special note are a few schools which also met all the above requirements and recycled a wide variety of materials. These include Butler University, Purdue University, Taylor University, Vincennes University, and Huntington College. The program at St. Meinrad Seminary deserves special recognition. Each resident is issued a blue recycling container which is picked up regularly by housekeeping, much like a curbside system. With this system, not only do they collect a wide variety of recyclables, but they are also able to make a profit on their paper and aluminum recycling.

CONCLUSION

As forerunners of recycling technology and frequently proactive in recycling practices, learning institutions have the ability and the responsibility to influence the general public in their attitudes toward recycling. Universities and colleges in Indiana have taken a positive step toward helping the environment and encouraging the rest of society to do the same.
Literature Cited


Appendix
Dear,

The enclosed questionnaire has been designed to obtain information needed for my honors' thesis research at Ball State University, Muncie, Indiana. This research will be submitted in partial fulfillment of the requirements for the degree of Bachelor of Science in Natural Resources and Environmental Management.

The environment is of growing importance to everyone. With so many landfill closings in the recent past, solid waste management in general and recycling in particular have become more important. In light of this, it is important to know what role colleges and universities play with their unique situations as learning institutions. I have based the questionnaire and my thesis on a study presented by F.T. Friedman (1993) in Waste Age magazine, "Do we practice what we teach?" This questionnaire has been mailed to the public relations officers at thirty-three colleges and universities in Indiana. I plan to create a general profile of the recycling programs of colleges and universities in Indiana.

This questionnaire may be forwarded within your university to another department that may have more information regarding the recycling program. Please make sure that someone at your university takes the time to read and complete the questionnaire and return it in the pre-addressed, stamped envelope by January 10, 1994. Please contact me by phone at (317) 287-1774 if you have any questions concerning this questionnaire or my study. Thank you for your time and I appreciate your help.

Sincerely,

Kimberly M. Reynolds
1. College/University name: _______________________

2. Size of student body:
   - 1 - 2,000
   - 2,001 - 10,000
   - 10,001 and up

3. Does your community have a mandatory recycling program?
   - yes  no

4. Does your college/university have a recycling program?
   - yes  no
     If no, please go to number 14.

5. Does your recycling program receive institutional support?
   - yes  no
     If yes, what kind of support does it receive?

6. Which portions of the campus community participate in the recycling program?
   - students (check all that apply)
   - staff
   - faculty
   - administration
   - other: _______________________

7. Who runs your recycling program?
   - students only
   - administration only
   - cooperative program between students and administration
   - other: _______________________

8. Which of the following materials does your program recycle: (check all that apply)
   - high grade office paper
   - computer paper
   - newspaper
   - cardboard
   - glass
   - aluminum cans
   - steel cans
   - plastics
   - batteries
   - scrap appliances
   - laser printer cartridges
   - motor oil
   - construction debris
   - tires
   - hazardous wastes
   - clothing, reusable goods, furniture
   - composting of yardwastes
   - other: _______________________

(Please complete reverse side)
9. How are these materials collected (i.e. drop-off bins)?

10. How are these items recycled (i.e. commercial recyclers, processors, local methods)?

11. Does your program operate at a profit or a loss?
   - profit
   - loss

12. Are avoided disposal costs a reason for your recycling program?
   - yes
   - no

13. Our community (check all that apply):
   - has a recycling program
   - participates in our recycling program
   - our recycling programs are completely separate
   - does not have a recycling program

14. Does your college/university purchase products with some recycled content?
   - yes
   - no
   If yes, what kind of materials?

15. Does your college/university practice source reduction? (check all that apply)
   - dishes/glasses/silverware instead of throwaways
   - double-sided copying
   - minimize packaging accepted from manufacturers
   - other: ____________
   - no

16. Does your college/university offer courses on (check all that apply):
   - social and political aspects of hazardous and nonhazardous waste management
   - scientific and engineering aspects of hazardous and nonhazardous waste management
   - agricultural aspects of hazardous and nonhazardous waste management
   - economic aspects of natural resource use and development
   - other relevant courses

17. This question is optional for the person filling out this survey.
   Name: _____________________________
   Position: ___________________________

18. Does your college/university give permission to use its name in any publications regarding this survey?
   - yes
   - no

Thank you for your time and effort. Please return this survey to:
Kimberly M. Reynolds
1213 W. University Ave.
Muncie, IN 47303
A self-addressed, stamped envelope is enclosed for your convenience.
1. College/University name: Anderson University

