

LEAP – Essentials

- **Innovation Based Economic Development (IBED)** approach to economic development spearheaded by GOED | Technology Commercialization
 - 5 required elements – including: “technically skilled workforce”
- **Based on best practices:** adapt national as well as international best practices
- **Skills focus:** in the 21st Century need to view job titles as an agglomeration of Skills
- **Life-long learning:** providing flexibility through “on” & “off” ramps
- **Fully integrated:** credit transfer seamlessly with no gaps from High School to College and University
- **CTE foundation:** Pathways have CTE & associated High School certificates at its foundation and developed CTE-standards are being applied across the state to form a common base
- **Standardization principle:** each element of the Pathway will lead to qualifications associated with a set of defined skills
 - employers will understand meaning of certification and degrees and can therefore assess an applicant’s skill set
- **Employer engagement process:** obtain employer participation
 - inform employers of skill sets that NV students and adults can obtain
 - employer review of all elements constituting a Pathway
 - employer endorsement
 - dynamic process with employers convening regularly

Nevada Governor’s Office of

ECONOMIC DEVELOPMENT




| Technology Commercialization

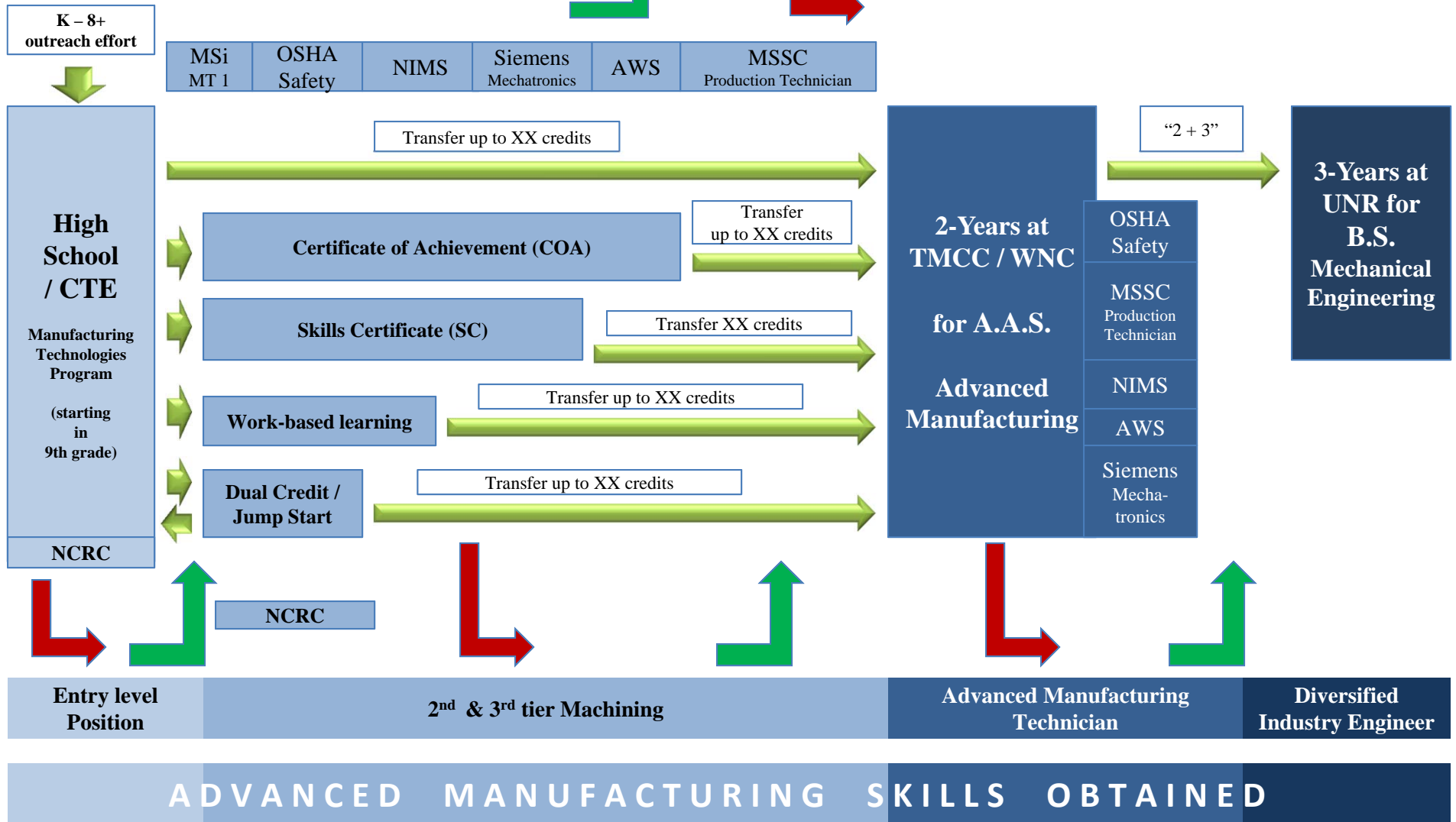
Karsten Heise

Director | Technology Commercialization

kheise@diversifynevada.com

LEAP Manufacturing Framework (Northern Cluster)

