Summary of Sustainability Plan Visioning

Ideas come from Visioning Conference results, February 13, 2012, and from Spring Conference session, May 4, 2012. The question was asked, "What is your vision for Lane in the year 2050?"

Education

Sustainability as an Interdisciplinary Educational Imperative

Lane as training center for sustainability

- Sustainability training is
  - out in front, immediate,
  - required as a core class,
  - pervasive (Infused into all classes)
  - connected to the community
  - and relevant to the world of 2050
- Students learn
  - skills needed for the future.
  - root causes of unsustainable human behavior/systems and the potential for changing these.
  - how to create an energy-decent world
  - how to change their world and make it more sustainable.
- Lane is a leader in sustainable entrepreneurial learning and sustainability social innovation
  - Mentoring: sustainability in the informal culture
  - Influencing culture through education
- Lane's students influence the local community, state, nation, world in sustainability
  - Lane's sustainably trained students influence
    - Other community colleges
    - Universities
    - Grade schools
    - High schools
    - Corporations
    - Cities
    - States
    - Nation
    - Other nations

Getting from here to there. How do we achieve this?

- Learning approaches
  - Lane incorporates environmental and place-based learning into its curriculum for each student, using ecological and permaculture model s, not a business model.
  - Some project-based courses that focus on addressing sustainability needs at LCC

    - Values – build into education system
    - Teaching people to be sustainable in their own thoughts and actions will help change society as a whole.
    - Start using different words—steady state or better. Financial sustainability and entrepreneurial are based on growth.
    - Use natural landscape surrounding campus for natural learning laboratories
    - Interconnected interdisciplinary
        - Vertical integration
        - Learning communities
        - Policy changes
        - Done in a manner sustainable for people
        - Commitments
- Programs
    - Each program has a class that explains how the program or discipline plays a role in sustainability
- Study is integrated with operations
    - Paid internships with different aspects of operations
    - Students can test ideas and generate new ideas
    - Students create equipment
- Signage
    - Aggressive community educational signage (interdisciplinary)
    - Interactive educational on-campus conservation and sustainability-related displays and signage utilize department collaboration
    - Signage everywhere on campus, multilingual, in basic accessible language
- Sustainability graduation requirement includes
    - Environmental justice
    - Economic justice concepts taught as a component of critical thinking
    - Concept and practice of voluntary simplicity
    - Internship in a sustainability related activity including
        - Infrastructure
        - Landscape
        - Food resources
        - 4 R's refuse, reduce, reuse, recycle
        - Education at Lane and elsewhere
    - Where do things come from
        - Understanding not only the downstream cycle but also the upstream.
        - Where does your water come from?
        - Where do your products come from?
    - Where do things go?
        - Education around recycling
        - Campaigns – the other R's. We have recycling on its way, let's now focus on reduce and reuse
- Learning connects outside of Lane
    - Curriculum/courses are relevant to the world of 2050
    - Community co-op connections are extensive

- International exchanges: students, faculty and staff occur frequently

Balancing E-Learning with Hands-On Learning (kinesthetic)

E-learning

- E-learning to reduce commuting and create more access
- E-learning – what will it be in 2050?
- Evaluate e-learning benefits and drawbacks, maximize benefits, minimize drawbacks

Emphasize kinesthetic learning

- Minimizing paper learning, maximizing hands-on learning
- Reduced stress assessment techniques

Ecological

Adapting to future climate, economic, and social challenges

Things will have changed – systems will be different, rare metals depleted? World more localized.

- Lane has anticipated most future climate, economic and social challenges and taken steps to minimize negative impacts and to benefit from positive impacts, has taken a challenge and turned it into an opportunity
- Solid, storm-proof (yet beautiful) structures
- Self sufficiency at community level
  - Self-sufficient food supply (enough to help the needy off-campus); grow our own food
- Sensible economic structure so people's personal finances benefit
- Permaculture model – transitions towns

Net Energy Exporter

Conservation and efficiency

- Conservation and efficiency reduces a large percentage (how much?) of our energy and water requirements
  - Inducements for conservation behavior. Behavioral investment: consumption down
    - Tuition effects behavior = agreed energy savings
    - 1° cooler = rebate award, reduced tuition/ book credit etc.