2. Size of student body:
   □ 1 - 2,000
   □ 2,001 - 10,000
   □ 10,001 and up

3. Does your community have a mandatory recycling program?
   □ yes  □ no

4. Does your college/university have a recycling program?
   □ yes  □ no
   If no, please go to number 14.

5. Does your recycling program receive institutional support?
   □ yes  □ no
   If yes, what kind of support does it receive?
   □ pay for receptacles and wages of students
   □ collect material

6. Which portions of the campus community participate in the recycling program?
   □ students
   □ staff
   □ faculty
   □ administration
   □ other: __________________________________________

7. Who runs your recycling program?
   □ students only
   □ administration only
   □ cooperative program between students and administration
   □ other: __________________________________________

8. Which of the following materials does your program recycle: (check all that apply)
   □ high grade office paper
   □ computer paper
   □ newspaper
   □ cardboard
   □ glass
   □ aluminum cans
   □ steel cans
   □ plastics
   □ batteries
   □ scrap appliances
   □ laser printer cartridges
   □ motor oil
   □ construction debris
   □ tires
   □ hazardous wastes
   □ clothing, reusable goods, furniture
   □ composting of yard wastes
   □ other: __________________________________________

(Please complete reverse side)
9. How are these materials collected (i.e. drop-off bins)?

   Bins around campus

10. How are these items recycled (i.e. commercial recyclers, processors, local methods)?

    Local pick up

11. Does your program operate at a profit or a loss?
   □ profit  □ loss

12. Are avoided disposal costs a reason for your recycling program?
   □ yes  □ no

13. Our community (check all that apply):
    □ has a recycling program
    □ participates in our recycling program
    □ our recycling programs are completely separate
    □ does not have a recycling program

14. Does your college/university purchase products with some recycled content?
    □ yes  □ no
    If yes, what kind of materials?
    Paper for printing

15. Does your college/university practice source reduction? (check all that apply)
    □ dishes/glasses/silverware instead of throwaways
    □ double-sided copying
    □ minimize packaging accepted from manufacturers
    □ other: __________________________________________
    □ no

16. Does your college/university offer courses on (check all that apply):
    □ social and political aspects of hazardous and nonhazardous waste management
    □ scientific and engineering aspects of hazardous and nonhazardous waste management
    □ agricultural aspects of hazardous and nonhazardous waste management
    □ economic aspects of natural resource use and development
    □ other relevant courses

17. This question is optional for the person filling out this survey.
    Name: Tom Bryce
    Position: Director of Univ Relations

18. Does your college/university give permission to use its name in any publications regarding this survey?
    □ yes  □ no  Use will consider if first made aware of specific publication.

Thank you for your time and effort. Please return this survey to:
Kimberly M. Reynolds
1213 W. University Ave.
Muncie, IN 47303
A self-addressed, stamped envelope is enclosed for your convenience.
1. College/University name: BETHLE COLLEGE (IN)

2. Size of student body:
   - □ 1 - 2,000
   - □ 2,001 - 10,000
   - □ 10,001 and up

3. Does your community have a mandatory recycling program? □ yes □ no
   On HAZARDOUS WASTES, YES.

4. Does your college/university have a recycling program?
   □ yes □ no
   If no, please go to number 14.

5. Does your recycling program receive institutional support?
   □ yes □ no
   If yes, what kind of support does it receive?
   - SIGNIFICANT PROMOTION
   - INSTITUTIONAL RESOURCES & FINANCES

6. Which portions of the campus community participate in the recycling program?
   □ students
   □ staff
   □ faculty
   □ administration
   □ other: ____________________________________________

7. Who runs your recycling program?
   □ students only
   □ administration only
   □ cooperative program between students and administration
   □ other: ____________________________________________

8. Which of the following materials does your program recycle: (check all that apply)
   □ high grade office paper
   □ computer paper
   □ newspaper
   □ cardboard
   □ glass
   □ aluminum cans
   □ steel cans
   □ plastics
   □ batteries
   □ scrap appliances
   □ laser printer cartridges
   □ motor oil
   □ construction debris
   □ tires
   □ hazardous wastes
   □ clothing, reusable goods, furniture
   □ composting of yardwastes
   □ other: WORN OUT PROFESSORS

(Please complete reverse side)
9. How are these materials collected (i.e. drop-off bins)?

Drop off bins

10. How are these items recycled (i.e. commercial recyclers, processors, local methods)?

Commercial Recyclers

11. Does your program operate at a profit or a loss? Break-even

☐ profit  ☐ loss

12. Are avoided disposal costs a reason for your recycling program? Only partial

☐ yes ☐ no

13. Our community (check all that apply):

☐ has a recycling program
☐ participates in our recycling program
☐ our recycling programs are completely separate
☐ does not have a recycling program

14. Does your college/university purchase products with some recycled content?

☐ yes ☐ no

If yes, what kind of materials?

