

Taking out the trash: Where do all Simpson's old computers go?

by Jennifer Whitham Johnson

Unfortunately for the environment, there is no such thing as "computer heaven" for retired machines to quietly go once they've expended their usefulness on earth.

Perhaps the next best thing though is the relatively new practice of computer recycling, which is just one thing society can do to protect our ecosystem from the detriments of ever-advancing technology. The importance of including computers in the increasingly popular recycling craze isn't lost on Simpson's information services staff. In fact, they've jumped on board.

For the past year and a half, computers not meeting the college's minimum functionality requirements and those not snatched up at the garage sale, are carted away to be recycled. Ken Halstead, owner and operator of Computer Recycling in Marshalltown, comes to campus and collects the machines, free of charge.

According to Jon Skelton, PC and network technician, Simpson has a sort of moral obligation to make sure their old computers don't end up in the landfill, mostly because their composition includes hazardous materials. In fact, a single monitor can house between seven and 11 pounds of lead.

"There are a lot of chemicals that make up the composite of the color monitor and most of these are toxic, including heavy metals such as mercury and arsenic," explains Skelton. "When you put them into the landfill, they get crushed, exposed to the elements, start breaking down and seeping into the ground and the water table."

There is also the issue of plastic, which doesn't deteriorate or breakdown over time, thus every time a computer gets ditched,

a bit of the landfill's finite space is permanently lost.

Simpson retires a relatively small number of computers each year in comparison to large corporations, with approximately 70 machines replaced on campus last year.



Information services is doing its part to keep computers out of landfills.

Even so, whether it be 30 computers or 300, the benefits of recycling are clear.

According to the Department of Natural Resource's Energy and Waste Management website, the average life span of a computer today is two years, (although it's worth noting that Simpson tries to keep them in use for between five and six years). The website also estimates that consumers have, on average two or three obsolete

computers in their garages, closets or storage spaces.

According to Theresa Stiner, program coordinator with DNR Energy and Waste Management, in 2001, the DNR did a study estimating a total of 274,000 complete computer systems wound up in Iowa landfills; that's 6,900 tons of e-waste.

With these statistics in mind, it's not difficult to argue that the situation is approaching epidemic proportions.

"People are throwing away computers at astronomical rates," says Chuck Johnson, academic software specialist. "Basically, I think people want the faster, more current, better machines and a lot of times they just don't know what to do with their old machines."

Fortunately, Halstead does know what to do with them. Once the machines are in his hands, their usefulness is renewed. He and his staff begin the recycling process by extracting all working parts from each discarded computer. They then restore as many salvaged machines as possible into functioning order.

Here's where the computers, once deemed worthless, become useful once again. Working on a need-based system, Halstead either gives away or sells the rebuilt computers. Those who qualify to receive computers free of charge, include nonprofit organizations such as public schools, Christian schools and churches, as well as daycare facilities and low-income homes. The Marshalltown Veterans Home has also been given some revamped machines.

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Computers

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“Any place where someone needs technology but can’t afford it, we like to work with them,” says Halstead.

For those computers that Halstead and his crew are unable to refurbish, as well as the ones they have stripped of all viable parts, the recycling process continues. Halstead sends these components to a demanufacturer, where parts are further broken down into pieces such as plastic housings, metals, wires and circuit boards.

From there, smelters or processors further deconstruct what remains into raw materials. Processing may also involve resource-recovery procedures such as precious metal separation, lead smelting and waste-to-energy incineration. Processing is the fourth and final procedure computers undergo in their recycling transformation.

When it comes to obsolete computers, putting them through these four steps can make a world of difference. According to the above referenced website, “if current trends continue, by 2004, the amount of

computers landfilled annually in the U.S. will be equal to a pile the size of a football field and a mile high.”

The Iowa State Legislature recently mandated that the DNR write a strategy regarding the recycling of electronics. Once written, the DNR’s recommendation on how to handle e-waste will be presented to the legislature.

Stiner says although it’s encouraging that the legislature is expressing an interest in the situation, there is still no Iowa law specifically restricting the dumping of computers into landfills.

The EPA, however does regulate the dumping of “hazardous materials,” which by default would cover computer monitors. But, Stiner says, “the EPA has been pretty fuzzy about this.”

So, until the recycling of e-waste is officially mandated by local, state or federal authorities, it’s up to institutions like Simpson to “do the right thing,” even without being required to do so by law.



Simpson replaced around 70 computers last year.

As far as clearing out the thousands of computers currently filling our landfills, Skelton says to his knowledge, no clause has been mandated to get them removed.

