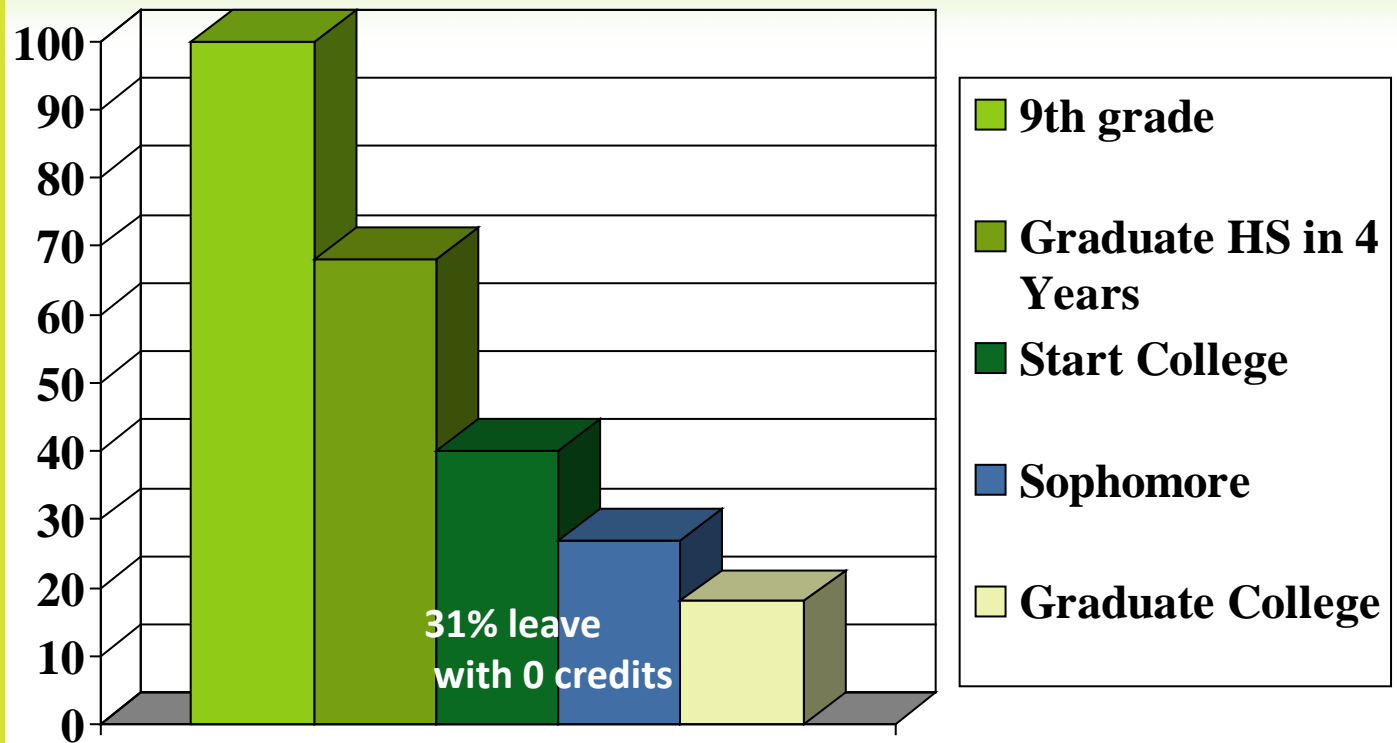


CAREER CLUSTERS & GREEN CAREER PATHS

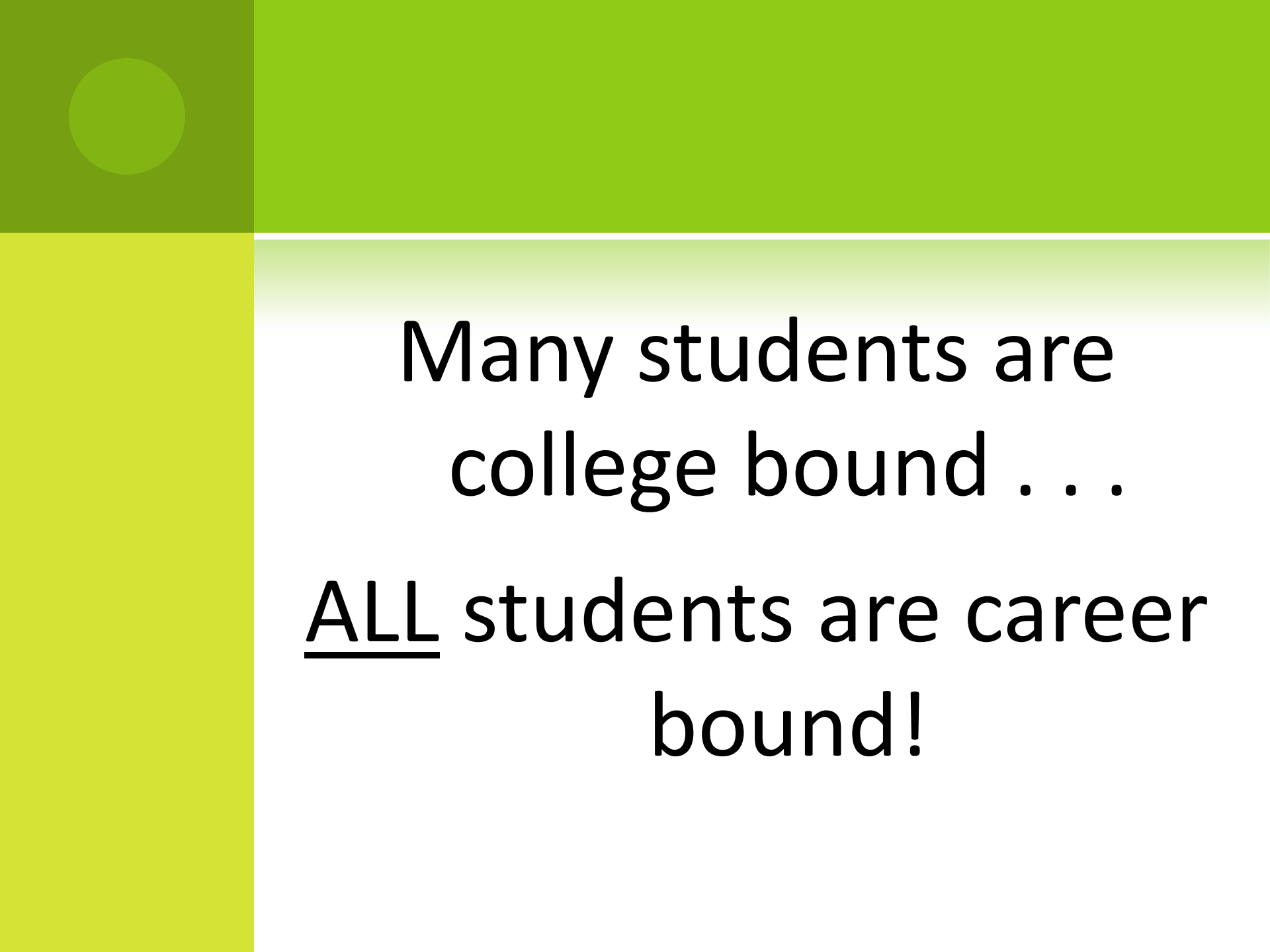
Marie Z. Hall

Kansas State Department of Education

TRANSITION FROM HIGH SCHOOL THROUGH COLLEGE



SOURCE: EDUCATION WEEKLY MARCH 2005



Many students are
college bound . . .

ALL students are career
bound!

WHAT ARE CAREER CLUSTERS?

- ◎ Career Clusters are groupings of occupations and industries
- ◎ These groupings are used as an organizing tool for:
 - ◎ Curriculum Design
 - ◎ Instructional + Guidance Model
 - ◎ Seamless Transition

Kansas Career Fields and Clusters Model

Agriculture, Food, and Natural Resources

- Animal Systems
- Agribusiness Systems
- Biotechnology in Agriculture
- Environmental Service Systems
- Food Products and Processing Systems
- Natural Resources Systems
- Plant Systems
- Power, Structural, and Technical Systems

Arts, A/V Technology, and Communications

- Audio/Video Techniques
- Journalism and Broadcasting
- Performing Arts
- Printing Techniques
- Telecommunications Techniques
- Visual Arts

Information Technology

- Information Support and Services
- Web and Digital Communications
- Network Systems
- Programming and Software Development