Don't know

15. Does your college/university practice source reduction? (check all that apply)

☐ dishes/glasses/silverware instead of throwaways
☐ double-sided copying
☐ minimize packaging accepted from manufacturers
☐ other: ________________________________

☐ no

16. Does your college/university offer courses on (check all that apply):

☑ social and political aspects of hazardous and nonhazardous waste management
☑ scientific and engineering aspects of hazardous and nonhazardous waste management
☑ agricultural aspects of hazardous and nonhazardous waste management
☑ economic aspects of natural resource use and development
☐ other relevant courses

17. This question is optional for the person filling out this survey.

Name: Dennis Engbrecht Ph.D.
Position: Senior Vice President

18. Does your college/university give permission to use its name in any publications regarding this survey?

☐ yes ☐ no

Thank you for your time and effort. Please return this survey to:

Kimberly M. Reynolds
1213 W. University Ave.
Muncie, IN 47303

A self-addressed, stamped envelope is enclosed for your convenience.
1. College/University name: 

2. Size of student body:
   - [ ] 1 - 2,000
   - [ ] 2,001 - 10,000
   - [ ] 10,001 and up

3. Does your community have a mandatory recycling program?
   - [ ] yes
   - [ ] no

4. Does your college/university have a recycling program?
   - [ ] yes
   - [ ] no
   If no, please go to number 14.

5. Does your recycling program receive institutional support?
   - [ ] yes
   - [ ] no
   If yes, what kind of support does it receive?
     - funding
     - buying

6. Which portions of the campus community participate in the recycling program?
   - [ ] students
   - [ ] staff
   - [ ] faculty
   - [ ] administration
   - [ ] other: ____________________________

.. Who runs your recycling program?
   - [ ] students only
   - [ ] administration only
   - [ ] cooperative program between students and administration
   - [ ] other: ____________________________

8. Which of the following materials does your program recycle: (check all that apply)
   - [ ] high grade office paper
   - [ ] computer paper
   - [ ] newspaper
   - [ ] cardboard
   - [ ] glass
   - [ ] aluminum cans
   - [ ] steel cans
   - [ ] plastics
   - [ ] batteries
   - [ ] scrap appliances
   - [ ] laser printer cartridges
   - [ ] motor oil
   - [ ] construction debris
   - [ ] tires
   - [ ] hazardous wastes
   - [ ] clothing, reusable goods, furniture
   - [ ] composting of yardwastes
   - [ ] other: ____________________________

(Please complete reverse side)
9. How are these materials collected (i.e. drop-off bins)?
   Drop bins

10. How are these items recycled (i.e. commercial recyclers, processors, local methods)?
    Through our trash hauler

11. Does your program operate at a profit or a loss?
    □ profit   ☑ loss

12. Are avoided disposal costs a reason for your recycling program?
    ☑ yes     □ no

13. Our community (check all that apply):
    ☑ has a recycling program
    □ participates in our recycling program
    ☑ our recycling programs are completely separate
    □ does not have a recycling program

14. Does your college/university purchase products with some recycled content?
    ☑ yes     □ no
    If yes, what kind of materials?

15. Does your college/university practice source reduction? (check all that apply)
    ☑ dishes/glasses/silverware instead of throwaways
    ☑ double-sided copying
    ☑ minimize packaging accepted from manufacturers
    □ other: _______________________________________
    □ no

16. Does your college/university offer courses on (check all that apply):
    □ social and political aspects of hazardous and nonhazardous waste management
    □ scientific and engineering aspects of hazardous and nonhazardous waste management
    □ agricultural aspects of hazardous and nonhazardous waste management
    □ economic aspects of natural resource use and development
    □ other relevant courses

17. This question is optional for the person filling out this survey.
    Name: 0. Nicholas Hill
    Position: Assistant Director of Facilities Management

18. Does your college/university give permission to use its name in any publications regarding this survey?
    ☑ yes     □ no

Thank you for your time and effort. Please return this survey to:
    Kimberly M. Reynolds
    1213 W. University Ave.
    Muncie, IN 47303
A self-addressed, stamped envelope is enclosed for your convenience.
1. College/University name: **CALUMET COLLEGE OF ST. JOSEPH**

2. Size of student body:
   - ☑ 1 - 2,000
   - ☐ 2,001 - 10,000
   - ☐ 10,001 and up

3. Does your community have a mandatory recycling program?
   - ☑ yes
   - ☐ no

4. Does your college/university have a recycling program?
   - ☑ yes
   - ☐ no
   If no, please go to number 14.

5. Does your recycling program receive institutional support?
   - ☑ yes
   - ☐ no
   If yes, what kind of support does it receive?
     - Run by maintenance dept.

