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# School-To-Work: It's the Law

*[The Ohio Department of Development has divided the state into 12 geographic, labor-market areas called economic development regions. This report addresses selected School-to-Work (STW) grants and activities in selected counties in Region 2- (Defiance, Fulton, Henry and Williams), but much of the information is applicable statewide.*

*Oftentimes, proponents of STW label their critics as uninformed or reactionary, and label their views as extrapolation, misunderstanding, supposition, distortion, etc. Therefore, to preclude such response, and to foster constructive debate of the facts, as presented in law and in contracts, this report is heavily footnoted. Submission of additional information and rebuttal is welcome providing that supporting documentation from law or contracts is included.*

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Proponents of STW cite time-honored field trips as proof that we have always taught career awareness, but the idea of little tots going to the fire station doesn't accurately portray STW. What is at stake is a major change in the purpose of schooling, a change that strikes at the heart of the basic American freedom to control one's destiny. No longer will we inspire youth to pursue their goals and dreams; rather, students will follow a

curriculum designed by those who want their labor.

## What is STW?

In summary:

- STW is a federal law that has been in place since 1994
- STW is federally-mandated job-training;
- STW is the redefinition of "education" as preparation for work;
- STW is for all students - kindergarten through college, but it includes out-of-school youth and adults too;
- STW is the integration of education and employment systems.
- The result: Schools are being turned into job-training centers.

## The Heart of the Debate

STW is massive in scope. The integration of education and employment systems blurs the line between school and work - for children and adults. This blurring of school and work raises a huge public policy question: Why do schools exist?

- Is their purpose to transfer the general knowledge, wisdom, and virtues of previous generations to the young thereby equipping them to reach their full potential? or,

- Are schools institutions for the state to use to train our children to be good workers?

Those opposed to a national STW system point out that skill is skill regardless of location and they ask: What does it take to become a global mathematician, pipe-fitter, bricklayer, cosmetologist, or writer?

Proponents say that STW provides students with opportunities and that participation is voluntary, but that is not what the federal STW law says.

Ohio's application for federal money clearly states: "Local partnerships must meet the federally established standards and criteria outlined in the School to Work Opportunities Act of 1994 and they must demonstrate school-based, work-based, and connecting activities.<sup>1</sup>

## Work-based learning

In Ohio, work-based learning is defined as an integral part of each student's learning.<sup>2</sup> **Federal law clearly describes work-based learning<sup>3</sup> as mandatory.** Required activities include:

- work experience
- a planned program of job-training
- skill certificates
- instruction in workplace competencies, including instruction to develop students'
  - attitudes
  - employability skills, and

- participation skills.

Let that sink in: Any state that sought out and accepted federal STW money is required, by federal law, to:

- instruct children in workplace competencies
- develop their employability skills
- develop their participation skills
- develop their attitudes
- provide them with job-training and work, and
- award certificates that verify that the desired skills and attitudes have been attained.

To fully appreciate the magnitude of work-based competencies, it is imperative that you understand how Ohio has defined a competency; a competency is an "observable and **measurable behavior**."<sup>4</sup> Note: **The federal law is specific: STW is for "all students"** including students with disabilities, school dropouts, and gifted students.<sup>5</sup> Ohio's STW contract is equally specific: **"Ohio's STW structure will ensure participation of all students in the initiative."**<sup>6</sup>

As part of the development of a comprehensive STW system, all students will receive a Career Passport that catalogues their strengths and experiences, and **identifies their attainment of critical SCANS competencies**.<sup>7</sup> SCANS is the acronym for the **Secretary's Commission on Achieving Necessary Skills**. [U.S. Dept. of Labor.]

## Mentors

Those who supervise children at the job site are called work-site mentors. The primary responsibility of mentors is to maintain a high level of **communication** regarding each student's progress.<sup>8</sup> According to federal law, a **work-site**

**mentor** is someone approved by the employer who works in consultation with classroom teachers and the employer of the student.<sup>9</sup> SchoolNet (computers) will be used to link school-site staff and workplace mentors.<sup>10</sup>

Federal law defines a **school-site mentor** as a professional employed at a school who is designated as the advocate for a particular student. These individuals will work in consultation with classroom teachers, counselors and the employer of students to design and monitor the students' progress.<sup>11</sup> To learn about the knowledge and skills that business and industry want taught in schools, teachers will be working at various job-sites. All in all, work-based learning means that teachers and employers will have new responsibilities and obligations.<sup>12</sup> In addition, the definition of "staff" is being expanded beyond the classroom to include school administrators, counselors, employers, and school-site and work-site mentors.<sup>13</sup> [Such redefinition will have significant financial ramifications.]

Our application for federal STW money says: "The heart of work-based learning is the relationship between the student and the employer."<sup>14</sup> Undoubtedly, the "greatest challenge will be in identifying a sufficient number of paid work experiences."<sup>15</sup> Accordingly, Ohio is looking at the possibility of turning student's existing part-time, after-school jobs into work-based learning experiences.<sup>16</sup>

[Getting kids out of the classroom and exposing them to the "real world" experiences that proponents advocate raises the question of when did school stop being a real world experience for a child? As students, we were told that *school was our job*. Nonetheless, if students must go out into the real world, they will need transportation to the various job sites. However, this won't work out like a normal bus route, especially in rural areas, since the students will be at various sites in the region. Who will pay for the transportation costs? Are we going to use

drivers? Or will students be driving themselves? Having students out and about town during school hours seems incompatible with the daytime curfew ordinances that are being put in place nationwide. On one hand, we say that students must be in school, but on the other hand, we are setting up a system that will require students to be out of school.]

## School-based learning

According to federal law, school-based learning includes "career awareness, career exploration and counseling (beginning at the earliest possible age)."<sup>17</sup> It also includes, among other things, regularly scheduled evaluations involving ongoing consultation with students and school dropouts.<sup>18</sup> School "**dropout**" is defined as **a youth who is no longer attending any school and who has not received a diploma or GED**.<sup>19</sup> Such students pose a **special challenge to the system because they may be more difficult to interest than youth who are still in school as well as being more difficult to contact**.<sup>20</sup> [It is interesting to note that districts will use precious limited resources (staff, time, money) intended for students enrolled in a district on students who are no longer enrolled in the public school system.]