Business Management and Administration

- Administrative Services
- Business Information Management
- Human Resources Management
- General Management
- Operations Management

Hospitality and Tourism

- Lodging
- Recreation, Amusements, and Attractions
- Restaurants and Food and Beverage Services
- Travel and Tourism

Marketing

- Merchandising
- Marketing Management
- Marketing Communications
- Marketing Research
- Professional Selling

Finance

- Banking Services
- Business Finance
- Securities and Investments
- Insurance
- Accounting

Environmental and Agricultural Systems

Arts, Communication, and Information

Industrial, Manufacturing, and Engineering Systems

Business Management and Administration

Human Resources and Services

Health Science

Foundation Knowledge and Skills

Academic and Technical Skills

- Employability
- Ethics
- Systems
- Teamwork
- Career Development
- Problem Solving
- Critical Thinking
- Information Technology Application
- Legal Responsibilities
- Communication
- Safety, Health, and Environment

Architecture and Construction

- Construction
- Design and Pre-construction
- Maintenance and Operations

Manufacturing

- Production
- Manufacturing Production Process Development
- Maintenance, Installation, and Repair
- Quality Assurance
- Logistics and Inventory Control
- Health, Safety, and Environmental Assurance

Transportation, Distribution, and Logistics

- Facility and Mobile Equipment Maintenance
- Health, Safety, and Environmental Management
- Logistics Planning and Management Services
- Sales and Services
- Transportation Operations
- Transportation/Systems Infrastructure Planning, Management, and Regulation
- Warehousing and Distribution Center Operations

Science, Technology, Engineering, and Mathematics

- Engineering and Technology
- Science and Math (Investigative, Informational, and Educational)

Government and Public Administration

- Revenue and Taxation
- Foreign Service
- Governance
- National Security
- Planning
- Public Management and Administration
- Regulation

Education and Training

- Administration and Administrative Support
- Professional Support Services
- Teaching/Training

Human Services

- Consumer Services
- Counseling and Mental Health Services
- Early Childhood Development and Services
- Family and Community Services
- Personal Care Services

Law, Public Safety, and Security

- Correction Services
- Emergency and Fire Management Services
- Law Enforcement Services
- Legal Services
- Security and Protective Services

Health Science

- Biotechnology Research and Development
- Diagnostic Services
- Supportive Services
- Health Informatics
- Therapeutic Services

Environmental and
Agricultural Systems

Arts, Communication,
and Information

Foundation Knowledge and Skills

Academic and Technical Skills

- Employability
- Ethics
- Systems
- Teamwork
- Career Development
- Problem Solving
- Critical Thinking
- Information Technology Application
- Legal Responsibilities
- Communication
- Safety, Health, and Environment

Industrial, Manufacturing,
and Engineering Systems

Business, Marketing,
Management and
Finance

Human Resources
and Services

Health
Science

Career

- Successful work life
- Economic viability and contribution to the life of the community
- Ongoing career evaluation and changes facilitated by lifelong learning skills

Career Preparation & Applications

- Advanced academic and technical education
- Career-specific training
- Employer-recognized certification and licensure
- Apprenticeships
- Cooperative education
- Internships
- Mentorships
- Part-time work
- Service learning
- Matriculation from secondary to post-secondary programs
- Career student organizations

Career Preparation & Applications

- Advanced academic and technical education
- Career-specific training
- Employer-recognized certification and licensure
- Career program of study
- Career academies
- Individual Career and Education Plans (ICEPs) revised annually
- Career student organizations
- Workbased learning
- Workplace readiness classes
- High school "senior experiences"
- Articulation linking secondary and post-secondary study
- Mentorships
- Part-time work
- Service learning

Career Exploration

- Career courses
- Career research
- Job shadowing
- Individual Career and Education Plans (ICEPs)

Career Awareness

- Introduction to career clusters and career fields
- Career fairs
- Career days
- Classroom guest speakers
- Field trips

START PLANNING!