6. Which portions of the campus community participate in the recycling program?
   - ☑ students (check all that apply)
   - ☑ staff
   - ☑ faculty
   - ☑ administration
   - ☐ other: ____________________________________________

7. Who runs your recycling program?
   - ☑ students only
   - ☐ administration only
   - ☑ cooperative program between students and administration
   - ☐ other: Maintenance Dept. __________________________

8. Which of the following materials does your program recycle: (check all that apply)
   - ☑ high grade office paper
   - ☑ computer paper
   - ☑ newspaper
   - ☑ cardboard
   - ☑ glass
   - ☑ aluminum cans
   - ☑ steel cans
   - ☑ plastics
   - ☑ batteries
   - ☑ scrap appliances
   - ☑ laser printer cartridges
   - ☑ motor oil
   - ☑ construction debris
   - ☑ tires
   - ☑ hazardous wastes
   - ☑ clothing, reusable goods, furniture
   - ☑ composting of yardwastes
   - ☐ other: ____________________________________________

(Please complete reverse side)
9. How are these materials collected (i.e. drop-off bins)?

   drop-off barrels

10. How are these items recycled (i.e. commercial recyclers, processors, local methods)?

11. Does your program operate at a profit or a loss?
   ☑ profit       ☐ loss

12. Are avoided disposal costs a reason for your recycling program?
   ☐ yes          ☑ no

13. Our community (check all that apply):
   ☑ has a recycling program
   ☐ participates in our recycling program
   ☑ our recycling programs are completely separate
   ☐ does not have a recycling program

14. Does your college/university purchase products with some recycled content?
   ☐ yes           ☑ no
   If yes, what kind of materials?

15. Does your college/university practice source reduction? (check all that apply)
   ☐ dishes/glasses/silverware instead of throwaways
   ☐ double-sided copying
   ☐ minimize packaging accepted from manufacturers
   ☐ other: ________________________________
   ☑ no

16. Does your college/university offer courses on (check all that apply):
   ☐ social and political aspects of hazardous and nonhazardous waste management
   ☐ scientific and engineering aspects of hazardous and nonhazardous waste management
   ☐ agricultural aspects of hazardous and nonhazardous waste management
   ☐ economic aspects of natural resource use and development
   ☐ other relevant courses
   ☐ no

17. This question is optional for the person filling out this survey.
   Name: WILLIAM F. PECK
   Position: DIRECTOR, PUBLIC RELATIONS

18. Does your college/university give permission to use its name in any publications regarding this survey?
   ☑ yes           ☐ no

Thank you for your time and effort. Please return this survey to:
   Kimberly M. Reynolds
   1213 W. University Ave.
   Muncie, IN 47303
   A self-addressed, stamped envelope is enclosed for your convenience.
1. College/University name: **Earlham College**

2. Size of student body:
   - □ 1 - 2,000
   - □ 2,001 - 10,000
   - □ 10,001 and up

3. Does your community have a mandatory recycling program?
   - □ yes  
   - □ no

4. Does your college/university have a recycling program?
   - □ yes  
   - □ no
   If no, please go to number 14.

5. Does your recycling program receive institutional support?
   - □ yes  
   - □ no
   If yes, what kind of support does it receive?

6. Which portions of the campus community participate in the recycling program?
   - □ students  
   - □ staff  
   - □ faculty  
   - □ administration  
   - □ other: ____________________

7. Who runs your recycling program?
   - □ students only  
   - □ administration only  
   - □ cooperative program between students and administration  
   - □ other: ____________________

8. Which of the following materials does your program recycle: (check all that apply)
   - □ high grade office paper  
   - □ computer paper  
   - □ newspaper  
   - □ cardboard  
   - □ glass  
   - □ aluminum cans  
   - □ steel cans  
   - □ plastics  
   - □ batteries  
   - □ scrap appliances  
   - □ laser printer cartridges  
   - □ motor oil  
   - □ construction debris  
   - □ tires  
   - □ hazardous wastes  
   - □ clothing, reusable goods, furniture  
   - □ composting of yardwastes  
   - □ other: ____________________

(Please complete reverse side)
9. How are these materials collected (i.e. drop-off bins)?
   drop-off bins

10. How are these items recycled (i.e. commercial recyclers, processors, local methods)?
    local

11. Does your program operate at a profit or a loss?
    □ profit  ☑ loss

12. Are avoided disposal costs a reason for your recycling program?
    □ yes  □ no

13. Our community (check all that apply):
    ☑ has a recycling program
    □ participates in our recycling program
    ☑ our recycling programs are completely separate
    □ does not have a recycling program