Framework resembles “Highway” with “on”  and “off”  ramps and flexible multiple  Pathways



Nevada Governor’s Office of
ECONOMIC DEVELOPMENT
Technology Commercialization
Advanced Manufacturing

Karsten Heise
Director | Technology Commercialization
kheise@diversifynevada.com

Randy Walden
Advanced Manufacturing Industry Specialist
rwalden@diversifynevada.com

Matching Skills with Job Titles

In the 21st Century need to view job titles as an agglomeration of Skills

<ul style="list-style-type: none"> Employability Skills (<i>work ethic, attendance/punctuality, communication, honest/candor, problem solving, career expectations/promotion</i>) Critical Thinking & Problem solving Drawing & Reading Prints Safety Pre-Engineering Measurement Math Skills (<i>fractions, decimals, conversion, dimensioning, tolerances, geometry</i>) Reading comprehension skills Measurements Attention to Detail Multiple processes Manufacturing Processes Electromechanical basics Introduction to Automation Diagnostic/Troubleshooting 	<p>Additional Major Skills Taught</p> <ul style="list-style-type: none"> Career Awareness Engineering Familiarity Inspection/Tool Reading Material Qualities (temps, feeds, speeds) Injection Molding Stamping/Piercing Press Fabrication Basics Communication Skills Workplace Expectations Technical Writing Basic Statistics 	<ul style="list-style-type: none"> Math Blueprint Reading Quality Control Communications Basic Measurement Material Handling (Practical) Problem Solving Human Relations OSHA (Analytical) Problem Solving Technical Drawings Reading Shop Drawings 	<ul style="list-style-type: none"> Electrical Fluid Automated Material Handling Programming Metallurgy LEAN 	<ul style="list-style-type: none"> Math Blueprint reading Quality Control Communications Basic Measurement Material Handling (Practical) Problem Solving Human Relations Electrical Fluid Automated material handling OSHA Programming Metallurgy LEAN 	<ul style="list-style-type: none"> Read and interpret blueprints, technical drawings, schematics, or computer-generated reports Research, design, evaluate, install, operate, or maintain mechanical products, equipment, systems or processes Confer with engineers to implement operating procedures, resolve system malfunctions Develop, coordinate, or monitor all aspects of production, including selection of manufacturing methods Investigate equipment failures or difficulties to diagnose faulty operation and recommend remedial actions Provide feedback to design engineers on customer problems or needs Research and analyze customer design proposals, specifications, manuals Apply engineering principles or practices to emerging fields: robotics, biomedical Supervision of production workers, technicians, technologists, or other engineers Solicit new business Provide technical customer service Study industrial processes to maximize the efficiency of equipment applications Establish or coordinate the maintenance or safety procedures
<ul style="list-style-type: none"> Entry Level Machinist Mechanical Assembler Material Handler Shipping & Receiving Quality Control/Inspector Assembler/Electro-mechanical Set Up Laborer Welders Helper Operator Packaging Operator Seamster 	<ul style="list-style-type: none"> General Assembler (COA) Line Technician (COA) General Technician (COA) Senior Technician (COA+) Maintenance Technician 1 (COA) Manufacturing Lead (COA) Machine Operator (COA) Manufacturing Technician 1-3 (COA) Tech Assembly I & II (COA) Assembler (COA) Set-up laborer (COA) Process Specialist (COA) 	<ul style="list-style-type: none"> Assembler (COA) Set-up laborer (COA) CNC Tender (SC) CNC Operator (SC) SNC Senior Operator (SC) CNC Technician (SC) <p>MT1:</p> <ul style="list-style-type: none"> CNC Machine Tool Operators* CNC Machine Tool Programmers* Machine Setters, Operators* <p>* MT1 job titles per Dream It Do It Virginia</p>	<ul style="list-style-type: none"> Machine Technician Facilities/ Maintenance Technician Coordinator/ Lead Supervisor Process Lead Production Worker/ Planner / Lead Manufacturing Technician Quality Inspector Automation Technician CNC Machine Operator / Machine Operator Maintenance Technician / Electrician Welder 	<ul style="list-style-type: none"> Mechanical Engineer Manufacturing Engineer Production, Operations Manager Process. Maintenance Engineer Engineering Manager Mechanical Design Engineer Plant Engineer Product Engineer 	