Better than net zero

- Better than net zero(we produce more energy on campus than we need)
  - Sales of excess energy help support sustainability programs
  - Investment in initial infrastructure
  - Revolving sustainable fund – reinvestment

All campus activities powered by alternative energy

Types of power

- Solar power
- Geothermal energy
- Wind power
- Local micro hydropower
- Human power

Getting from here to there. How do we achieve this?

- Solar collection – panels on all buildings
- Workout facility to generate energy
    - Every student can contribute a little at a time – 1 Whr at a time or tredmills
- Standing/walking work stations and computers powered by the user

Cradle-to-cradle commitment

Cradle-to-cradle policy

- All units at LCC produce zero waste – closed loop, products/furniture are recycled material or cradle-to-cradle certified

Getting from here to there. How do we achieve this?

- Needs strategic guidance document – similar to climate plan for purchasing/product use
- Report cradle-to-cradle impact for every degree or every class. Help instructors make choice to lower their rating.
- Know what you're committed to before starting a project
- Purchasing system: vendors get points for being cradle-to-cradle. We display labels
    - Partner with manufacturers – get grant $ to help pay higher cost (cost will go down as more people adopt.)
    - Require life cycle costing for all major purchase decisions
    - Approved vendor lists – don't buy from vendors who refuse to commit
    - Policy – manufacturers must take back every product
- Community colleges nationwide band together to demand cradle-to-cradle and create economies of scale

Natural, non-petroleum-based materials

- Natural materials: cloth, wood, ceramics instead of oil-based products; reusable

Getting from here to there. How do we achieve this?

- Policy: stop selling petroleum-based plastic

Reduce

- Refuse, reduce natural resource use, reuse, recycle

Composting facility on campus

- Compost collection is in every staffroom and hallway

- Shredded paper from the recycling bins be composted
- Worm farming

Reusing products/materials

- Reusing as many reusable items as possible
- Use re-purposed, refurbished products
- Create refurbished products; student work or training?
- No throw away cups/dishes/eating utensils, everyone packs their own
- Sustainable paper and clothing use and making, like hemp
- Have LCC reusable bags, "Chico" bags, in the bookstore.

Getting from here to there. How do we achieve this?

- Find a way to let public buy unwanted products from Lane (legal obstacle?)
- Develop technology to recover materials.
- Computer students interning at Bring to earn their computers

Recycle

- Recycle, enforcement of recycling
- Keep local – on-site make recycled paper
- Downcycle, upcycle

Landfill

- Make sure only trash (hopefully none) goes to the landfills and other things that don't belong there don't get there
- Landfill mining for what we really need.

Climate-Friendly Transportation or Eco-Transportation

Public transportation, Rapid and new transit

- More public transportation; eliminate cars
- Solar-powered electric bus
- Tram, sky tram or sky rail, electric monorail run on solar power
    - Sky rail from Lane to downtown center
- Work with LTD to increase bus service and improve its efficiency
- Get rapid transit routes to Lane and cheap

Vehicle availability

- WeCar, zip car
- Advertize emergency rides to encourage more people to take alternative transportation
- Vehicle loan to employees or commuters

Electric vehicles

- More or only electric vehicles with facilities to manage them

Getting from here to there. How do we achieve this?

- Encourage full electric car usage
- Motor-pool vehicles – projects for auto tech program

Bikes

- Work with city and county to get improved bike routes to Lane
- Improve bicycle access for students by initiating a bike loan program
- Bike taxies

Getting from here to there. How do we achieve this?

- Safe bike routes with safe lanes including over 30th Ave.
- Connected bike paths between LCC campuses (City/LCC)
- Campus borrowing or renting area for bikes, equipment (panniers, baskets), better facilities for bicyclists
- Work with LTD, EMX to help bicyclists get up the hill
- Storage space for bikes and bike gear (helmets, etc.)

Reduce parking

- Research what other schools have done that have no or very little on-campus parking
- Incentivize bussing and biking by charging for parking and offering free bus passes and free loaned bikes
- Begin removing parking lots and replacing them with organic food gardens
- Rethink parking lots

Ride sharing

- Rideshare easier

Preserve and create natural systems

Landscape– a sense of beauty and nature

- Landscape is all native and edible
- Reduce hardscape, more green plants, trees, planted pavement, permeable pavers and permeable pavement
- Physical campus is fully integrated into the local biosphere; think in terms of watershed to preserve natural spaces
- Biking and walking paths around natural and built areas of campus including lagoons

Getting from here to there. How do we achieve this?