14. Does your college/university purchase products with some recycled content?
    ☑ yes  □ no
    If yes, what kind of materials?
    ☑ paper, rubber, metal

15. Does your college/university practice source reduction? (check all that apply)
    ☑ dishes/glasses/silverware instead of throwaways
    ☑ double-sided copying
    □ minimize packaging accepted from manufacturers
    □ other: ______________________________________
    □ no

16. Does your college/university offer courses on (check all that apply):
    □ social and political aspects of hazardous and nonhazardous waste management
    □ scientific and engineering aspects of hazardous and nonhazardous waste management
    □ agricultural aspects of hazardous and nonhazardous waste management
    □ economic aspects of natural resource use and development
    □ other relevant courses

17. This question is optional for the person filling out this survey.
    Name:  Alice Laffure
    Position:  Dir. of Campus Services

18. Does your college/university give permission to use its name in any publications regarding this survey?
    □ yes  ☑ no

Thank you for your time and effort. Please return this survey to:
Kimberly M. Reynolds
1213 W. University Ave.
Muncie, IN 47303

A self-addressed, stamped envelope is enclosed for your convenience.
1. College/University name: University of Evansville

☐ Size of student body:
☐ 1 - 2,000
☒ 2,001 - 10,000
☐ 10,001 and up

3. Does your community have a mandatory recycling program?
☐ yes ☒ no

4. Does your college/university have a recycling program?
☒ yes ☐ no
If no, please go to number 14.

5. Does your recycling program receive institutional support?
☒ yes ☐ no
If yes, what kind of support does it receive?

6. Which portions of the campus community participate in the recycling program? (check all that apply)
☒ students
☒ staff
☐ faculty
☒ administration
☐ other: ____________________

7. Who runs your recycling program?
☐ students only
☐ administration only
☒ cooperative program between students and administration
☐ other: ____________________

8. Which of the following materials does your program recycle: (check all that apply)
☒ high grade office paper
☒ computer paper
☒ newspaper
☒ cardboard
☒ glass
☒ aluminum cans
☒ steel cans
☒ plastics
☐ batteries
☐ scrap appliances
☐ laser printer cartridges
☒ motor oil
☐ construction debris
☐ tires
☐ hazardous wastes
☒ clothing, reusable goods, furniture
☐ composting of yardwastes
☐ other: ____________________

(Please complete reverse side)
9. How are these materials collected (i.e. drop-off bins)? Drop off bins in classroom & office.
   bids for paper, alum. & newspaper. All previous items plus glass & plastic in residence halls. Outside bins for cardboard.

10. How are these items recycled (i.e. commercial recyclers, processors, local methods)?

11. Does your program operate at a profit or a loss?
   ☑ profit ☐ loss

12. Are avoided disposal costs a reason for your recycling program?
   ☑ yes ☐ no

13. Our community (check all that apply):
   ☑ has a recycling program (pilot+)
   ☐ participates in our recycling program
   ☑ our recycling programs are completely separate
   ☐ does not have a recycling program

14. Does your college/university purchase products with some recycled content?
   ☑ yes ☐ no
   If yes, what kind of materials? Paper

15. Does your college/university practice source reduction? (check all that apply)
   ☐ dishes/glasses/silverware instead of throwaways
   ☑ double-sided copying
   ☐ minimize packaging accepted from manufacturers
   ☐ other: ______________________________________________________
   ☐ no

16. Does your college/university offer courses on (check all that apply):
   ☐ social and political aspects of hazardous and nonhazardous waste management
   ☐ scientific and engineering aspects of hazardous and nonhazardous waste management
   ☐ agricultural aspects of hazardous and nonhazardous waste management
   ☑ economic aspects of natural resource use and development
   ☑ other relevant courses

17. This question is optional for the person filling out this survey.
   Name: Robert Dale
   Position: Supervisor of Grounds

18. Does your college/university give permission to use its name in any publications regarding this survey?
   ☐ yes ☑ no

Thank you for your time and effort. Please return this survey to:
   Kimberly M. Reynolds
   1213 W. University Ave.
   Muncie, IN 47303
A self-addressed, stamped envelope is enclosed for your convenience.
1. College/University name: Franklin College

2. Size of student body:
   - ☑ 1 - 2,000
   - □ 2,001 - 10,000
   - □ 10,001 and up

3. Does your community have a mandatory recycling program?
   - ☑ yes
   - □ no

4. Does your college/university have a recycling program?
   - ☑ yes
   - □ no
   If no, please go to number 14.

5. Does your recycling program receive institutional support?
   - ☑ yes
   - □ no
   If yes, what kind of support does it receive?