## Connecting Activities

The third federally required component, Connecting Activities, refers to **linking** employers and educators, **enabling continuous feedback between the classroom and the work-site**.<sup>21</sup> SchoolNet will be one of the vehicles for such linkage. According to federal law, connecting activities include, among other things, **matching** students with employers, providing **job hunting assistance**, **linking** the participants with other community services, and **collecting and analyzing information**

**regarding post-program outcomes.**<sup>22</sup> [Translated, that means tracking individuals after they graduate.]

## Support

The federal law provides the framework and financial incentives for states which volunteer to participate. **To receive funding, states and districts must meet twenty-three federal requirements.** They include, among other things, a description of **how vocational training and academic instruction will be integrated, a process for awarding skill certificates,** and a plan to maintain the system when federal funds have been exhausted.<sup>23</sup>

There are three primary ways that the government funds STW, at this time: A state can apply for federal money to **develop** its State Plan;<sup>24</sup> a state can apply for federal money to **implement** its State Plan<sup>25</sup>; and a local partnership can apply directly to the federal government for money.<sup>26</sup>

In **1993**, Ohio developed a preliminary vision for **integrating education and employment.**<sup>27</sup> Developers sought the input and commitment of all **relevant** stakeholders including business, labor, education, and community-based organizations.<sup>28</sup> In **1995**, Ohio applied for federal STW money and the application was approved. Our contract with the federal government says that "at the **heart** of a successful STW strategy is the inclusion of world class **standards.**"<sup>29</sup> Ohio will be establishing academic, **occupational and employability** standards.<sup>30</sup>

## Business & Industry

Building the state, regional and local STW system requires more than federal funds.<sup>31</sup> There can be no STW without the intensive support of business and industry. Leaders of **the business community are being recruited** to support STW funding initiatives.<sup>32</sup> The

Ohio STW Office is working closely with Ohio's: Business Roundtable, the Manufacturers' Association, the Chamber of Commerce, the Education Association, the Federation of Teachers, a number of labor organizations, and the PTA **to assure their members' participation in and support for Ohio's STW system.** **"These organizations and their members are determined to be full partners in all aspects of Ohio's STW system."**<sup>33</sup> Ohio's contract also states that employers will have opportunities to recruit other employers to participate in STW

- provide materials and equipment
- make career day presentations
- provide job-shadowing experiences for teachers and students
- conduct work-site field trips, and
- offer work experiences
- assist in developing learning objectives and training plans
- structure and supervise learning at the work site
- integrate work experience with school curricula, and
- certify skills.<sup>34</sup>

**In exchange for supporting STW, business and industry leaders will be sought out to serve on advisory and policy-making committees and panels that will set standards and develop curricula.**<sup>35</sup> Ohio law requires schools to have Business Advisory Councils. These Councils will help in setting the **standards for employment, which will, in turn, have an impact on curriculum.**<sup>36</sup>

**Participation of employer and labor unions will ensure that standards for learning are based on the requirements of the workplace.**<sup>37</sup>

## Implementation Barriers

There are some real barriers to employer involvement. One barrier is the **cost** of employee **time** to participate on policy making committees and panels and to carry out other activities.<sup>38</sup> Another barrier is concern about **liability** for student or school personnel injuries at the work-site.<sup>39</sup> Will the school or the business be responsible for workers' compensation premiums and liability, or will liability be shifted to third-parties so that neither the school nor the business can be held responsible for injuries to students? Other districts may follow the lead of a Region 2 STW partnership wherein the Northern Buckeye Education Council provides large group health insurance for many schools, thereby lowering the risk factor of any one school system.<sup>40</sup>

**Incentives** to address the barriers include **paying** companies to retrain current and new employees and giving **tax credits to companies which use public schools for training their employees.**<sup>41</sup> Already mentioned were **other incentives:**

- **the "opportunity to have a say in what gets taught and how it gets taught**
- **a way to assess the work skills of future employees**
- **an opportunity to provide input into setting standards**
- **developing credentials, and**
- **training students for employment in their particular industry.**"<sup>42</sup>

## Partnerships

As mentioned earlier, the Ohio Department of Development has divided the state into 12 geographic, labor-market areas called economic development regions. Regional alliances and local partnerships are structured around these 12 regions.<sup>43</sup> Regions select a regional coordinator - subject to the approval of STW Office and others.<sup>44</sup> **Partial**

**funding for each of the 12 coordinators is \$50,000 per year.**<sup>45</sup> The regional **coordinators act as liaisons** between the State Office of STW and other partnerships.<sup>46</sup> Membership in local partnerships includes: Educators, social services personnel, employers, labor market **analysts**, counselors, union representatives, community-based organizations, parents and students.<sup>47</sup> The partnerships,

- apply for funding
- assure “continuous participation by employers”
- use assessments to improve curriculum and instructional decisions
- **“change teaching and learning methodologies”**
- **“change curriculum annually based on changes in the work world”**
- provide students, parents, business partners and the state with . . . assessment results [see \*below]
- **provide students with “state and regionally recognized Career Passports, and**
- **utilize the portable credential for placement and employment decisions.”**<sup>48</sup>

\*The results of individual work-based assessments which include the SCANS skills and ACT Work Keys results are **documented** in a Career Passport.<sup>49</sup> **All students will receive a Career Passport which catalogues their strengths and experiences, and identifies their attainment of critical SCANS competencies.**<sup>50</sup>

Local partnerships that apply for state STW **money** must incorporate twelve **“critical elements” into the local partnership plan.** Plans that do not meet all the requirements either will not be funded or will be sent back for clarification. [See page 68 of the state grant for complete list of elements.]<sup>51</sup> **Local applications are not reviewed at**

**the state level, nor is STW money released until the state has received a recommendation from the regional coordinator.**<sup>52</sup> Is this local control?

[*Note:* It is important to understand that members of the various partnerships are not elected representatives of The People. Even if some individuals hold elected office, they were not elected to develop or implement a STW system, therefore they represent no one but themselves, their associations, and/or their employers.]

## Career Development

The essence of STW is **Career Development. Ohio’s goal is to ensure that every Ohio student engages in career development beginning in elementary school.**<sup>53</sup> **Career development begins in kindergarten, leads to the development of an Individual Career Plan, and then to a Career Passport.**<sup>54</sup>

Career Development is structured around Career **Clusters** and Career **Majors**. Students select a major during the last two years of high school as described in the federal law.<sup>55,56</sup> The six career clusters and corresponding majors are:

- Arts and Communications
- Business and Management
- Health Services
- Human Resources
- Industrial and Engineering Systems
- Environmental and Agricultural Systems <sup>57</sup>

Students will be required to select a career major around the age of sixteen. [Is mandatory decision-making, based on federal law, evidence of local control or the opportunity for a student to volunteer?]

Federal law states that completion of a career major results in the student

receiving a skill **certificate.**<sup>58</sup> **Federal STW law defines a skill certificate as a portable credential** given when the student has mastered **skills endorsed by the National Skill Standards Board** [see Goals 2000 legislation.] Until the board completes its work, “portable credential” means a credential issued under a process described in the State Plan.<sup>59</sup> In Ohio the portable credential is called a Career Passport.