- Incorporate native landscapes around edible gardens
- Incorporate agro-ecology into parking lots (a mix of trees, herbaceous shrubs and perennials that produce shade and profits (floral, nuts, flowers), benches and mini-parks in parking lots
- Tree plantings around lagoons
- Break up pavement or drill holes into pavement and sidewalks for permeability
- Incremental projects utilizing broken concrete for other sustainable structure or art (sell to local artists or for concrete counter tops)
- Utilize work study groups to do work and maintenance

Wildlife

- Research the needs of threatened and endangered species and wherever feasible, develop suitable habitats for them on campus
- Care for wildlife neighbors – habitat

Water

- Net zero water – rainwater – purify and reuse – make processes visible
- Collect rainwater from as many buildings as possible
- Gray water for landscape through bioswales applied below surface
- Rainwater or gray water used to make products
- Managing all our storm water
- Lagoons become habitat and places for people
- Lane is the Water and Energy College
- Irrigation from rainwater

Getting from here to there. How do we achieve this?

- Filter storm water as closed to source as possible
- Rainwater catchment recycling, piping with mini turbines, rerouted into water for restrooms, landscape watering
- Rainwater retrieval/toilets
- Rainwater systems that are small (i.e. washing paint brushes, maintenance to wash shovels, mechanical cooling)
- Closed loop water mechanical cooling systems (with rainwater? As makeup water)
- Collaboration between shop department and art department and science departments to make system and processes visible, educational, aesthetically pleasing
- Plant vegetative areas to promote filtering, absorption, and slowing storm water runoff.
- Construct bioretention rain gardens to filter storm water and add campus aesthetics
- Implement better use of current bioswales by deepening them and planting more native plants into for better filtration
- Utilize better contour plantings on slopes around campus
- Native plants (aquatic and terrestrial) planted in and around lagoons. Birding signs for lagoons installed. Benches put in place

Policy and Building Standards Changes

- Solar energy master plan; update it frequently
- Natural buildings (cob, etc.)
- Energy efficient upgrades
    - Annual plan
    - Building energy use index
    - Set up “budget” for each building
    - EUI - Energy use /square foot
    - Insulation upgrades to existing buildings
    - Set t-stats higher/lower
- Use best sustainability standards for new buildings; new buildings use less energy, less water

- Minimize new buildings, retrofit old buildings
- Eco district self-supporting infrastructure
- Upgrade buildings with 20 or 30-year payback (LCC will probably still exist in 30 years so if a project will pay itself back in 20 years due to energy or other savings then it makes sense to do it)

Embracing Futuristic Technologies that Are Sustainable

- Pilot programs
- Lifestyle changes through visual example
- Announcing energy's use today
- Real-time counters of carbon and energy
- Interactive tools, technology

Getting from here to there. How do we achieve this?

- Embrace futuristic technologies – Through education and incentives
- Lifestyle changes/ conservation consciousness
- Smart metering to show current or recent usage

E-Learning

The Uncampus

- E-learning, e-working, no buildings no commuting
- Online/telecommuting to work

Getting from here to there. How do we achieve this?

- Support telecommuting for students and staff

Electronics to reduce resource use

- Open source education framework
- Paperless – all electronic, analyze tradeoffs
- Going paperless
- Electronic tests

Getting from here to there. How do we achieve this?

- Secure e-forms
- Ability to recycle/reuse hardware
- Insure electronics have cradle-to-cradle requirements

New appropriate technology

- Carbon-silicon memory: transferable
- New un-imagined (in 2012) technology
- More electronic books; cheaper, reusable

Getting from here to there. How do we achieve this?

- Pick up pace on adopting new technology
- Life cycle costing, e.g. "What's the long-term cost of this?" and include environmental costs

- Address the social justice issues of production of technology
- Consider "commons" approach for tech use
- Design purchasing processes for the future we want: 1. least toxic, 2. Up on tech
- 1st least toxic; then not toxic; finally: Improves health

SOCIAL

Healthy Spaces and Choices

Outdoor spaces

- More outdoor classrooms (and classes) – positive health benefits
- Outdoor eating, hanging out, meeting areas

Getting from here to there. How do we achieve this?