6. Which portions of the campus community participate in the recycling program?
   - ☑ students
   - ☑ staff
   - ☑ faculty
   - ☑ administration
   - □ other: ________________________

7. Who runs your recycling program?
   - ☑ students only
   - ☑ administration only
   - ☑ cooperative program between students and administration
   - □ other: ________________________

8. Which of the following materials does your program recycle: (check all that apply)
   - ☑ high grade office paper
   - ☑ computer paper
   - ☑ newspaper
   - ☑ cardboard
   - ☑ glass
   - ☑ aluminum cans
   - ☑ steel cans
   - ☑ plastics
   - ☑ batteries (Automobile from College Car Pool)
   - □ scrap appliances
   - □ laser printer cartridges
   - □ motor oil
   - □ construction debris
   - □ tires
   - □ hazardous wastes
   - □ clothing, reusable goods, furniture
   - □ composting of yardwastes
   - □ other: ________________________

(Please complete reverse side)
9. How are these materials collected (i.e. drop-off bins)?
   - Mixed Paper, Cardboard - Daily Collection by Housekeeping
   - Beverage Cans - Daily Collection by Housekeeping
   - Newspaper, Glass, Plastic, Motor Oil - Drop off Site on Campus 1 day/week

10. How are these items recycled (i.e. commercial recyclers, processors, local methods)?

11. Does your program operate at a profit or a loss?
    - ☐ profit    ☐ loss

12. Are avoided disposal costs a reason for your recycling program?
    - ☐ yes ☐ no

13. Our community (check all that apply):
    - ☐ has a recycling program
    - ☐ participates in our recycling program
    - ☑ our recycling programs are completely separate
    - ☐ does not have a recycling program

14. Does your college/university purchase products with some recycled content?
    - ☐ yes ☐ no
    If yes, what kind of materials?
    - Paper

15. Does your college/university practice source reduction? (check all that apply)
    - ☑ dishes/glasses/silverware instead of throwaways
    - ☑ double-sided copying
    - ☑ minimize packaging accepted from manufacturers
    - ☐ other: Use of e-mail instead of memos
    - ☐ no

16. Does your college/university offer courses on (check all that apply):
    - ☐ social and political aspects of hazardous and nonhazardous waste management
    - ☐ scientific and engineering aspects of hazardous and nonhazardous waste management
    - ☑ agricultural aspects of hazardous and nonhazardous waste management
    - ☑ economic aspects of natural resource use and development
    - ☐ other relevant courses

17. This question is optional for the person filling out this survey.
    Name: Thomas Patel
    Position: Superintendant of Environmental Health & Safety

18. Does your college/university give permission to use its name in any publications regarding this survey?
    - ☐ yes    ☑ no

Thank you for your time and effort. Please return this survey to:
Kimberly M. Reynolds
1213 W. University Ave.
Muncie, IN 47303

A self-addressed, stamped envelope is enclosed for your convenience.
1. College/University name: Goshen College

2. Size of student body:
   - 1 - 2,000
   - 2,001 - 10,000
   - 10,001 and up

3. Does your community have a mandatory recycling program?
   - yes
   - no

4. Does your college/university have a recycling program?
   - yes
   - no
   If no, please go to number 14.

5. Does your recycling program receive institutional support?
   - yes
   - no
   If yes, what kind of support does it receive?

6. Which portions of the campus community participate in the recycling program?
   - students
   - staff
   - faculty
   - administration
   - other: __________________________

7. Who runs your recycling program?
   - students only
   - administration only
   - cooperative program between students and administration
   - other: __________________________

8. Which of the following materials does your program recycle? (check all that apply)
   - high grade office paper
   - computer paper
   - newspaper
   - cardboard
   - glass
   - aluminum cans
   - steel cans
   - plastics
   - batteries
   - scrap appliances
   - laser printer cartridges
   - motor oil
   - construction debris
   - tires
   - hazardous wastes
   - clothing, reusable goods, furniture
   - composting of yard wastes
   - other: __________________________

(Please complete reverse side)
9. How are these materials collected (i.e. drop-off bins)?