Certificates such as the **Career Passport are an integral part of the STW system.**<sup>60</sup> A Passport includes a personal data sheet, occupational, academic and employability profiles, transcripts, diploma and certificates, etc.”<sup>61</sup> “A **major issue** in regard to occupational skill standards and skill **certificates is the extent to which they are standardized to ensure [their] portability . . .**”<sup>62</sup> Ohio’s Career Passports are standardized across the state and “**recognized throughout the State and nation .**”<sup>63</sup>

Ohio’s STW contract says that **the Governor’s Human Resource Investment Council will ensure** that all Ohio’s skill standards and skill certificates are both **industry-based and coordinated with national skill standards.**<sup>64</sup>

The Ohio Department of Education is currently redesigning the Passport to serve not just vocational students but all students including out-of-school youth, adults, and students with disabilities.<sup>65</sup> The Passport will provide employers, colleges, and training institutions information for screening, interviewing and selecting applicants.<sup>66</sup>

Although our STW application says that Ohio would explore and develop the ill-reputed **Certificate of Initial Mastery**, recently the Ohio’s STW Office issued a letter saying that “. . . Ohio has **not** developed a Certificate of Initial Mastery.”<sup>67</sup> However, the second year application clearly says that **the “Career Passport program . . . is being used as an alternative to the Certificate of Initial Mastery.”**<sup>68</sup>

[Is a Certificate/Passport/Credential just a glorified diploma? No, it is not. A diploma documents that the holder has completed a specific course of study in a specific period of time. The certificate, regardless of its name, verifies that the holder can perform specific behaviors at a pre-determined level and that the holder is ready to enter the workforce.

Historically, receipt of a high school diploma brought a sense of closure to K-12 education. But the "credential" is to be attained, ideally, when the student is about sixteen, midway through what we now call high school. The Passport/Credential does not bring closure to high school. In fact, the most important difference between a diploma and the Passport/Credential is that the certificate is not the end of anything; it is the first of five national systems that collectively make up the national integrated education and employment system. For additional information see: *A Report on the Work Toward National Standards, Assessments, and Certificates* at [www.fessler.com](http://www.fessler.com) on the Internet].

### Tracking and Evaluation

Ohio's STW Office and others plan to track student participation in STW and the extent to which employers and schools are fully involved in it.<sup>69</sup> A system will be set up to capture employment status and wage level information on participants beyond high school, merging the information into a comprehensive database. Strategies will be developed to obtain information that is not collected through existing systems.<sup>70</sup> Special tracking of students residing in rural areas will be implemented.<sup>71</sup>

Is STW working? An evaluation of Ohio's STW pilot projects was submitted in March, 1995. Among other things, it says that "when selection decisions were

required by the school, school personnel usually "hand-picked" the most motivated students. The screening or "hand-picking" of high performing and highly motivated students in many of the pilot projects indicates the degree to which school personnel are striving to demonstrate their program's success. This tendency is perhaps not surprising for program operators who are anxious to have a successful pilot or who are concerned about recruiting employers."<sup>72</sup>

### Region Two STW Grant Applications

The significance and scope of local and regional STW contracts can best be comprehended in conjunction with, and in the context of, federal STW law and Ohio's STW contracts. Although each local and regional application must meet federal requirements, each has its own emphasis. The following excerpts give the flavor of five Region Two contracts. To be fully informed, interested parties should read the federal STW law, Ohio's State Plan, and regional and local contracts in their entirety.

### Four County JVSD-Middle School Career Development

In 1996, 26 school districts in Defiance, Fulton, Henry and Williams Counties, in cooperation with local business, industry, labor, and post secondary institutions, established Four County STW.<sup>73</sup>

Full employment for all students is the ultimate goal of the program.<sup>74</sup> The objective is for 100% of fifth and sixth grade students [ten and eleven year-olds] in the four counties to develop career awareness, preferences, and skills<sup>75</sup> to ensure that they become flexible entry-level workers.<sup>76</sup> This will be accomplished, in

part, by providing all the fifth and sixth grade teachers with access to career profiling software and by providing all fifth and sixth grade students with an electronically generated career profile prior to entering the seventh grade.<sup>77-78</sup>

A governing committee, known as the Four County Steering Committee, is charged with the overall responsibility for Four County STW programs and they authorize all final decisions.<sup>79</sup> Four County was awarded \$100,000 for their proposal.<sup>80</sup>

### Henry County Works!

In 1993, the Napoleon City Business Advisory Council and the Henry County Business Advisory Council created the Henry County Business and Education Advisory Council (HCBEAC).<sup>81</sup> One of the highest priorities in this geographic region is to educate "stakeholders" about the existence and priorities of STW.<sup>82</sup> The goal of HCBEAC's \$100,000 STW proposal is to reach every fifth grade parent and student with career options providing all 1,600 four-county fifth graders with a copy of "Greatest Hits" a video about careers.<sup>83-84</sup> The cost of each video is approximately \$3.00.<sup>85</sup>

"The HCBEAC schools" include: Napoleon Area Schools, Patrick Henry Local, Liberty Center Local, Holgate Local, Henry County, Henry county MRDD (Hope School), Four County JVS, and Northwest State Community College.<sup>86</sup>

### Northwest Ohio Team Works!

The Henry County Business and Education Advisory Council appointed a subcommittee of ten individuals [see the appendix] to prepare a STW application.<sup>87</sup> The \$300,000 proposal includes aggressively expanding the above mentioned Henry County Works! proposal into neighboring Fulton, Defiance and Williams Counties.<sup>88</sup> **The**

**plan proposes to utilize Henry County as the testing ground** before expanding a model into the other three counties.<sup>89</sup> Thus **the name of the original partnership was changed** from Henry County Works! to **Northwest Ohio Team Works!**<sup>90</sup> Their plan is consistent with Ohio's STW mission and principles. In Henry County, **the Chamber of Commerce serves as the 'champion'** for STW.<sup>91</sup>

The four counties of Northwest Ohio include 23 schools and 25,000 students.<sup>92</sup> "The schools in Fulton county are Archbold, Delta, Evergreen, Fayette, Pettisville, Swanton and Wauseon. The schools in Defiance County are Ayersville, Central Local (Fairview), Defiance, Hicksville and Tinora. The schools in Williams county are Bryan, Edgerton, Edon, Hilltop, Montpelier, North Central and Stryker."<sup>93</sup> **Many programs include the participation of parochial schools.**<sup>94</sup> Unemployment in the area tends to be below both state and national averages.<sup>95</sup> **Reportedly, the biggest business challenge is providing employers with workers proficient in problem solving and teamwork.**<sup>96</sup>

