

2008

DACUM Panel

Gretchen Garth, President, 21 Acres Farm

Noa O'Hare, Farm Program Manager, Pike Place Market

Mary Embleton, Executive Director, Cascade Harvest Coalition

Mark Musick, The Tilth Foundation

Brad Goalach, Director, Washington State University King County Extension

Todd Murray, Faculty, Washington State University King County Extension

Laura Niemi, Garden Programs Manager, Seattle Tilth Association

Mark Musick, The Tilth Foundation

Seattle Central Community College

Rebecca Hartzler, MA, Interim Dean Science & Mathematics

Grace Sparks, PhD, Faculty, SAGE PI

Katie Gagnon, PhD, Faculty: SAGE Co-PI

Jason Niebler, MS, Faculty; SAGE Project Manager

Consultants

Dr. Rick Parker, Director and Co-PI

Deb Klopp, Curriculum Specialist

AgrowKnowledge

DACUM

Urban Food Systems Technician



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Conducted by:

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The National Center for Agriscience & Technology Education

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DACUM: Urban Food Systems Technician

Preliminary Observations

Small businesses: Farming, Agriculture, Nursery: one of the biggest growing industries in the pacific northwest. There's a lot of room for entrepreneurial or self-employed work in the future of this field. Focused towards entrepreneurs, students at SCCC are often of diverse backgrounds and may have a lot of life experience coming in.

Seattle Central Community College is submitting a proposal to the NSF for a \$150,000 project grant. A pre-proposal for the grant was submitted and received favorable reviews. Their full proposal is due October 15, 2008 and pending approval funds will be dispersed May of 2009.

AgrowKnowledge worked with SCCC, assisting them with the design and hosting a Planning Institute and DACUM in an effort to build relationships with their constituents and to gain information to respond to the pre-proposal reviewer comments.

A modified DACUM process was used to determine the types of jobs and workers that could be prepared using the broad position description of Urban Food Systems Technician.

The DACUM served as an opportunity to flesh out specific duties, tasks, knowledge and skills that DACUM participants believe should be expected of graduates earning Associate of Arts and/or Associate of Science two-year degrees entering the workforce.

Direct follow-up with specific businesses, organizations, and other community employers will allow SCCC to refine and sequence the Duties and Tasks and incorporated the specific science, math and technology skills required to perform jobs in this growing workforce area.

Technician Jobs

Associates of Arts (2 year)

Food Processor
 Entrepreneurial
 Value-added businesses
 Produce Manager
 Food markets and brokers
 Charlie's
 OGC
 Restaurant business
 Chefs collaborative
 Bon Appétit
 Third party farm certifications (organic, food alliance, salmon safe)
 Events manager
 Seattle Urban Farm Cco.
 Garden Educators
 School Gardens
 Youth Gardens
 Greenhouse Manager
 Volunteer coordinator for farms
 Non-profits (Tilth, CHC, WSFFN, F&E, Community to Community , 21 Acres, Sunfield)
 CSA manager
 New Farmer
 Market Manager
 Urban Farm Manager
 Farm Education/Program Coordinator
 Ag Supply Retail
 Real Estate
 Farmers Market worker
 Extension Conservation District (program assistant)
 Local government
 Peace Corps

Beyond AA

Food distribution
 Irrigation Specialist
 Food Safety
 IPM specialist
 Ag consultant
 Community Gardens Coordinator
 Institution / restaurant food procurement
 Forager (schools to farm)
 Broker (farmer to wholesale)
 School "food learning lab" manager/ aide

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DUTIES

TASKS

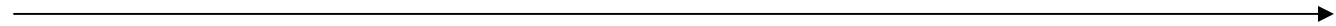


Manage Land & Production Resources	A1 Operate greenhouse	A2 Manage soil, water, and pest-control	A3 Identify and diagnose soil, plant and livestock problems	A4 Safely operate and maintain scale relevant tools, equipment and technology	A5 Propagate, harvest, maintain local and seasonally appropriate plants and livestock
	A6 Manage post-harvest products	A7	A8	A9	A10
Read & Interpret Technical Data	B1 Identify problems and provided solutions	B2 Assess land and resource, including energy audit	B3 Identify and comply with applicable city, state, and federal laws, programs and policies	B4	B5
	B6	B7	B8	B9	B10
Perform Business Management Tasks	C1 Recruit, lead and manage staff and volunteers	C2 Develop and maintain budgets	C3 Create marketing and promotional materials, including website/blog and newsletter	C4 Evaluate programs	C5 Identify and acquire on-going sources of funding
	C6 Perform market research	C7 Records management	C8	C9	C10