“You can’t fix the past, but you can start from now and move toward the future,” says Skelton. “We’ve identified that this is not good for the environment. It’s a bad problem, but we can only do our little part, we can’t change the world.”

College advancement ‘Picking Up The Pace’ of campaign

The college advancement office will kick-off the faculty-staff phase of Simpson’s capital campaign later this month.

“Picking Up The Pace” is a four-week solicitation of the “Simpson family” in support of “At the Crossroads: The Campaign for Simpson.”

All faculty and staff are invited and encouraged to attend one of two Campus Campaign Kickoff events including either a luncheon on Thursday, Oct. 23 at 12:30 p.m. in Great Hall or a breakfast on Friday, Oct. 24 at 8 a.m. in Great Hall.

The purpose of each kickoff event is to provide faculty and staff an overall preview of the campaign. A PowerPoint presentation will introduce campaign national co-chairs as well as campus campaign co-chairs to the Simpson community.

National campaign co-chairs are James Reed and Jerry Chicoine. Campus campaign co-chairs are John Bolen, administration chair; Betty Dyer, staff chair; Everett Laning, emeriti faculty

chair; Bruce Sloan, faculty chair; and Lana Smith, athletics chair.

Pam Pepper, assistant vice president and director of annual giving, says “Picking Up The Pace” is a participation campaign for the entire Simpson community.

“We want people to donate at a level they feel comfortable with,” explains Pepper. “We don’t have a dollar goal for this phase of the campaign, we have a participation goal and we hope for 100 percent participation from faculty and staff.”

A group of 29 volunteers (made up of a mix of faculty and staff) will each contact seven of their fellow Simpson employees to conduct one-on-one informational sessions. Each employee will receive additional information on the campaign, including a case statement as well as a pledge card during these individual meetings.

Two question and answer sessions will follow the initial kickoff events. Members of the college advancement staff will be available in the Matthew Simpson Room

on Thursday, Oct. 30 from 12:30 p.m. to 1:30 p.m. and Wednesday, Nov. 12 from 3 p.m. to 4 p.m. to answer questions.

Faculty and staff can opt to spread their gifts out over a three-year period and all donations received during “Picking Up The Pace,” will go toward the capital campaign’s overall goal.

Once the “Picking Up The Pace” campaign is complete, the college will enter the public phase of the campaign and begin soliciting alumni, friends, parents, corporations, etc. Pepper says the support of the campus community can go a long way in encouraging public participation.

“Faculty and staff support of the programs and the college are critical to the success of the campaign,” says Pepper. “We want a high percentage of participation because that will reflect well on Simpson when the campaign goes public.”

Results of the “Picking Up The Pace” phase of the campaign will be announced at the Simpson Holiday Party on Friday, Dec. 12.

Simpson's 2003-2004 economic impact estimated in the millions

Increased enrollment affects more than faculty and staff pay raises; it also has a substantial financial impact on the Indianola community.

The Iowa Department of Economic Development has put together a formula to gauge institutional economic impact.

The formula takes into account, the number of students enrolled (including Iowa and non-resident), the number of full-time employees (and their salaries), capital expenditures, student spending and parent spending. An economic multiplier (i.e. 1.5 or 2.5) is applied to each of the projected expenditures depending on the number of times the monies are expected to change hands within the community.

Although the formula may not be an exact science, according to Ken Birkenholtz, vice president for business and finance, it's a useful tool for approximating numbers.

"The formula is developed by staff experienced in calculating economic data

of this nature and we are trusting in their judgement as to how this works," explains Birkenholtz.

Birkenholtz outlines that the economic impact formula takes into account the college's composite budget of \$37 million, minus \$10 million in unfunded institutional aid times an economic multiplier between 1.5 and 2.5.

Birkenholtz used a "middle of the road" economic multiplier of 2.0, to determine the composite budget's total impact, which comes to \$54 million.

"Basically, we have \$27 million to spend, which is estimated to turn over twice within the community," says Birkenholtz.

This amount (which includes Simpson payroll) is added to capital expenditures, student spending and parent spending to determine the total economic impact.

The formula calculates total student spending by assuming that the average

full-time equivalent (FTE) student spends approximately \$3235 per year on locally provided goods and services. By multiplying \$3235 times the number of FTE students enrolled (1857) and taking the total times a 1.5 economic multiplier, a total of \$9 million in student spending is projected.