Two of Northwest Ohio Team Works! major components are **exposure to STW so all parties can understand the concept**, including its relevance and importance, and establishing groups involving businesses, schools, and government to **develop trust** to set the stage for continuation of STW and greater results.<sup>97</sup>

The plan includes the use of videos to enable students to tour many businesses without leaving the classroom.<sup>98</sup> [Could such an arrangement be construed as tax-supported advertising for business and industry?] Twenty students will be producing 35 one-half hour videos on local careers.<sup>99</sup>

Reportedly, successful STW activities **take the form of extracurricular activities or they take place during the summer.**<sup>100</sup> [Examples: Odyssey of the Mind, Growth Camps, Quiz Bowls,

Power of the Pen, etc.] However, student participation in extracurricular activities is also considered a barrier to participation in STW activities.<sup>101</sup> [Could this be a reference to band, sports and other similar activities?] **Another obstacle to participation is the scheduling requirement** imposed by state education regulations. Schools contend that Carnegie **time based** approach to education [50 minute class period] does not allow any time for serious STW efforts.<sup>102</sup> [Consider the move toward block scheduling in the context of work-based learning.]

### Defiance Area STW Initiative

The Defiance Area STW application for \$162,000, targeting primarily 18 students,<sup>103</sup> addresses the need for a skilled and semi-skilled trades work force in the area.<sup>104</sup> "Schools recognize that courses and instruction need to be redesigned to meet the needs of students who will enter the work force upon graduation."<sup>105</sup> "Over a year ago, the school superintendent started meeting with companies to discuss apprenticeship programs and to see how schools could help businesses find the skilled labor they need."

According to the grant application, **students in kindergarten through fourth grade will discover their aptitudes, interests, and abilities with the aid of tests, surveys, career days, field trips to places of business, and special speakers who come to the school and talk about their occupations.**<sup>106</sup> Students in grades five through eight will explore careers and discuss job clusters and the occupations within each cluster.<sup>107</sup> They will also use a computer program called "Coin, Jr." to learn about job clusters, occupations, and future educational opportunities.<sup>108</sup> Students will match their abilities to careers.<sup>109</sup> **By the seventh grade students will practice job search**

**skills.**<sup>110</sup> Ninth through twelfth grade students will continue all of the above experiences as well as focus on programs that support their career choices.<sup>111</sup>

*Analyze and Apply* materials and training will be provided for all high school students and teachers at Defiance High School and Northeastern Local Schools.<sup>112</sup> "These materials are designed to develop technical reading and writing skills, applied science skills, communication skills, and team building to develop the work place skills needed by all students.<sup>113,114</sup> [These are the SCANS skills that will be documented on Career Passports].

The **Analyze and Apply program, which has been designated by the national school-to-work office as a technical assistance provider, will have a direct impact on all high school students from the three school districts** [Defiance City, Ayersville Local, and Northeastern Local]. Students will be exposed to real world problem situations which will develop team building skills, technical reading and writing skills, applied science skills, and communication skills.<sup>115</sup> [SCANS skills.]

A committee of business/industry leaders, teachers, principals, and assistant superintendents will **examine the present high school curriculum in relation to the skills needed by local employers**, and they will then develop recommendations **for changing the curricula** to better prepare graduates for the work place.<sup>116</sup> In determining the skills needed by employers, the committee will consider **national skills standards** for occupational clusters, occupational skills profiles for individual job positions, and **the performance levels needed** in reading, comprehension, writing, communication, mathematics, and computer literacy. [In Ohio, we use **Work Keys** assessments to determine levels of performance]. Future courses of study will be modified and skill based learning will be integrated into students' daily experiences.<sup>117</sup>

**The work experience program will allow students to work between two to four hours at the work site each weekday and receive academic credit under the educational options program.**<sup>118</sup> Students will receive **minimum wage pay** for their work from the employing companies.<sup>119</sup> "We also envision the possibility of expanding the times during which the students can work. This [work experience program] will allow students to earn up to two credits while working part-time."<sup>120</sup> **Businesses and industries will communicate the desired student work schedules to the local schools for scheduling purposes.**<sup>121</sup>

**Students who have participated in the work experience program will be eligible to receive post-secondary training from Northwest State Community College.** [Such courses may, or may not, lead to a degree.] **Selection of the training program will be made by the employer to further the student's skills to meet the needs of the employer.**<sup>122</sup> **Tuition will be pre-paid from the grant.**<sup>123</sup> **The involvement of Northwest State Community College will permit students to earn college credits while participating in work experience program.**<sup>124</sup>

**Employers will incur costs for each student worker.**<sup>125</sup> **These costs are approximately \$2,640 per student worker.**<sup>126</sup> **In addition, the businesses will need additional equipment or software to support the training of student workers.**<sup>127</sup> [If purchased with STW money, who will own the new equipment?] **In-house coordination for all the school-to-work activities will be carried on by one administrative person at each industry.** It is estimated that the **time needed for such activities will cost the employer about \$1,000 per student worker.**<sup>128</sup> [Initially, these costs will be paid for with STW money. However, once the federal money dries up, it seems reasonable to

presume that the cost of such training will be covered by increasing the cost of goods and services].

**The Private Industry Council will administer a mechanical skills and aptitude test to help screen potential student workers.**<sup>129</sup> "Future business access and participation cannot be risked because a student does not act in a mature, responsible manner."<sup>130</sup> **Supervision of student workers at the job sites will be provided by PIC employees.**<sup>131</sup> The school counselors, principals, or the Private Industry Council will visit the job site at least once every two weeks to meet with the job supervisor and/or the student to discuss the student's work and determine the steps needed to maintain a positive work experience for both the student and employer.