10. How are these items recycled (i.e. commercial recyclers, processors, local methods)?

ON CAMPUS

11. Does your program operate at a profit or a loss?
   - profit
   - loss
   □ Volunteer = No cost, No profit

12. Are avoided disposal costs a reason for your recycling program?
   - yes
   - no

13. Our community (check all that apply):
   - has a recycling program
   - participates in our recycling program
   - our recycling programs are completely separate
   - does not have a recycling program

14. Does your college/university purchase products with some recycled content?
   - yes
   - no
   If yes, what kind of materials? = paper

15. Does your college/university practice source reduction? (check all that apply)
   - dishes/glasses/silverware instead of throwaways
   - double-sided copying
   - minimize packaging accepted from manufacturers
   - other: ____________________________
   - no

16. Does your college/university offer courses on (check all that apply):
   - social and political aspects of hazardous and nonhazardous waste management
   - scientific and engineering aspects of hazardous and nonhazardous waste management
   - agricultural aspects of hazardous and nonhazardous waste management
   - economic aspects of natural resource use and development
   - other relevant courses

17. This question is optional for the person filling out this survey.
   Name: ____________________________
   Position: ____________________________

18. Does your college/university give permission to use its name in any publications regarding this survey?
   - yes
   - no

Thank you for your time and effort. Please return this survey to:
Kimberly M. Reynolds
1213 W. University Ave.
Muncie, IN 47303
A self-addressed, stamped envelope is enclosed for your convenience.
1. College/University name: Grace College & Seminary

Size of student body:
- [ ] 1 - 2,000
- [ ] 2,001 - 10,000
- [ ] 10,001 and up

3. Does your community have a mandatory recycling program?
- [ ] yes
- [x] no

4. Does your college/university have a recycling program?
- [x] yes
- [ ] no

If no, please go to number 14.

5. Does your recycling program receive institutional support?
- [x] yes
- [ ] no

If yes, what kind of support does it receive?
Cooperation between custodial, food service, and student government.

6. Which portions of the campus community participate in the recycling program?
- [x] students
- [ ] staff
- [ ] faculty
- [x] administration
- [ ] other: __________________

7. Who runs your recycling program?
- [ ] students only
- [ ] administration only
- [x] cooperative program between students and administration
- [ ] other: __________________

8. Which of the following materials does your program recycle: (check all that apply)
- [x] high grade office paper
- [x] computer paper
- [x] newspaper
- [x] cardboard
- [ ] glass
- [x] aluminum cans
- [ ] steel cans
- [ ] plastics
- [ ] batteries
- [ ] scrap appliances
- [ ] laser printer cartridges
- [x] motor oil
- [ ] construction debris
- [ ] tires
- [ ] hazardous wastes
- [ ] clothing, reusable goods, furniture
- [x] composting of yard wastes
- [ ] other: __________________

(Please complete reverse side)
9. How are these materials collected (i.e. drop-off bins)?

10. How are these items recycled (i.e. commercial recyclers, processors, local methods)?

11. Does your program operate at a profit or a loss?
   - profit
   - loss

12. Are avoided disposal costs a reason for your recycling program?
   - yes
   - no

13. Our community (check all that apply):
   - has a recycling program
   - participates in our recycling program
   - our recycling programs are completely separate
   - does not have a recycling program

14. Does your college/university purchase products with some recycled content?
   - yes
   - no
   If yes, what kind of materials?
   - computer paper, other paper

15. Does your college/university practice source reduction? (check all that apply)
   - dishes/glasses/silverware instead of throwaways
   - double-sided copying
   - minimize packaging accepted from manufacturers
   - other: __________________________
   - no

16. Does your college/university offer courses on (check all that apply):
   - social and political aspects of hazardous and nonhazardous waste management
   - scientific and engineering aspects of hazardous and nonhazardous waste management
   - agricultural aspects of hazardous and nonhazardous waste management
   - economic aspects of natural resource use and development
   - other relevant courses

17. This question is optional for the person filling out this survey.
   Name: [Signature]
   Position: [Signature]

18. Does your college/university give permission to use its name in any publications regarding this survey?
   - yes
   - no

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1. College/University name: Answer College

2. Size of student body:
   - [ ] 1 - 2,000
   - [ ] 2,001 - 10,000
   - [ ] 10,001 and up

3. Does your community have a mandatory recycling program?
   - [ ] yes
   - [ ] no

4. Does your college/university have a recycling program?
   - [ ] yes
   - [ ] no
   If no, please go to number 14.

5. Does your recycling program receive institutional support?
   - [ ] yes
   - [ ] no
   If yes, what kind of support does it receive?