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DUTIES

TASKS



Educate & Inform Constituents	D1 Bridge urban and rural markets	D2 Develop cultural awareness to the groups for which services are provided	D3 Gather and prepare educational materials	D4 Educate consumers about food and growing systems	D5 Work with youth, school gardens, neighborhoods, Funders, and communities.
	D-6 Engage the community in food production	D-7	D-8	D-9	D-10
Develop & Enhance Stakeholder Relations	E1 Respond to customer needs (adjacent landowner, private citizens, industries and organizations)	E2 Maintain effective interpersonal relationships	E3 Maintain and enhance relationships between disciplines and other agencies	E4 Identify and respond to stakeholder needs and concerns	E5 Attend and participate in local and regional meetings
	E6 Represent and promote the organization	E7 Communicate effectively using appropriate media	E8 Conduct outreach	E-9 Use diplomacy in interactions with governmental agencies	E-10
Conduct Systems Assessments	F1 Identify systems components and interactions	F2 Understand applicable legal and city code.	F3 Participate in training; obtain and then maintain appropriate certifications	F4 Map system flow using technology tools (i.e. GIS/GPS, LabQuest etc).	F5 Identify relevant licenses, and obtain those need to carry out responsibilities
	F6 Develop a strategic plan	F7	F8	F9	F10

DACUM: Urban Food Systems Technician

Acronyms

ABE - Adult Basic Education
ATTRA
BURSST - for Prosperity (Burien, Renton, SeaTac, Skyway, and Tukwila)
CAO/SAO
CFSFC
CSA: Community Supported Agriculture
CSREES: Cooperative State Research Education & Extension Service
CTED
CUH: Center for Urban Horticulture
DDES
DNR: Department of Natural Resources
DNRP
DOE: Department of Education
EBT
EPA: Environmental Protection Agency
ESL: English as a Second Language
ESRI: Environmental Systems Research Institute, Inc.
FSNEP-funds
GIS
GMA
GPS: Global Positioning Systems
HCCP: Health Control Critical Points
IPM
KCD: King Conservation District
KCFFCI
MPC
MSDS: Material Safety Data Sheets
NEPA : National Environmental Protection Act
NSF: National Science Foundation
OGC
OSPI
PCC
PPM
QAQC
SAGE: Sustainable Agriculture Education
SAM
SARE: Sustainable Agriculture Research & Education
SCCC: Seattle Central Community College
SCCD
SFC
TESC: The Evergreen College
USDA: United States Department of Agriculture
UW: University of Washington
VESL: Vocational English as a Second Language
WLRD: Water and Land Resources Division
WSDA: Washington State Department of Agriculture
WSU: Washington State University
WWJD

Tools, Equipment, Supplies, & Materials

Hardware

LabQuest
GIS/GPS Hand-helds
TI-84

Software

Microsoft Office (Word, Excel, PowerPoint, and Access)
Arc GIS
ArcPad

Equipment

Soil/water probes
Post-harvest equipment
Scale relevant tools and equipment (production, pest management, weeds, soil, seeding, livestock)
Greenhouses and other smaller scale season extenders
Irrigation
GIS/GPS
Weather/climate data collection
Composting equipment
Welding and construction equipment
Bio-fuel production
Basic office equipment (databases)
Value-added food processing (fermentation, preservation for plant and animal based products)

Licenses/Certifications

Master Gardener
Organic Certification

Work Behaviors

Hard worker, ambitious and self-directed
Good communicator both verbal and written
Willing to work outside in inclement weather
Ability to work independently and as a part of a team
Comfortable giving presentations
Organizational skills
Ability to get along with a wide range of people
Planning (production schedules and field plans)
Physically-fit to meet work demands
Commitment to social justice and knowledge of food systems issues
Pass drug and alcohol test
Dependable

Future Trends and Concerns

- Loss of experienced personnel due to retirements, reorganization, budget restraints
- Expanding job opportunities
- Movement toward entrepreneurial enterprises
- Technology application
- School gardens
- K-12 curriculum
- Race and social justice initiatives = equality in access to fresh local culturally appropriate foods
- Global food system – push back, opposition, acquisition
- Urbanization, population growth around Puget Sound
- Immigration
- Food policy council initiative
- Awareness of urban food security issues
- Emergencies (natural disasters), budget cuts
- Regulatory changes - continual updating, responding, and documenting actions

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