According to a January 21, 1997 letter written by the PIC, **"The Northwest Ohio Private Industry Council will also support the program in three contracted areas. First, in an effort to match student aptitude to job requirements, the Private Industry Council will provide aptitude testing to determine the strengths of the students in 11 vocational areas, three academic areas, and a vocational interest inventory. Secondly, we will provide pre-employment training to insure that job keeping skills are understood. Thirdly, the PIC will provide on-site monitoring of the students to make sure that the training needs are being met."**<sup>132</sup> Professional services provided by non-school personnel will be paid from the grant.<sup>133</sup>

This program will develop strong communications between businesses, industries, and the schools. **"The schools need this communication to determine the skills, attitudes, behaviors, and curricular experiences that should be provided to meet the needs of today's work place. This information will help the schools redesign their curricular offerings and remold their teaching strategies."**<sup>134</sup>

Northwestern State Community College, in a letter dated January, 1997 writes: "We believe this grant will allow business and educators to work together to assist our young citizens in acquiring the **necessary skills** for the workforce 2000."<sup>135</sup> [This is a subtle reference to the Secretary's Commission on Necessary Skills - the SCANS competencies]

## Metal Working Skills Program Certification

**Ohio is the national leader in developing national skill standards.** [Although such standards are referred to as voluntary standards, members of the National Skills Standards Board concede the point that "somewhere along the way in the system, *voluntary gets changed to required*, not because you intended, but because *that's what happens* with every kind of set of standards. To be explicit about it, they either get incorporated in a particular school curriculum that you must take, or a particular examination that students have to pass, or they get incorporated in specifications for a position, you must be able to do these things or you don't get the position."<sup>136</sup>

"If they [the standards] are broadly accepted in the industry, broadly enough to bind, that makes the transition from being voluntary to, in effect, mandatory because you can't get a job at Motorola or IBM or whatever, not by legislation, but by collaboration among the industry leaders that say this is what's required to get there."<sup>137</sup>

Ohio was the first to implement metalworking **standards and the first to certify workers to those standards.** Ohio is **also the first state to certify metalworking training programs to the national skill standards.**<sup>138</sup>

The Ohio Bureau of Employment Services considers metalworkers [machinists, tool and die workers, machinery builders and stamping

operators]<sup>139</sup> fundamental to Ohio's economic development.<sup>140</sup>

In 1996, the National Institute of Metalworking Skills (NIMS) selected Ohio as the first state in the nation to adopt metal working **skills program certification** and **individual credentialing**.<sup>141</sup> Adoption of NIMS standards is a monumental change.<sup>142</sup> **Training programs will change 180 degrees, from time based to ability based training. This may require some changes in attitudes.** The four partners [Automatic Feed/U.A.W. Local 2349, Napoleon High School, Northwest State Community College, and Four County Joint Vocational High School] will become **the first in the entire nation to convert to objective skill based standards**.<sup>143</sup> One objective of this \$50,000 agreement is to develop certified training **programs** that **produce credentialed individuals**.<sup>144</sup>

Three **non-time based** career paths [high school/vocational, technical, and business] are being developed. Each path eventually culminates in Level 3 credentialing.<sup>145</sup>

- **Level One** credentialing results from successfully completing a **high school/technical training program**.<sup>146</sup>
- **Level Two** credentials are associated with two year **vocational school programs**.<sup>147</sup>
- **Level Three** credentials are for **individuals at individual companies**.

[According to the creators of this three-tiered system, level one standards are associated with elementary and secondary education and adult basic education. **These are the "standards for what everyone in the society ought to know and be able to do to be successful at work, as a citizen and as a family member."**<sup>148</sup> When an individual meets the standards, as verified by assessment, he receives a

credential that verifies that he is eligible for work or more schooling.

Level two standards are associated with the education and training that takes place after meeting level one standards for being "successful at work, as a citizen and as a family member."<sup>149</sup> Individuals who meet level two standards, demonstrated by passing performance assessments, will receive **occupational certificates**.

Level three standards build on levels one and two and add the specific standards set by individual firms for individual jobs.<sup>150</sup> **Reportedly, the government will have no more to do with setting standards for level three than it does now, "at least at the beginning."**<sup>151]</sup>

Northwest State Community College is positioned to assist companies in the **assessment and development** of level three **credentialing of individuals**.<sup>152</sup>

[For additional information see *A Report on the Work Toward National Standards, Assessments, and Credentials* at <http://www.fessler.com> on the Internet].

### Food for Thought

**Is STW voluntary?** Sure, in that a state can choose to voluntarily apply for and then accept federal funding; but once federal money flows, volunteerism ceases. And when the state chooses to accept federal money, they in effect make the choice for all school districts, parents and students in their state.

How can a school district decline to "choose" the state chosen STW system? Especially if the state sets criteria for "effectiveness" for districts (drop out rates, proficiency exam scores, etc.) based on that STW system, and threatens takeover of those districts that don't meet the "criteria"?

How does a student opt out of mandatory integrated vocational and academic programs? Especially when completion of such programs results in the issuance of a credential that is, in fact,

a ticket for getting a good job and/or additional education?

**Is STW locally driven?** No. Before a state or district can receive funding they must comply with federal law. Regional and local proposals must also comply with the State Plan that is based on federal law.

**Is Ohio involved in the development and implementation of a national STW system?** Yes. Gov. Voinovich, in a letter to U. S. Secretary of Labor, said: ". . . it is a pleasure to work hand-in-hand with both the United States Departments of Labor and Education in developing and implementing a national school-to-work system."

### Informed consent

Last year, a school board member in Licking County conducted a statistically significant study of the understanding of and openness to STW within schools. The findings indicate that educators hold a favorable opinion of STW although their actual knowledge of it plays little or no role in their acceptance of it. The investigator says the results suggest that educators blindly accept STW or do so out of sense of loyalty to the school. The investigator went on to say that he found "such willingness, within those who teach our children, to hold an opinion in the absence of hard knowledge frightening."<sup>153</sup> It has since been determined that a broader study would likely yield similar results.

Willingness to accept change without investigation is not unique to educators. Many business and industry leaders, legislators, and even members of the general population have accepted STW without knowing what it really is or its impact on our nation. Many, myself included, have unwittingly supported STW because we have not been fully informed concerning the STW system. To my shame, when the matter came before the Ohio State Board of Education in September, 1996, I voted in support of the resolution.



My current understanding of STW is a result of personal research conducted over the last twelve months. Not everyone has the time for exhaustive research and decisions must be made based on the best information available at the time that a decision must be made. It is for these reasons that I fully understand why many local, city, exempted village, education service center board members, and others may have given their support to STW efforts in their communities.

### Abolishing STW

Based on federal law, work-based learning is mandatory. By its very nature STW integrates occupational and academic training. The notion of opting out is completely incompatible with the totality of STW. The result: our schools are being converted to job-training centers. This job-training, beginning in kindergarten, will reduce our children and grandchildren to dependent, intellectually stunted laborers.

Once informed about what STW really is, those of us sworn to serve our constituents will be hard pressed to support a national system that regulates our children's future access to employment and education.

Abolishing STW will take the kind of political courage demonstrated by Craig

Hagen, North Dakota's elected Commissioner of Labor. After serving for three years on the state's STW management team, he resigned as a matter of principle because he could no longer support STW. May others have the wisdom and courage to take steps needed to disengage from STW.

In just over 200 years, this country went from a colony of England to the Greatest Nation on Earth. We've had more Nobel prize recipients than any industrialized nation. We've sent men into outer space, and brought them back; we've pioneered open-heart surgery, and our science and technology are copied world-wide. Those who accomplished those incredible feats were the product of an education system that emphasized academics, not life-long job-training for the perceived good of the economy.