- Watershed council (knowledge-based programs)
- Partnership with master gardener program- OSU extension
- Gazebo/seating by creek, Frisbee golf course…

Agriculture culture

- All parking lots are now garden areas; we feed LCC and sell/trade to community
- Permaculture
- Campus community gardens

Getting from here to there. How do we achieve this?

- A landscaping program with a certification earned, whose students work with the composting program and local schools' composting gardening programs to learn/teach green landscaping services so our local landscaping maintenance companies are greener operations
- Requirement for students to work at college including the garden or with local farmers
- Align education programs with high schools and middle school gardens with LCC agriculture education
- Child care center garden curriculum
- Partnership with master gardener program- OSU extension

Living Healthy Buildings

- Architecture supporting human interaction
- All buildings have green walls, hanging garden and green roofs
- Bio-cleaning systems for air and water "living buildings"
- Increase windows on all buildings that can be opened for ventilation and create courtyards in the middle of buildings for better lighting, ventilation, connection to the outside and aesthetics

Getting from here to there. How do we achieve this?

- Natural lighting in every space (day-lighting), Lighting retrofits
- Fish tanks
- Plants in buildings including classrooms

- Music
- Vertical rain gardens on every building
- Create hanging edible gardens in lattice arbors around campus

Campus as learning laboratory

- Buildings and spaces as learning labs
- Transparency – visible systems—energy, stormwater/wastewater, etc.

Healthy Eco-friendly Food

- Food services – impact of our actions on the healthy choices of our students (example: not selling bottled water)
- Food services –sustainability focus
- Food services –consumer demand at Lane (affordability)
- Grow all our own food served on campus, including dairy, meat, grains, etc.
- Eco-spa hotel with homegrown food
- Sustainable farms
- Permaculture
- Bristow Square is a food garden
- Vegan food services

Getting from here to there. How do we achieve this?

- Storage and preservation
- Promote campaign regarding healthy/sustainable eating
- Purchase produce, dairy, meat, etc. from local farmers or grow on campus
- Purchasing farmland nearby college
- Expand restaurant hours and serve food grown here
- "beer garden" grow hops, classes on brewing, sales/business classes in brewing
- Establish and support more community farms outside LCC campus area

Fitness availability

- More, better waking, running, biking paths
- Free yoga/tai chi classes
- Free fitness – open gym
- P.E. credit for working in garden

Social needs

- Cultural (multi) center, virtual and built, on site
- Social equity, empowerment of communities
    - Behavioral investment: consumption down, equity up
- Institutional policies and identity promoting, staff, student, community centered learning about each other's cultures
- Activities retreats (on campus)
- More environmental and economic justice for students

Libraries

- Tool library
- Resource library
- Hotline--Practical skills for living
- Service exchange

Localization

- Bioregionalism; Self sustaining within the bioregion
- Resource base from community
- Transition town
- Permaculture

Community trust

- Education or community trust – new way to conceptualize property, neither public nor private

Coordinate with local community, state, national, international

- Fully integrated sustainably with Cities of Eugene and Springfield, with Lane County, State of Oregon
- Community outreach and involvement that has developed social equity and environmental justice in communities surrounding LCC
- partnerships
- Community/state/national/international partnerships, internships and study/work abroad
- All Lane County population to be involved in recycling
- No more plastic or paper bags at grocery stores in Lane County
- No more bottled water in Lane County

Getting from here to there. How do we achieve this?