Nevada Governor's Office of

ECONOMIC DEVELOPMENT

Technology Commercialization

Advanced Manufacturing

Karsten Heise

Director | Technology Commercialization

kheise@diversifynevada.com

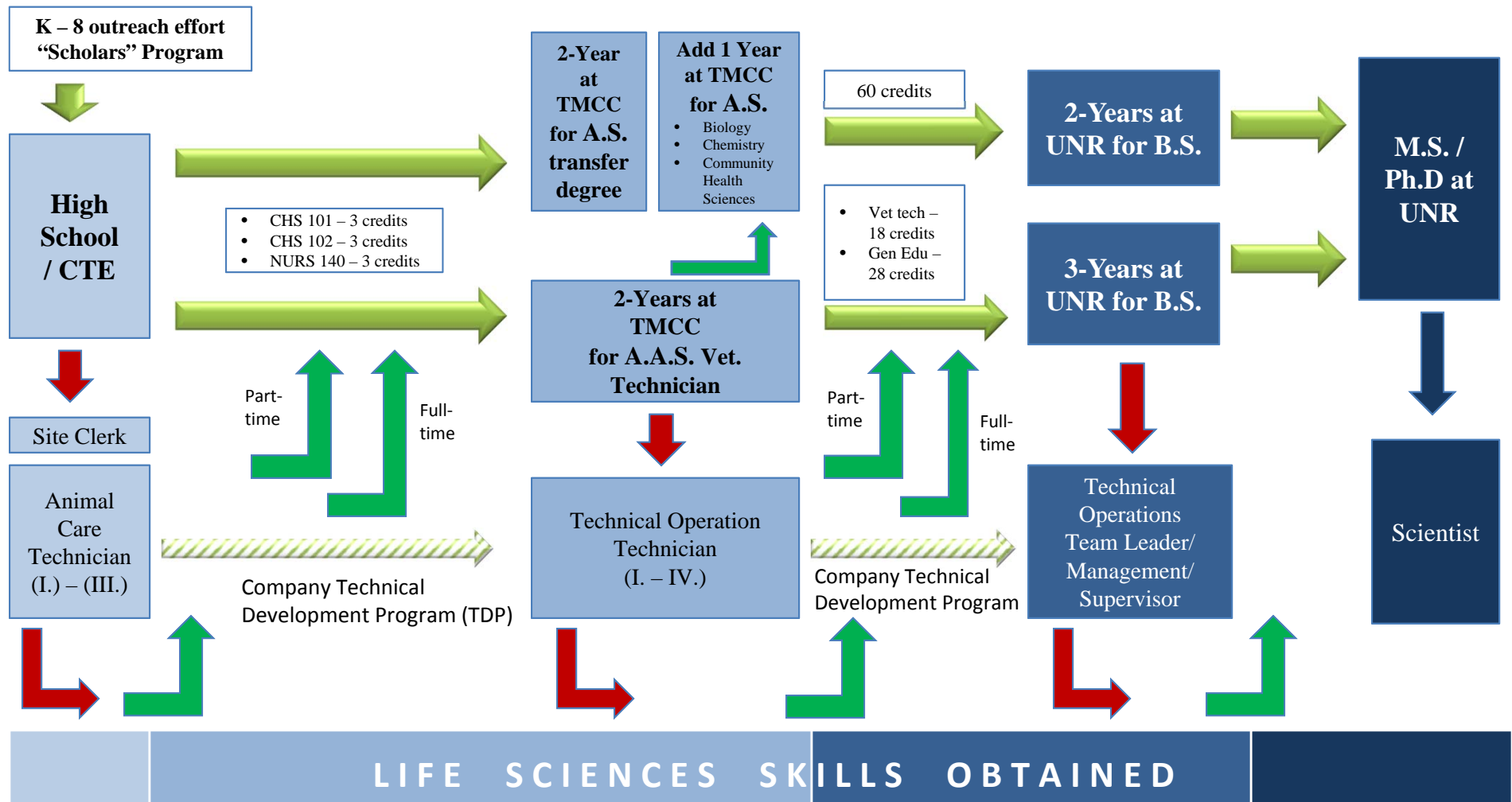
Randy Walden

Advanced Manufacturing Industry Specialist

rwalden@diversifynevada.com

LEAP Life Sciences Framework (Northern Cluster)

Framework resembles “Highway” with “on”  and “off”  ramps and flexible multiple  Pathways



Nevada Governor’s Office of
ECONOMIC DEVELOPMENT
 | Technology Commercialization

Karsten Heise
 Director | Technology Commercialization
kheise@diversifynevada.com