We desperately need a whole-hearted national re-commitment to the pursuit of academic excellence; there is no other substitute.

### Resource contacts

#### Ohio School-to-Work

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Lucas, Ottawa  
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#### Region Two Coordinator

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#### Regional Alliance Coordinators

Nathan Weeks  
David Wellington

### About the author

**Diana M. Fessler** researches national and state initiatives affecting public and private education. She and her husband Bob have been married twenty-nine years, and they are the parents of six children. Diana is an elected member of the Ohio State Board of Education.

### Local Participants

#### Defiance Area School-to-Work Initiative

Fiscal Agent - Defiance City Schools, Judy Mayes

Partners:

Ayerville Local Schools, Ken Jones, Superintendent  
Defiance 2000, Walter Chaput, Director  
Defiance Area Chamber of Commerce, Michael Schultz, Executive Director  
Defiance City Schools, William Krouse, Superintendent  
Defiance High School, Julia Starner, Parent  
Defiance High School Student Council, Melanie Scribner & Curt Hasselschwert  
Defiance Metal Products, Jon Zachrich; Roxanne Stoufer, Human Resource Director  
General Motors PowerTrain, Mike Hamilton; Deborah Eastern-Hall, Human Resources Director  
Koester Metals, Inc., Gary Koester, President  
Northeast Local Schools, James Roach, Superintendent  
Northwest State Community College, Dr. Larry McDougale; Judy Ennis, Director  
Private Industry Council, Gary Andres, Administrative Director  
United Auto Workers Local 211, Pearl Lane, Labor Representative

Zeller Corporation, Mark Zeller; Michael Faber, Manager-Human Resources

### **Metal Working Skills Program Certification Partnership**

Fiscal Agent: Northwest State Community College, Jim Hutchinson, VP of Business  
Automatic Feed Company, Reed Shawcroft, Training Manager  
Four County Vocational High School, Bruce Goodwin, Director of Vocational Education  
Napoleon High School, Larry Long, Principal; Rick Weirch, Instructor  
National Institute for Metalworking Skills, Robert Sherman, Executive Director  
Northwest State Community College, Dr. Larry McDougale, President  
Ohio Bureau of Employment Services, Debra Bowland, Administrator  
The Association For Manufacturing Technology, David Horn, Continuous Improvement Director  
U.A.W. Local 2349, Shop Committee Chairman

### **Northwest Ohio Team Works!**

Fiscal Agent: Northwest Ohio Educational Service Center, John Wilhelm, Deputy Superintendent  
After Market Tool & Equipment Group of SPX Corporation, Steven Hillard  
Archbold Area Chamber of Commerce, Ken Cline, Pesident; Fred Witte, Administrator  
Arrow N.A., Penny Whitaker, Human Resources Manager  
Automatic Feed Company, Nathan Weaks, Treasurer  
Bryan Custom Plastics, Tim Kilne, Vice President/General Manager  
Claude Sintz Inc., Sheryl Petersen, Human Resource Manager  
Defiance College, James Harris, President  
Flexible Personnel, Ginny Fountain, Branch Manager  
Henry County Auditor, James Hoops  
Henry County Board of Developmental Disabilities, Gary Donaldson, Superintendent  
Henry County Community Improvement Corporation, Jon Bisher, Executive Director  
Henry County Hospital, Inc., Robert Coholich, Chief Executive Officer  
Holgate Local School, John Mohler, Superintendent  
Krueger Insurance Agency, Jack Krueger  
Liberty Center Schools, Thomas Lammers, Superintendent/Henry County BEAC Co-Chairman  
Napoleon/Henry County Chamber of Commerce, Sue Westendorf, Executive Director  
North Star BHP Steel, Ed Fox, President  
Northwest Ohio Educational Service Center, Becky Chamberlin, Gifted & Talented Coordinator  
Northwest Ohio Educational Service Center, Dolores Spieles/Wayne Mauk, Curriculum Consultants  
Northwest Ohio Educational Service Center, John Wilhelm, Deputy Superintendent  
Northwest State Community College, Chris Robinson, Tech Prep Director  
Northwest State Community College, Larry McDougale, President  
Patrick Henry Local School District, Mark Stall, Superintendent  
Penrod, George & Company, Thomas Moriarty  
Sauder Woodworking, Sandy Spengler, Director of Human Resources  
Snyder-Wesche Funeral Homes & Crematory, W. Lear Snyder  
Swanton Local Schools, Charles Knisley, Superintendent  
United Technologies Automotive, Mary Ann Benecke, Human Resources Manager  
Worthington Steel, Donald Gerdes, Personnel Manager

### **Henry County Works!**

\*subcommittee responsible for the School-to-Work Initiative  
\*Automatic Feed Company, Nathan Weaks  
\*Four County Joint Vocational School, Linda Watkins, Superintendent  
\*Henry County Auditor, James Hoops, **Treasurer of HCBEAC**  
\*Henry County Educational Service Center, John Wilhelm, Superintendent  
\*Liberty Center Local Schools, Thomas Lammers, Superintendent; **Education Co-Chair of HCBEAC**  
\*Matthew Stovcsik, Student  
\*Napoleon Area Schools, John Stovcsik, School Board Member; Campbell Soup Company  
\*Napoleon Area Chamber of Commerce, Sue Westendorf  
\*Napoleon Area Schools, Kenneth Hawley  
\*Northwest State Community College, Larry McDougale, President  
\*Penrod, George & Company, Thomas Moriarty, HCBEAC Business **Co-Chair of HCBEAC**

### *Stakeholder Groups:*

Henry County C. I. C./ Northwest State Community College, Jon Bisher

Henry County Hospital, Robert Coholich  
 Henry County MRDD, Gary Donaldson  
 Holgate Local Schools, John Mohler, Superintendent  
 Krueger Insurance Agency; United Way County President, Jack Kreuger  
 Leader Engineering/Fabrication, Charles Leader  
 Napoleon Area Schools, Robert Limbird, School Board Member; Napoleon Vision Center  
 Napoleon Area Schools, Susan Cameron  
 Napoleon Area Schools, Susan Kucharek  
 Napoleon City Council, Sprint/United Telephone; Dennis Fligor  
 Napoleon Inc., Jamie Kuser, News Media-Newspaper  
 Ohio Bureau of Employment Services., Robert Soncrat  
 Patrick Henry Local Schools, Mark Stall, Superintendent  
 Schwab Insurance Agency, Clarence Schwab  
 Snyder Funeral Homes, Wally Snyder  
 Tricounty Rural Electric Co-op, Phil Parsons  
 UFCW Local 626, James Brown  
 WNDH Radio, Robert McLimans  
 Pr

