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Green Careers and the Community College: Embrace the Possibility

Irene L. Diritsky, MSSA, LISW-S¹

Abstract: This article identifies emerging green themes and describes the green career paths that exist for students who have completed community college level coursework. It also explores the green employment opportunities, future trends, job titles, and salary ranges expected in these positions. It questions the community college's higher education role, especially going beyond sustainable declarations with national organizations, incorporating green certificates, and becoming a leader in providing sustainable education.

Keywords: community college, sustainability, green careers, associate degree, green certificate

“IT ALSO EXPLORES THE GREEN EMPLOYMENT OPPORTUNITIES, FUTURE TRENDS, JOB TITLES, AND SALARY RANGES EXPECTED IN THESE POSITIONS.”

Nationally and internationally, non-governmental organizations, foundations, industries, governmental associations, and public and private companies are in need of environmentally literate employees (McFarlane & Ogazon, 2011). Higher education can be instrumental in developing environmentally literate leaders for today and the future.

Universities have taken the lead in offering sustainable curriculum, whereas community colleges have been slow to participate. The high cost of energy, as well as consumer pressures to be environmentally responsible, has challenged companies and organizations to look for more affordable and sustainable practices. Companies are implementing these sustainable measures, to increase profits, cut

costs, help manage risks, improve public reputation, meet changing regulations, retain employees, and contribute positively to the community (U.S. Department of Labor, 2012).

Finding data about existing types of sustainable career paths and jobs remains challenging. Many sustainable jobs do not post under the heading of *sustainable* because green job components exist but are not the main focus

(Wright, 2002). Others jobs are easily identified with titles such as Sustainability Manager, Environmental or Industrial Managers, Recycling Coordinators, and Civil Engineers. This lack of clarity in green job titles contributes to the confusion colleges and students encounter when trying to find a green career path and job. Some companies employ a sustainability

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Table 1. Typical Green Occupation Areas, Job Titles, Education Requirements, and Median Salaries.

Green occupation areas	Specific job titles and education requirements	Median salary (US\$)
Bio-fuels: Consist of taking raw materials and making fuel from corn oil, and so on	Lab technician: Associate Degree	49,920
	Construction management: Associate Degree and experience	100,000 33,440
	Construction equipment operator: Associate Degree/training	49,060
	Plant operators: Associate Degree and Safety Training Certifications	
Green industry: Include growing plants and horticulture	Urban forester and plant curator: Horticultural Degree	37,000
Wind energy: In the field and jobs in factories, building and the assembly of turbines	Engineering technician: Associate Degree	50,130
	Electricians: Associate Degree	48,800
	Wind turbine service technician: 1- to 2-year degree program	40,000
Geothermal energy: Utilizes the earth's natural heat to provide base load power	Construction manager: Associate Degree in Engineering and Business	95,630
Environmental remediation: Cleaning up pollution from industry, pesticides/fertilizers, and return to the original state	Construction manager: Associate or Bachelors Degree in Construction Management	89,920 45,720
	Environmental science and protection technician: Associate Degree in Physics or Biology or Chemistry	41,620
	Chemical technician: Associate Degree in Chemistry	
Sustainability: Responsible use of resources so there are enough in the future	Logistic technicians: Associate Degree	71,910
	Industrial production: Associate Degree in sustainability and management	88,190 95,000
	Operations manager: Associate Degree	
Recycling industry and practices that decrease waste	Route manager: Associate Degree and experience in transportation	67,720
Electric vehicles: Production and maintenance of vehicles	Engineering technician: Associate Degree	52,950
	Engineering drafter: Associate Degree	53,840
	Automotive service technician: Associate Degree	33,010
Solar power: Harnessing sunlight	Engineering technician: Associate Degree in Engineering	51,060

Source. U.S. Bureau of Labor Statistics (2012).

professional, whereas others train existing employees or hire consultants to complete certain projects and practices. New types of green equipment, procedures, materials, and tools are needed. Industry stakeholders seek people with education, training, and experience, along with credentialing for the green labor market (U.S. Department of Labor, 2012-2013).

What are the main green career areas? According to the U.S. Bureau of Labor Statistics (2012-2103), 10 typical occupational areas are green-based, 9 of which have

specific job titles, educational requirements, and median salary range (see Table 1). The 10th occupational area, Energy Auditors, inspects buildings for leaks and energy waste. The U.S. Department of Labor did not provide this occupation's specifics, so it is excluded from the table. Within the 10 occupational areas, there are 20 specific job titles, demonstrating the viability of sustainable programming at the associate degree level.

Universities have incorporated green components in their mission statements, general education

requirements, and sustainability degree programs (Shephard, 2010). Although many community colleges have signed a national declaration incorporating institutional policies of sustainability, they have not incorporated greening at a curriculum level. Could recruitment and retention issues, financial limitations, an outcomes focus, lack of inquiry and service-based learning, and lack of faculty training and values be an issue? Community colleges have faced many financial challenges, including a reduction in federal monies as well as new rules on providing graduation rate tracking and outcomes. Certificates often have limited enrollment and federal financial aid monies, leading to problems with cost, retention, and poor outcome rates. There is a way to increase retention in a certificate program: Develop the certificate so it becomes applicable (interdisciplinary curriculum) to the 20 career programs/employment areas. Certificate courses could thrive in an online format if they encompass all of the green career paths. The working student could have access to new sustainability-based educational certificates. Students from around the world could enroll, learn and network with other students in an online course format which would teach sustainability concepts specific to their career area.

By utilizing inquiry and student centered/driven curriculum, students will incorporate green employment practices, using the soft skills of social justice, citizenship, and leadership. Community colleges can start greening the curriculum by incorporating sustainability into their mission statements, providing the impetus for change at the student, faculty, and administrative level. The green career paths and employment opportunities for associate degree students exist and will only get better as we move forward in a world challenged to develop sustainable resources and practices. Community colleges need to

recognize and embrace this socially responsible and lucrative opportunity to provide new and future-oriented curriculum that will directly benefit the community and planet.

Conflict of Interest

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