6. Which portions of the campus community participate in the recycling program?
   - [ ] students
   - [ ] staff
   - [ ] faculty
   - [ ] administration
   - [ ] other: ________________________________

7. Who runs your recycling program?
   - [ ] students only
   - [ ] administration only
   - [ ] cooperative program between students and administration
   - [ ] other: ________________________________

8. Which of the following materials does your program recycle: (check all that apply)
   - [ ] high grade office paper
   - [ ] computer paper
   - [ ] newspaper
   - [ ] cardboard
   - [ ] glass
   - [ ] aluminum cans
   - [ ] steel cans
   - [ ] plastics
   - [ ] batteries
   - [ ] scrap appliances
   - [ ] laser printer cartridges
   - [ ] motor oil
   - [ ] construction debris
   - [ ] tires
   - [ ] hazardous wastes
   - [ ] clothing, reusable goods, furniture
   - [ ] composting of yardwastes
   - [ ] other: ________________________________

(Please complete reverse side)
9. How are these materials collected (i.e. drop-off bins)?
   [Blank/bins provided in various official]

10. How are these items recycled (i.e. commercial recyclers, processors, local methods)?

11. Does your program operate at a profit or a loss?
   - profit
   - loss

12. Are avoided disposal costs a reason for your recycling program?
   - yes
   - no

13. Our community (check all that apply):
   - has a recycling program
   - participates in our recycling program
   - our recycling programs are completely separate
   - does not have a recycling program

14. Does your college/university purchase products with some recycled content?
   - yes
   - no
   If yes, what kind of materials?

15. Does your college/university practice source reduction? (check all that apply)
   - dishes/glasses/silverware instead of throwaways
   - double-sided copying
   - minimize packaging accepted from manufacturers
   - other: ________________________________
   - no

16. Does your college/university offer courses on (check all that apply):
   - social and political aspects of hazardous and nonhazardous waste management
   - scientific and engineering aspects of hazardous and nonhazardous waste management
   - agricultural aspects of hazardous and nonhazardous waste management
   - economic aspects of natural resource use and development
   - other relevant courses

17. This question is optional for the person filling out this survey.
   Name: ________________________________
   Position: ________________________________

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- Size of student body: 
  - ☐ 1 - 2,000
  - ☐ 2,001 - 10,000
  - ☐ 10,001 and up

3. Does your community have a mandatory recycling program? 
  - ☐ yes  ☐ no

4. Does your college/university have a recycling program? 
  - ☐ yes  ☐ no
  If no, please go to number 14.

5. Does your recycling program receive institutional support? 
  - ☐ yes  ☐ no
  If yes, what kind of support does it receive? 
    - Funding for start-up costs
    - Cooperation from maintenance department
    - Volunteerism among all personnel

6. Which portions of the campus community participate in the recycling program? 
  - ☐ students
  - ☐ staff
  - ☐ faculty
  - ☐ administration
  - ☐ other: _________________________

7. Who runs your recycling program? 
  - ☐ students only
  - ☐ administration only
  - ☐ cooperative program between students and administration
  - ☐ other: _________________________

8. Which of the following materials does your program recycle: (check all that apply) 
  - ☐ high grade office paper
  - ☐ computer paper
  - ☐ newspaper
  - ☐ cardboard
  - ☐ glass
  - ☐ aluminum cans
  - ☐ steel cans
  - ☐ plastics
  - ☐ batteries
  - ☐ scrap appliances
  - ☐ laser printer cartridges
  - ☐ motor oil
  - ☐ construction debris
  - ☐ tires
  - ☐ hazardous wastes
  - ☐ clothing, reusable goods, furniture
  - ☐ composting of yardwastes
  - ☐ other: _________________________

(Please complete reverse side)
9. How are these materials collected (i.e. drop-off bins)?

   "Convenient bins in buildings monitored by students."

10. How are these items recycled (i.e. commercial recyclers, processors, local methods)?

   "Huntington Co. Pathfinders Recycling Service"

11. Does your program operate at a profit or a loss?

   ☐ profit  ☐ loss  thus far

12. Are avoided disposal costs a reason for your recycling program?

   ☐ yes  ☐ no

13. Our community (check all that apply):

   ☐ has a recycling program
   ☐ participates in our recycling program
   ☐ our recycling programs are completely separate
   ☐ does not have a recycling program

14. Does your college/university purchase products with some recycled content?

   ☐ yes  ☐ no

   If yes, what kind of materials?

   paper

15. Does your college/university practice source reduction? (check all that apply)

   ☐ dishes/glasses/silverware instead of throwaways
   ☐ double-sided copying
   ☐ minimize packaging accepted from manufacturers
   ☐ other: __________________________________________
   ☐ no

16. Does your college/university offer courses on (check all that apply):

   ☐ social and political aspects of hazardous and nonhazardous waste management
   ☐ scientific and engineering aspects of hazardous and nonhazardous waste management
   ☐ agricultural aspects of hazardous and nonhazardous waste management
   ☐ economic aspects of natural resource use and development
   ☐ other relevant courses

17. This question is optional for the person filling out this survey.

   Name: ____________________________
   Position: ________________________

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   ☐ yes

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