- ◎ What are the students' interests?
 - ◎ www.kansascareerpipeline.org
 - ◎ *American Careers* magazine
www.carcom.com
- ◎ What education and/or training is necessary?
- ◎ What is the job outlook (demand/pay)?
 - ◎ Kansas Department of Labor
www.dol.ks.gov
 - ◎ Bureau of Labor Statistics
www.bls.gov/oco

PERSONAL PLANS OF STUDY

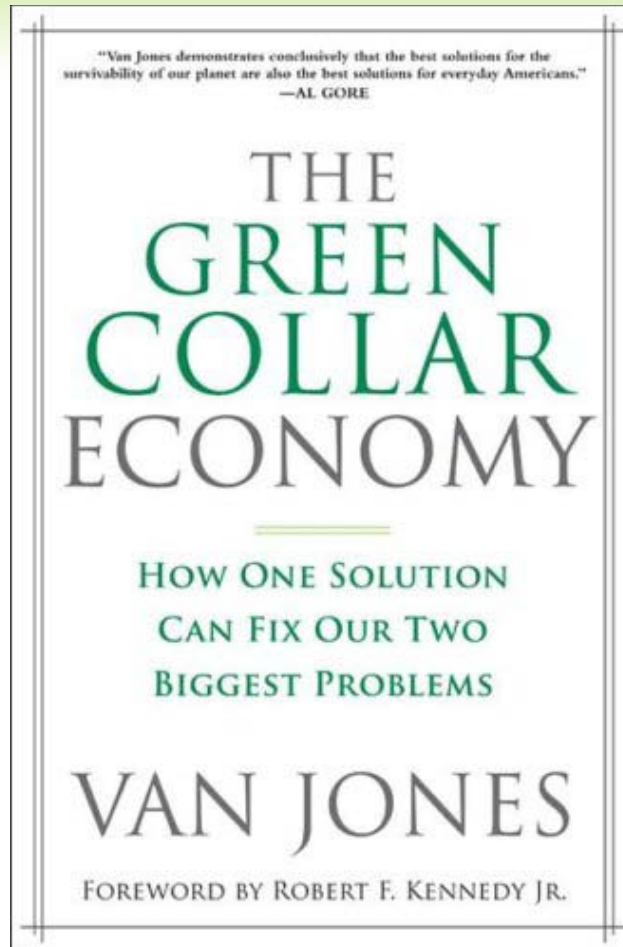
[HTTP://WWW.KSDE.ORG/DEFAULT.ASPX?TABID=1799#PPS](http://www.ksde.org/default.aspx?tabid=1799#pps)

- ◎ Vehicle for career discovery
- ◎ Map of courses and activities for each individual student
- ◎ Living document, ever evolving, career development is a life long process, not a destination
- ◎ Emphasizes the relevance of learning

WHAT IS A GREEN JOB?

- © Green-Collar (Merriam Webster): *of, relating to, or involving actions for protecting the natural environment*
- © Green-Collar Job (Van Jones): *family-supporting, career-track job that directly contributes to preserving or enhancing environmental quality*

GREEN CAREERS



Green Collar:

Blue-collar jobs that have been upgraded or upskilled to better respect the environment.

www.greenforall.org

O*NET REPORT

- ◎ O*NET – Nation’s primary source of occupational information
- ◎ *Greening of the World of Work: Implications for O*NET –SOC and New and Emerging Occupations*
- ◎ <http://www.onetcenter.org/reports/Green.html>

O*NET DEFINITION OF GREEN ECONOMY

The green economy encompasses the economic activity related to reducing the use of fossil fuels, decreasing pollution and greenhouse gas emissions, increasing the efficiency of energy usage, recycling materials, and developing and adopting renewable sources of energy.

O*NET DEFINITION OF GREEN OCCUPATIONS

The “greening” of occupations refers to the extent to which green economy activities and technologies increase the demand for existing occupations, shape the work and worker requirements needed for occupational performance, or generate unique work and worker requirements.



O*NET REPORT IDENTIFIES 3 OCCUPATIONAL CATEGORIES

- ③ Green Increased Demand Occupations
- ③ Green Enhanced Skills Occupations
- ③ Green New & Emerging (N&E) Occupations

GREEN SECTORS

- ⊙ Renewable Energy Generation
- ⊙ Transportation
- ⊙ Energy Efficiency
- ⊙ Green Construction
- ⊙ Energy Trading
- ⊙ Energy & Carbon Capture & Storage
- ⊙ Research, Design, & Consulting Services
- ⊙ Environment Protection
- ⊙ Agriculture & Forestry
- ⊙ Manufacturing
- ⊙ Recycling & Waste Reduction
- ⊙ Governmental & Regulatory Administration



THANK YOU!

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