#### **Four County JVSD**

Fiscal Agent: G. Richard Limber  
 Archbold Middle School, James Redd, Guidance Counselor  
 Bowling Green State University, Clyde Willis  
 Bryan City Schools, James Garber, Superintendent  
 Central Middle School, Beverly Warnimont, Guidance Counselor  
 Community Hospitals of Williams County Inc., Frank Ordway, UAW Apprentice Representative  
 Defiance Chamber of Commerce, Mike Schultz, Executive Director  
 Defiance City Schools, William Krouse, Superintendent  
 Defiance College, James Bray, Division Head of Education Department  
 Defiance County Schools, Robert Breisinger, Superintendent  
 Edgerton Local Schools, Gregg Rcinck, Superintendent  
 Evergreen Local Schools, Russell Griggs, Superintendent  
 Four County Joint Vocational Schools, Ron Goheen, Instructor  
 Four County Vocational School, Bruce Goodwin, Vocational Director  
 Four County Vocational School, Linda Watkins, Superintendent  
 Fulton County Department of Economic Development, Shwan Ferguson, Director  
 Fulton County Schools, Roy Vivian, Superintendent  
 Gorham Fayette Schools, Joseph Long, Superintendent  
 Henry County Schools, John Wilhelm, Superintendent  
 Hicksville Exempted Village Schools, Robert Smith, Superintendent  
 Holgate Local Schools, John Mohler, Superintendent  
 Liberty Center Local Schools, Thomas Lammers, Superintendent  
 Montpelier Exempted Village Schools, John Kaylor, Superintendent  
 Napoleon Area Chamber of Commerce, Sue Westendorf, Executive Director  
 Napoleon Local Schools, Kenneth Hawley, Superintendent  
 North Central Local Schools, Robert Alexander, Superintendent  
 Northwest State Community College, Debora Barey, Director of Health & Human Resources  
 Northwest State Community College, Dennis Gable, Director of Admissions  
 Ohio House of Representatives, Lynn Wachtmann  
 Patrick Henry Local Schools, Mark Stall, Superintendent  
 Pettisville Local Schools, Stephen Switzer, Superintendent  
 Quality Graphics, Donald Tracy, President  
 Vision Molded Plastics, Ron Ernsberger  
 Williams County Schools, John Granger, Superintendent  
 Woolace Electric, Butch Woolace, Business Owner

#### **ENDNOTES**

- <sup>1</sup> *Building A School-To-Work System in the State of Ohio: The State of Ohio's Application for a School-to-Work Opportunities Act Implementation Grant*. June, 1995. p. 6. Also see: School-to-Work Opportunities Act of 1994. Signed into law by President Clinton on May 4, 1994, and became Public Law 103-239. "General Program Requirements. School-to-Work Opportunities program under this Act shall – (1) integrate school-based learning and work-based learning; as provided for in sections 102 and 103, integrate academic and occupational learning, and establish effective linkages between secondary and post-secondary education; . . . (3) incorporate the program components provided in sections 102 through 104; . . ." [Section 102 is the School-based learning component; Section 103 is the Work-Based learning component; and Section 104 is the Connecting activities component]. Sec. 101.
- <sup>2</sup> *Building A School-To-Work System in the State of Ohio: The State of Ohio's Application for a School-to-Work Opportunities Act Implementation Grant*. June, 1995. "[The] operational definition identifies work-based learning as an experience that is available to every Ohio students and is an integral part of each student's learning." p. 39.
- <sup>3</sup> School-to-Work Opportunities Act of 1994. Work-Based Learning Component (a) "Mandatory Activities. – The work-based learning component of the School-to-Work Opportunities program shall include – (1) work experience; (2) a planned program of job-training and work experiences (including training related to pre-employment and employment skills to be mastered at progressively higher levels) that are coordinated with learning in the school-based learning component described in Section 102 and are relevant to the career majors of students and lead to the award of skill certificates; (3) workplace mentoring; (4) instruction in general workplace competencies, including instruction and activities related to developing positive work attitudes, and employability and participative skills." [Sec. 103].
- <sup>4</sup> Vocational Instructional Materials Laboratory, Ohio State University, Career Passport Implementation Handbook (Columbus, OH: 1992). p. 43. "Competency: An observable and measurable behavior that has a definite beginning and ending, can be performed within a limited amount of time, consist of two or more competency builders [skills, knowledge and attitudes], and leads to a product, a service, or a decision."
- <sup>5</sup> School-to-Work Opportunities Act of 1994. [SEC 4. (2)].
- <sup>6</sup> *Building A School-To-Work System in the State of Ohio: The State of Ohio's Application for a School-to-Work Opportunities Act Implementation Grant*. June, 1995. p. 66.
- <sup>7</sup> *Ibid.*, p. 34-35.
- <sup>8</sup> *Ibid.*, p. 50.
- <sup>9</sup> School-to-Work Opportunities Act of 1994. SEC 4. (25).
- <sup>10</sup> *Building A School-To-Work System in the State of Ohio: The State of Ohio's Application for a School-to-Work Opportunities Act Implementation Grant*. June, 1995. p. 8.
- <sup>11</sup> School-to-Work Opportunities Act of 1994. SEC. 4 (18)
- <sup>12</sup> *Building A School-To-Work System in the State of Ohio: The State of Ohio's Application for a School-to-Work Opportunities Act Implementation Grant*. June, 1995. p 46.
- <sup>13</sup> *Ibid.*, p. 46.
- <sup>14</sup> *Ibid.*, p. 38.
- <sup>15</sup> *Ibid.*, p. 40.
- <sup>16</sup> *Ibid.*, p. 43.
- <sup>17</sup> School-to-Work Opportunities Act of 1994. SEC. 102 (1).
- <sup>18</sup> *Ibid.*, SEC 102 (5).
- <sup>19</sup> *Ibid.*, SEC. 4 (17).
- <sup>20</sup> *Building A School-To-Work System in the State of Ohio: The State of Ohio's Application for a School-to-Work Opportunities Act Implementation Grant*. June, 1995. p 65.
- <sup>21</sup> *Ibid.*, p. 44.
- <sup>22</sup> School-to-Work Opportunities Act of 1994. SEC. 104.
- <sup>23</sup> School-to-Work Opportunities Act of 1994. SEC 213 (d) (1-23).
- <sup>24</sup> *Ibid.*, SEC. 201. See header.
- <sup>25</sup> *Ibid.*, SEC. 211. See header.
- <sup>26</sup> *Ibid.*, SEC. 301. See header.
- <sup>27</sup> *Building A School-To-Work System in the State of Ohio: The State of Ohio's Application for a School-to-Work Opportunities Act Implementation Grant*. June, 1995. p. 52.
- <sup>28</sup> *Ibid.*, p. 52.
- <sup>29</sup> *Ibid.*, p. 33.
- <sup>30</sup> *Ibid.*, p. 77.
- <sup>31</sup> *Ibid.*, p. 81.
- <sup>32</sup> *Ibid.*, p. 96.
- <sup>33</sup> *Ibid.*, p. 8, 96.
- <sup>34</sup> *Ibid.*, p. 57-58.
- <sup>35</sup> *Ibid.*, p. 57-58.
- <sup>36</sup> *Ibid.*, p. 75.
- <sup>37</sup> *Ibid.*, p. 27.
- <sup>38</sup> *Ibid.*, p. 58.