- Students are empowered to change their world and make it more sustainable
- Coordinate plans and have internships available with Cities of Eugene and Springfield, with Lane County, State of Oregon
- Provide leadership in sustainability, demonstrate sustainability
- Research in social equity and environmental justice in communities surrounding LCC
- Business in city/county can be persuaded that we can be partners, more community education/internships
- Possibly have students/interns actually go out into communities to pick up recycle items especially for those that live outside the city limits
- Strengthen ties to local community – intern at local schools
- Computer science students – current ties to Bring
- National/international societies around the world – what have other societies used from our waste? Learn from them
- Partnerships with schools, colleges, universities UO, OSU, PSU…

Put the "Community" in Community College

College as community

- How to make the "organism" non-hierarchical?
- We create art, music, theater, knowledge
- Lane as sacred learning space and we, staff/students, are all caretakers
- Social behaviors – everyone's ideas and genius is accepted. We all feel positive for it to work
- Treat it like a village where we live
- Deep sense of connected community of people (students, teachers, staff) being their true, complete selves and having fun!

Getting from here to there. How do we achieve this?

- Continuing education classes

Beyond the college

- Society is totally redesigned for basic needs
- Self-sufficient food supply (enough to help the needy off-campus)

Needs met

- Every person here feels safe, connected and valuable
- Social, work, and play
- Sustainable workload for students, faculty, staff
- Good work is rewarded
- All our basic needs are met: health care, family time, shelter, food, safety
- Emotional intelligence and wellness: nonviolent communication, empowering and inclusive and connected economic system that is restorative rather than consumptive and divisive
- On-campus wellness practitioners and services, including massage…
- Redefine what we really need! I.e. clean air and water, social connection vs. cell phones!

Diversity

- Cultural diversity is a given; everyone is educated about diversity
- Marginalized groups have a place among us (within boundaries)
  - Incarcerated
  - Homeless
  - Hungry
- Increase diversity by celebrating local heritage
- Human resources

Getting from here to there. How do we achieve this?

- One-place directory of all "people services": catalog, electronic
- Campus-wide social networking (forum)
- Personal commitment declared as condition of enrollment – I commit to:…
- Volunteerism to create community and get things done = win-win; or maybe required "community service" at LCC

- Have parties! Celebrate! Need good gathering spaces: homey, comfortable
- Make a personal commitment to sit with someone you don't know – make it part of our (LCC) culture – to create community
- Restore, rest, work, time

Economic

Economic and Social Access and Equity

Equity

- Decision equity with educators
- Sustainable Equitable Governance
- Equity among all people at Lane

Getting from here to there. How do we achieve this?

- Equity training for students, staff, faculty
- Students, staff, faculty, part-time, full-time hierarchical and equity issues addressed

Economic access

- Students graduate without debt
- Free LCC education

Getting from here to there. How do we achieve this?

- Students are required to participate in all working college activities in exchange for tuition, or work exchanges for students who need access
- We offer all our classes free to the community on-line. You pay if you want credit.
- Increasing school availability to more students through local funding streams (tax systems? Minimized costs)

Economic sustainability

- Campus provides local economic sustainability by paying all employees full-time living wages
- State of Oregon pays for education to happen! Fiscal sustainability
- Economic sustainability
  - Farmers markets
  - Student businesses
  - Student internships
  - Service learning on campus
  - Booths, Fairs
  - Trade
  - Classes for trade
- We have a sustainable work ethic that balances rest, restore and work (sustainable work load)
- Institution faculty staff study
- Recycling profits gained from innovation → to go into new sustainable projects
- Restoration economy

- Lane builds the economic base for state funding – the money gets recycled back to Lane from taxes from successful people who were educated at Lane

Social and Economic Innovation

- Lifestyle changes
- Many cooperative relationships to share programs in the community
- "exchange" inst's or students sharing their sustainability knowledge
- Partner with local businesses
- Involve/invite local green businesses
- Barter, trade instead of money – facilitate learning and trading, crafts …

Getting from here to there. How do we achieve this?

- Focus on developing innovative sustainable economic system
- Imagine trade/barter economic system
- Sweat equity education → on campus/ service learning opps. → tap into existing skill sets
- Entrepreneurial opportunities
- Building interdisciplinary certificates/program ê
- Balance workforce develop focus with developing cottage industry entrepreneurs
- Facility functions and classes meeting all aspects

Implementation Strategy Summary

- Sustainable behavior contract upon registration. A contract
- Required sustainability class with on-campus internship
- Low-impact development and preservation of natural systems
- Mandate/incorporate, encourage bilateral/interdisciplinary classes jointed projects geared to sustainability
- Surveys and data collection from LCC community at large. What do they think of these ideas?
- More interdisciplinary learning