The formula also factors in full-time and part-time employee payroll, including Simpson's on-campus partners, Sodexo, Inc. (food service and campus services) and Follet, Inc. (bookstore). The college and those on-campus partners, employ 300 people full-time and 120 part-time, totaling a \$12.6 million payroll. Of that total two hundred full-time employees live within the 50125 zip code (Indianola,) and those employees earn \$7.6 million annually.

Parent spending is broken into two categories, Iowa FTE enrollment and non-resident (out-of-state) FTE enrollment. Parents of Simpson students living in Iowa (1676) are estimated to spend \$450 each year in the Indianola community (on move-in days or other visits to campus). Thus, by taking 1676 times \$450 and multiplying the total by a 1.5 economic multiplier, in-state parents are projected to spend a total of \$1.1 million in the community.

Out-of-state parents average about \$665 per year, times the 181 out-of-state FTE students enrolled at Simpson. This number multiplied by a 2.5 economic impact (as these are all new dollars,) estimates that out-of-state parent spending will come to \$.3 million. Thus, total parent spending is equal to \$1.4 million.

All told, the formula concludes that Simpson will have a \$65.9 million total economic impact on the community during the 2003-2004 academic year.

Total numbers

Composite budget (\$37 million) (minus \$10 million in unfunded aid)
x 2.0 economic multiplier = \$54 million

Employee payroll (included in composite budget)
full-time 300, part-time 120 = \$12.6 million

Capital expenditures x 1.5 economic multiplier = \$1.5 million

Student spending (\$3235) x total full-time equivalent enrollment
x 1.5 economic multiplier = \$9 million

Parent spending Iowa full-time equivalent enrollment (1676) x \$450
x 1.5 economic multiplier = \$1.1 million

Parent spending out-of-state full-time equivalent enrollment (181) x \$665
x 2.5 economic multiplier = \$.3 million

Total economic impact = \$65.9 million

LIFE AFTER FIVE



A look at life with Susan Nady

Nady

Title: part-time admissions system specialist in adult learning

Been at Simpson: 13 years

Family: husband, Louis; son, Ryan and daughter, Amy. Will become a grandmother for the first time in April.

Likes most about job: "I very much like the people that I work with. I like the variety and I love my hours."

Outside of work: enjoys boating, reading (suspense, mystery) and walking.

Recent vacation: trip to Palm Beach in Aruba with husband and daughter last October.

The Cornerstone

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FACULTY FOOTNOTES

Photographs by **Michael Adams**, public relations, are featured in an exhibit of Fine Print Group photographers now on display at the Cowles Communication Center, Grand View College through December. The Fine Print Group is composed of central Iowa area photographers who specialize in fine art black and white film photography and darkroom printing.

The foreign language department (**Mark Bates**, associate professor of Spanish; **Tricia Calkins**, associate professor of German; **Bob Gieber**, professor of French; and **Nia Kos**, professor of Spanish) attended the meeting of the Iowa World Language Association Oct. 3 in Des Moines. Calkins did a presentation on speaking and writing activities.

Fred Jones, professor of criminal justice, and **Ako Abdul Samad** presented information on gang activities in Des Moines for the faculty and staff at Wallace Elementary School on Sept. 26. Topics covered are causes of gang involvement, indicators of gang activities such as argot, signing or representing, and the role the school can play in addressing gang-related issues.

Gary Kinkel, associate professor of religion, gave a lecture titled "A Biblical Theology of Ministry" to the Bishop, the committee on ordained ministry, and all candidates for ministry of the ELCA, Southeastern Iowa Synod on Sept. 12.

Steve Rose, associate professor of education, published an article in the spring 2003 issue of the *International Journal of Reality Therapy* titled "The Relationship between Glasser's Quality School Concept and Brain-Based Theory." At the July

23-27 International Conference of Quality Schools, he presented with Marilyn Russ "Effective Teaching from a Quality School, Brain-Based Perspective." Rose was named as one of two "Outstanding Christian Educators" for St. Paul's Episcopal Cathedral in Des Moines. Along with Cheryl Sterns, he has initiated what is called the "Rite 13" curriculum for middle school- aged Sunday schoolers.

This past month, Iowa Health Systems (the John Stoddard Cancer Research Center, in particular) applied for a patent on a stretch of human DNA (found on chromosome 17) that may be useful in cancer gene therapy for ovarian cancer patients. The patent means that Iowa Health System is the only agency that can make money from the use of this DNA sequence. The co-discoverers named on the patent are **Pat Singer**, professor of biology, and His-Chou Liu.

NEW FACE



Elbert

Kristie Elbert has joined the college advancement office as alumni relations secretary. Prior to joining the Simpson staff, Elbert was a secretary at the Mercy Indianola Clinic.