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- <sup>39</sup> Ibid., p. 59.
- <sup>40</sup> Northwest Ohio Team Works! STW Systems Building grant application. p. 6.
- <sup>41</sup> *Building A School-To-Work System in the State of Ohio: The State of Ohio's Application for a School-to-Work Opportunities Act Implementation Grant.* June, 1995. p. 58.
- <sup>42</sup> Ibid., p. 58.
- <sup>43</sup> Ibid., p. 71.
- <sup>44</sup> Ibid., p. 90, 92.
- <sup>45</sup> Ibid., p. 94.
- <sup>46</sup> Ibid., p. 54, 71-72.
- <sup>47</sup> Ibid., p. 71.
- <sup>48</sup> Ibid., p. 78-79.
- <sup>49</sup> Ibid., p. 25.
- <sup>50</sup> Ibid., p. 34-35.
- <sup>51</sup> Ibid., p. 67-68.
- <sup>52</sup> Ibid., p. 93.
- <sup>53</sup> Ibid., p. 33.
- <sup>54</sup> Ibid., p. ii.
- <sup>55</sup> Ibid., p. 26, 35-36.
- <sup>56</sup> School-to-Work Opportunities Act of 1994. SEC 102.
- <sup>57</sup> *Building A School-To-Work System in the State of Ohio: The State of Ohio's Application for a School-to-Work Opportunities Act Implementation Grant.* June, 1995. p. 35-36.
- <sup>58</sup> School-to-Work Opportunities Act of 1994. SEC. 4 (5)(A-E).
- <sup>59</sup> Ibid., SEC. 4 (22).
- <sup>60</sup> *Building A School-To-Work System in the State of Ohio: The State of Ohio's Application for a School-to-Work Opportunities Act Implementation Grant.* June, 1995. p. 34.
- <sup>61</sup> Ibid., p. 34.
- <sup>62</sup> Ibid., p. 25.
- <sup>63</sup> Ibid., p. 30.
- <sup>64</sup> Ibid., p. 25.
- <sup>65</sup> Ibid., p. 8.
- <sup>66</sup> Ibid., p. 26.
- <sup>67</sup> Letter: Ohio School-to-Work Office. August 13, 1997.
- <sup>68</sup> Letter: Ohio School-to-Work Office. August 22, 1996.
- <sup>69</sup> *Building A School-To-Work System in the State of Ohio: The State of Ohio's Application for a School-to-Work Opportunities Act Implementation Grant.* June, 1995. p. 79, 102.
- <sup>70</sup> Ibid., p. 101.
- <sup>71</sup> Ibid., p. 67, 69.
- <sup>72</sup> *Evaluation of the Ohio School-to-Work Pilot Projects*, Institute on Education and the Economy, Teachers College, Columbia University and Metis Associates. p. 18.
- <sup>73</sup> Four County JVSD - Middle School Career Development Project. A FY96 and FY97 STW Local Partnership Demonstration Grant. The focus of the grant is on Career Development and Career Clusters and Majors for Middle School Youth. March 8, 1996. p. 1.
- <sup>74</sup> Ibid., p. 5.
- <sup>75</sup> Ibid., p. 1.
- <sup>76</sup> Ibid., p. 1.
- <sup>77</sup> Ibid., p. 3.
- <sup>78</sup> Ibid., p. 3.
- <sup>79</sup> Ibid., p. 10.
- <sup>80</sup> Ibid., cover page.
- <sup>81</sup> Henry County Works! p. 8.
- <sup>82</sup> Ibid., p. 15.
- <sup>83</sup> Ibid., p. 18.
- <sup>84</sup> Ibid., p. 18.
- <sup>85</sup> Ibid., p. 18.
- <sup>86</sup> Ibid., p. 8.
- <sup>87</sup> Northwest Ohio Team Works! p. 5.
- <sup>88</sup> Ibid., p. 1.
- <sup>89</sup> Ibid., p. 8.
- <sup>90</sup> Ibid., p. 1.

- <sup>91</sup> Ibid., p. 9.  
<sup>92</sup> Ibid., p. 3.  
<sup>93</sup> Ibid., p. 8.  
<sup>94</sup> Ibid., p. 4.  
<sup>95</sup> Ibid., p. 3.  
<sup>96</sup> Ibid., p. 3.  
<sup>97</sup> Ibid., p. 9.  
<sup>98</sup> Ibid., p. 10.  
<sup>99</sup> Ibid., p. 10.  
<sup>100</sup> Ibid., p. 19.  
<sup>101</sup> Ibid., p. 19.  
<sup>102</sup> Ibid., p. 19.  
<sup>103</sup> The Defiance Area School-to-Work Initiative, Attachment C.  
<sup>104</sup> Ibid., p. 1.  
<sup>105</sup> Ibid., p. 6.  
<sup>106</sup> Ibid., pp. 5, 12.  
<sup>107</sup> Ibid., p. 5.  
<sup>108</sup> Ibid., p. 5.  
<sup>109</sup> Ibid., p. 20.  
<sup>110</sup> Ibid., p. 12.  
<sup>111</sup> Ibid., p. 12.  
<sup>112</sup> Ibid., p. 26.  
<sup>113</sup> Ibid., p. 12.  
<sup>114</sup> Ibid., p. 20.  
<sup>115</sup> Ibid., p. 18.  
<sup>116</sup> Ibid., p. 14.  
<sup>117</sup> Ibid., p. 14.  
<sup>118</sup> Ibid., p. 10.  
<sup>119</sup> Ibid., p. 10.  
<sup>120</sup> Ibid., p. 6.  
<sup>121</sup> Ibid., p. 4.  
<sup>122</sup> Ibid., p. 13.  
<sup>123</sup> Ibid., p. 13.  
<sup>124</sup> Ibid., p. 20.  
<sup>125</sup> