

Grand Rapids Community College

Sustainability Plan

2007 Progress Report

**Submitted By Dr. Gary W. Burbridge,
Director of Sustainability**

**Approved by the Grand Rapids Community
College Sustainability Council***

In 2006-2007 the Sustainability Council worked with GRCC leadership to attain the approval of the college sustainability plan. In addition we worked with the College Leadership Council, the Deans Council, and the Academic Governing Council to familiarize everyone with the plan, its purposes and outcomes.

We also made progress on developing a Sustainability Certificate for the college, and integrating sustainability principles and practices into the college's academic services and operations.

Working with the City of Grand Rapids, the Grand Rapids Public Schools, Aquinas College and Grand Valley State University we continued to develop the Community Sustainability Partners. The CSP offered several Summits built around the Triple Bottom Line concept for CSP members and other interested community members. Each summit attracted between 90 and 125 people. In addition, the work of the CSP led to recognition by the United Nations University of Grand Rapids as a Center of Sustainability Expertise.

As a founding member of CQIN (Continuous Quality Improvement Network), GRCC became a part of a Vision Implementation Project: Building Sustainable Local/World Community. The college Sustainability Director was appointed as liaison to the project, which will result in a Distributive Innovations Lab which can be used by CQIN members as well as other community colleges. The Sustainability Director, together with two members of the Sustainability Council attended a charette with 12 other community colleges, sponsored by CQIN, prior to the development of the Lab.

Outcomes of work of the Council in 2006-2007 are reported in bold print below.

Grand Rapids Community College Sustainability Plan

“Academic Excellence – Operational Efficiency – Environmental Responsibility”

Statement of Purpose: The Sustainability Council will lead Grand Rapids Community College’s efforts to implement sustainability in all academic, operational and community work.

Vision: GRCC will be a leader in our community in making sustainable practices the norm through education and example.

Goals:

- A. **Education:** We will provide education to members of the college and the community about the ethics, alternative resources, and best practices needed to create a sustainable environment.

GRCC shows signs of development in this area, but there is quite a bit of work to be done yet. To that end, the College Leadership Council and the Sustainability Council met to review this plan and identify areas that need work.

As a result of that meeting, a Sustainability Education Task Force will be created to help with implementing the Plan.

Objectives:

1. Design courses/programs/certificates that teach sustainability practices and principles

Action Plan: Develop a sustainability “certification” to be offered through GRCC patterned after similar work done at Western Michigan University and other schools. 2006-2007

Expected Outcomes:

- Benchmark and assess demand – **Process begun in 2007**
- Identify potential coursework –**Initial courses identified in all but one department**

- Design 15 credit “certification” list of potential classes – **In process**
- Present proposal to the appropriate college committees – **Initial approval from the Sustainability Council. Discussed with the College Leadership Council and the Academic Governing Council**
- Obtain approval for “certification” – **Winter 2008**
- Market “certification” – **Winter 2008**
- Begin to offer – **Fall 2008**

Indicators of success: (Revised)

- Approval of “certification” – Winter 2008
- Offer coursework – Fall 2008
- Enroll and graduate students – first completions in Winter, 2009

2. Incorporate sustainability principles and practices into existing programs and coursework.

Action Plan:

- Offer SS120: Introduction to Sustainability – **Ongoing**
- Review existing courses to identify sustainability principles and practices in place – **Completed Fall semester 2007**
 - **In partnership with Habitat for Humanity, GRCC/Tassell M-TEC Residential Construction program built LEED certified affordable homes in the Grand Rapids community.**
- Benchmark our work against what other colleges are doing – **Reviewed programs at Aquinas College and Western Michigan University**
- Develop plan to familiarize faculty with concepts related to sustainability – **Convened faculty committee to plan this work – Summer 2007 - ongoing**
- Train faculty in sustainability principles/practices – **Winter 2008**
- Create faculty team to develop learning objectives specific to sustainability – **Convened Summer 2007**
- Support introduction of appropriate material into GRCC courses – **Winter 2008**

- Offer course on Green building principles and practices to Construction Trades students – **Winter 2008**

Indicators of Success:

- Complete review of GRCC courses - **Completed**
- Complete training plan
- Complete training
- Appropriate material integrated into courses

3. Incorporate sustainability principles and practices into GRCC General Learner Outcomes

Action Plan

- Identify and clarify sustainability in the context of General Learner Outcomes – **Fall/Winter 2006/2007**
- Meet with Assessment Coordinator - **Completed**
- Incorporate sustainability and community engagement into the GLO's – **Fall 2009**

Indicators of success

- Complete proposal for presentation to Assessment Coordinator and General Education Team - **completed**
- Sustainability principles integrated into GLO's – **Integrated a pre-enrollment scenario for incoming students to assess their understanding of sustainability – used beginning Summer 2007**
- Incorporated into GLO's

4. Promote seminars and workshops on sustainability for community and for GRCC staff

Action Plan

- Identify community needs, working with area organizations (Summer, 2006) - **Completed**
- Develop schedule of tentative workshops and /or seminars (Fall, 2006) - **Completed**
- Begin offering workshops and seminars (Winter, 2007) - **Completed**

Indicators of Success

- Identification of potential offerings –**Completed Fall 2006**
- Coordination with interested community organizations - **Ongoing**
- Offer workshops and seminars – **Co-sponsored**

1. **Alternative Energy Speakers series at GRCC**
2. **Co-sponsored presentation by Jerome Ringo to area middle and high school students**
3. **Ongoing sponsorship and support of the Community Sustainability Partners summit meetings (3 held in Winter 2006/Fall 2006 semesters)**

5. Support use of non-toxic resources (such as chemicals) in classrooms

Action Plan

- Identify toxic substances in use (**Fall, 2007**)
- Work with faculty and staff to identify ways of replacing toxics where possible (**Fall, 2007**)
- Establish procedure for making decisions about use of toxics (**Winter, 2008**)

Indicators of Success

- Reduction in toxic materials use – established targets for reduction in place – **Initial discussions held, but no procedures in place yet**

6. Develop Academic Service Learning opportunities for students

Action Plan

- Create a list of sustainability related opportunities in coordination with Service Learning program (Fall, 2006) - **Completed**
- Promote opportunities for students (Fall, 2006) - **Completed**
- Implement service learning for students (Winter, 2007) - **Completed**

Indicators of Success

- Sustainability learning opportunities identified – **Students in SS 120: Introduction to Sustainability worked on service learning project – developed presentation on sustainability, which they presented to college and community members in Winter, 2007 semester.**
- Coordination plan with Service Learning in place – **regular work with the Service Learning Director**
* **See Appendix C**
- Students beginning to take advantage of the opportunities – **SS 120**

B. **Operations:** We will integrate sustainable practices into our campus Operations

GRCC has made notable progress in measuring our energy usage, and has begun a plan to reduce use of natural gas and electricity. An initial report was developed by the Facilities Office toward that end.

In addition, the College is exploring partnering with other institutions to create a Green Purchasing consortium.

Objectives:

1. Establish methods and time lines for reduction of solid waste

Action Plan

- Develop and use effective measures of types and quantities of waste (Fall, 2006) – **See appendix B-1**
- Identify methods of waste reduction (Fall, 2006) - **ongoing**
- Establish starting point and implement (Winter, 2007) – **See appendix B-1**
- Monitor outcomes (Ongoing)

Indicators of Success

- Types and quantities of waste identified – **begun/ongoing**
- Methods of waste reduction identified – **begun/ongoing**
- Begin to implement the plan - **begun**
- Outcomes Monitored on a quarterly basis – **ongoing**
See appendix B-1

2. Reduce energy/ resource use on campus

Action Plan

- Develop measures of energy usage (Fall, 2006) – **See appendix B-1**
- Establish a base line for energy reduction (Fall, 2006) – **to be done**
- Identify energy saving methods (Winter, 2007) – **in process**
- Implement savings plan (Summer, 2007) – **to be done**
- Switch to duplex printing as default in all campus printing and copying - **asap**

Indicators of Success

- Energy usage measurements identified and adopted – **see appendix B-1**

- Energy saving methods identified and implemented – **to be done**
- Duplex printing as default initiated – **Fall 2007**

3. Use renewable energy sources

Action Plan

- Identify types of renewable energy available and appropriate for GRCC (Fall, 2006) – **in process**
- Explore green energy purchase options (Fall, 2006) – **in process**
- Establish a percentage of energy to be derived from renewable resources (Fall, 2006) – **to be established**
- Implement a plan to achieve established goals (Winter, 2007) – **not yet done**
- Develop partnerships for purchase of green energy (Winter, 2007) – **not yet done**

Indicators of Success

- Alternative energy types and sources identified – **in process**
- Plan implemented and percentage goals achieved – **not yet done**

4. Expand recycling efforts on campus

Action Plan

- Identify opportunities for improvement (Fall, 2006) - **done**
- Locate resources for increased recycling (Fall, 2006) – **ongoing**
- Educate the college community about values of recycling (Fall/Winter, 2006/2007) – **ongoing**
- Implement the plan (Summer, 2007) – **to be done**
- Send Building Directors to conferences/workshops - **ongoing**

Indicators of Success

- Opportunities identified and resources secured – **in process**
- Education plan implemented – **in process**
- Recycling on campus increases – **see appendix B-1**

5. Adopt environmentally friendly vehicles for the campus fleet

Action Plan

- Identify fleet vehicles and ages (Summer, 2006) - **done**
- Examine environmentally friendly alternatives (Fall, 2006) - **done**

- Create a plan for adoption of vehicles (Winter, 2007) – **not yet done**

Indicators of Success

- Plan in place – **ongoing discussion about feasibility**

6. Adopt a “Green” purchasing plan

Action Plan

- Identify purchased items with recycled/post-consumer content - **Ongoing**
- Research existing plans (Fall, 2006) - **done**
- Identify possible plan (Fall, 2006) - **done**
- Adopt a plan (Winter, 2007) – **to be done**
- Secure appropriate approvals (Winter, 2007) – **not yet done**
- Implement the plan (Summer, 2007) – **not yet done**

Indicators of success

- Green purchasing plan in place – **not yet done**
- Evidence of purchasing based on the plan identified - **not yet done (GRCC has been purchasing “green” products for some time)**
- List of recycled/post-consumer products established – **Done * See appendix C-1**

7. Construct Living/Green roof on the Applied Technology center

Action Plan

- Develop plan – **Done**
- Secure private sector funding – **Done**
- Begin construction – **Summer 2008**

Indicators of success

- Plan completed – **Ongoing**
- Funding secured – Steelcase Foundation Grant - **Done**

C. **Community:** GRCC will be a leader and partner in sustainability efforts in Western Michigan.

GRCC has developed and maintains excellent relations with other institutions and businesses in this area. Examples of accomplishments can be seen below.

Objectives

1. Support local businesses that employ sustainability in their principles and practices

Action Plan

- Identify businesses with a sustainable business plan (Fall, 2006) - **As member institution of the West Michigan Sustainable Business Forum, we are connected to many businesses and organizations in West Michigan with such plans. Work will continue to identify other businesses as well.**
- Join Sustainable Business Forum of West Michigan - **Completed**
- Participate in training workshops and seminars in collaboration with local sustainable businesses – **Ongoing**
 - **A member of the GRCC Sustainability Council attends the WMSBF meetings and reports back to the Council. GRCC Council co-sponsored the Alternative Energy Speakers Series at GRCC along with several local sustainable businesses.**
- Develop fiscal relationships with local sustainable businesses where appropriate (Winter, 2007) – **We are in discussions with a coalition of West Michigan businesses and organizations which are working to establish a Green Purchasing consortium**

Indicators of success

- Relationships established and maintained – three per year – **This has been accomplished for 2006-2007**

2. Support clean and healthy neighborhoods

Action Plan

- Establish and maintain partnerships with community neighborhood associations (Fall, 2006 – ongoing) – **To be done**
- Identify resources that GRCC has to offer (Fall, 2006) – **Process has begun in conjunction with the GRCC Service Learning Center**
- Link our resources to community needs (Winter 2007 – ongoing) – **Ongoing**

Indicators of success

- Three partnerships established by December, 2007 – **not accomplished**
- GRCC resources identified and cataloged – **in process. No documentation produced as yet.**

3. Collaborate with community, state and national organizations with similar sustainability goals

Action Plan

- Continue existing relationship with the Community Sustainability Partners - **Ongoing**
- Assist other institutions/businesses develop sustainability plans (Ongoing) – **Sustainability Director worked with the WMSBF on developing an assessment of social equity components within its member organizations**
- Establish a defined relationship with the Grand Rapids Public Schools re sustainable education (Winter, 2007) – **in process**
- Seek grants and other support for community collaborative projects (Ongoing) – **work in this area should develop as GRCC receives pledged grant money from local foundations.**
- Work with MiHEPS (Michigan Higher Education Partners for Sustainability) - **Ongoing**

Indicators of success

- Partnership with GRPS established and functioning – **Ongoing**
- Grants secured for partnering – **Ongoing**
- Co-sponsoring conference on energy issues in higher education with other MiHEPS members – November, 2007

Appendix A: GRCC Sustainability Council Membership (2007-2008 academic year)

Dr. Gary Burbridge, Director of Sustainability and Behavioral Sciences
Professor gburbrid@grcc.edu

Ms. Holly Hoare, Biology Learning Center Coordinator
hhoare@grcc.edu

Ms. Rachel Hood, West Michigan Environmental Action Council
rhood@wmeac.org

Ms. Vicki Hudson, Communications Coordinator vhudson@grcc.edu

Ms. Leigh Kleinert, Biological Science Professor lkleine@grcc.edu

Mr. Klaas Kwant, Coordinator of TV Production kkwant@grcc.edu

**Mr. Duane McIntyre, Residential Construction Program, GRCC Job
Training** dmcintr@grcc.edu

**Mr. Bruce Morrison, Data and Reports Coordinator, Institutional
Research and Planning** bmorrison@grcc.edu

Mr. Mansfield Mathewson, Director of Purchasing mmatthew@grcc.edu

**Mr. Courtland Overmyer, Director of Environmental Services, City of
Grand Rapids**
covermye@ci.grandrapids.mi.us

Mr. James Schaefer, Broadcast Coordinator, LRTS, GRCC jschaefe@grcc.edu

**Mr. Brian Shultz, Manager, GRCC Construction Trades
Apprenticeship Program** bshultz@grcc.edu

Mr. Tom Smith, Executive Director of Facilities tsmith@grcc.edu

Dr. Wayne Sneath, Director of Service Learning wsneath@grcc.edu

Mr. William Stough, CEO, Sustainable Research Group srg@iserv.net

Dr. Mike Vargo, Behavioral Sciences Professor mvargo@grcc.edu

Dr. Juan Olivarez, GRCC President (ex officio) jolivare@grcc.edu

**Ms. Patti Trepkowski, Associate Provost and Dean of Instructional Support and
Interdisciplinary Studies (ex officio)** ptrepkow@grcc.edu

GRCC Sustainability Plan Report, 2006-2007
Appendix B

UTILITIES: Considering the number of students, 27,288 using College facilities in 2006-2007, an increase of 1,062 from 2005-2006, and with an increase of additional technology (labs and power requirements), and daily facility usage, the College has still been able to reduce energy consumption through increased conservation methods and efforts. Electrical use was reduced by 212,766 kilowatt hours, and natural gas showed a reduction of 8,850 metered cubic feet. The continual incorporation of energy saving lighting; reduction of water consuming devices; and increased monitoring of HVAC environmental conditions have been the major factors for the reductions in utilities.

Over the course of the past year the College has reduced energy consumption for electricity, natural gas and water. Additionally, total utility costs were reduced by \$193,025. Despite the overall savings in usage, the cost of electricity increased by \$162,441, and sewer by \$158, both due to uncontrollable rate increases.

Electric:

<u>School Year</u>	<u>Kilowatts (kwh)</u>	<u>Cost</u>
2005-2006	18,620,942	\$1,223,688
2006-2007	<u>18,408,176</u>	<u>\$1,386,129</u>
Reduction	212,766	Increase (\$ 162,441)

Natural Gas:

<u>School Year</u>	<u>Meter Cubic Feet (mcf)</u>	<u>Cost</u>
2005-2006	163,211	\$1,314,866
2006-2007	<u>154,361</u>	<u>\$ 962,740</u>
Reduction	8,850	Reduction \$ 352,126

Water/Sewer:

<u>School Year</u>	<u>Units</u>	<u>Water Cost</u>	<u>Sewer Cost</u>
2005-2006	42,324	\$72,027	\$73,415
2006-2007	<u>37,513</u>	<u>\$68,529</u>	<u>\$73,573</u>
Reduction	4,811	\$ 3,498	Increase (\$ 158)

RECYCLING: Emphasis has continued with recycling efforts. In 2003-2004 school year, we recycled 62 tons of material, and in the next two school years, we averaged approximately 71 tons of material. This past school year, 2006-2007, we recycled 101 tons of paper, cardboard and mixed recyclable products a significant increase since the 2003-2004 school year.

LEARNING ENVIRONMENT: Renovations, classroom improvements and upgrading to all facilities are based on sustainability. The Facilities Department is continually exploring opportunities to use environmentally friendly materials and furnishings. For

example, all carpeting being installed on campus is recyclable and made from recycled products, lighting is energy efficient, approximately 90 percent of custodial paper products used on campus is from recycled material.

Appendix C

2006-2007 Academic Service-Learning Center Program Summary

The following was produced in October, 2007 as an addendum to the Sustainability Council Annual Report by Dr. Wayne Sneath, Director—GRCC Academic Service-Learning Center

Academic Service-Learning Program

Academic Service-Learning (ASL) is: “a credit-bearing, educational experience in which students participate in an organized service activity that meets identified community needs and reflect on the service activity in such a way as to gain further understanding of course content, a broader appreciation of the discipline, and an enhanced sense of civic responsibility.”

Total ASL Students	533
Total ASL Faculty:	23
Total Unique ASL Courses:	19
Total Course Sections:	65
Total ASL Hours Served:	10,131
Ave. Hours of Service/Student/Course:	19

Community Impact:

Total Value of GRCC Student ASL Service
(\$18.77/hr by Independent Sector* values): **\$190,159**

Total School ASL Sites:	147
Total Non Profit, Church, and Government Sites:	49

Community Service Work Study (CSWS) Program

CSWS students are placed in positions which connect their academic and vocational goals to non-profit organizational needs.

Community Impact:

14 students served 5251 hours for a community impact value of: **\$98,561**
(\$18.77/hr by Independent Sector values)

CSWS Partners in 2006-07:

- Palmer Elementary School
- E. Leonard Elementary School
- Grand Rapids Housing Commission--Adam's Park & Creston Plaza Apartments
- Grand Rapids Children's Museum
- GRCC Faculty Senate

- Kent County Tax Credit Coalition
- Heartside Ministries
- Community Media Center

Kent County Tax Credit Coalition/AmeriCorps
Michigan Service Scholar Program

Michigan Service Scholars is an AmeriCorps Education Award Program. Students receive a voucher for use toward tuition or loan payments in return for 300 hours of service to the community.

GRCC MSS students staffed the Southeast Community Association KCTCC VITA (Volunteer Income Tax Assistance) site.

Community Impact:

4 students served 1200 hours for a community impact value of: **\$22,524**

\$50,939 was returned in tax refunds at the SECA site
(including **\$24,228** in Earned Income Tax Credits)

Total GRCC ASLC Programs Community Economic Impact:

\$362,183

*Annually, the Independent Sector calculates the value of volunteer time. This has become a nationally recognized standard for non-profits to calculate the value of their volunteer labor and most colleges and universities use this figure as well. More information at:

http://www.independentsector.org/programs/research/volunteer_time.html.

Appendix D

Food Service Report (2006-2007)

The entire food industry is actually reorienting to be more sensitive about the environment with discussions about supporting local foods, "greening" our disposables and paying attention to our carbon food print.

I am proud to say that Creative Dining Services has been very aggressive at trying to be more conscious about these things as well. It has actually been a very hot topic and the focus point of our last quarterly manager's meeting.

We were originally restricted by contract to go through Gordon Food Services for all of our produce and vegetables. It was also much more economical for us. Trying to find the balance between what is *right*, and what is economically feasible is an issue that I have struggled with over the years.

The purchasing restrictions have been lifted and we are currently going through Tom's Produce, a local produce and dairy distributor that works with local farmers to provide seasonal vegetables when they can. We now purchase approximately 90% of our produce through Tom's. This will shift to some degree as the season ends in Michigan and we have to look to other climates for our produce. Customers still want their fresh fruit cups, salads and stocked salad bar.

We have also switched to Nickle's Bakery based out Ohio . However they have a bakery that we get our product in Kalamazoo for most of our general use breads.
<http://www.nicklesbakery.com/>

We use Little Rooster Bread Co.'s Organic Breads for our panini's and grab-and-go sandwiches. They are based right here in Grand Rapids. <http://www.littlerooster.net/>

We get our bagels from Great American Bagels based out of Holland.
<http://www.greatamericanbagel.com/>

Our Turkey comes through the Michigan Turkey Producer's here in western Michigan.
<http://www.miturkey.com/>

We switched our coffee in the Quiet Cafe from Starbuck's Coffees to Schuil Coffees based here in Grand Rapids.
<http://www.schuilcoffee.com/>

I have attached Creative Dining's most recent Purchasing Guidelines for Local Purveyors.

Thankfully with growth in the education of the public and growing customer base of concerned consumers, the suppliers have responded with a lot of new options in

packaging. Now that it is more available we have switched over 70% of our disposables to these more environmentally friendly products. The attached pamphlet from GFS explains the items more clearly than I can. Each of the highlighted items are items that we now use, replacing the original poly-styrene and oil base plastics.

There are other items that we are waiting on to add to this list that they showcased at the manager's meeting last week that are not yet available including replacement packaging for the Styrofoam stir-fry containers, current plastic utensils and possible soup cups and bowls.

Over the summer we also switched our sandwich packaging from hinged plastic containers (1.25 oz of plastic) to cellophane bags (.0625 oz of plastic) and switched from the plastic box lunch and to go hot sandwich boxes in the Quiet Cafe packaging to paper boxes.

I would be more than happy to meet with you to discuss any further suggestions that you may have to help us strive to be greener or clarify any of the things I have listed above.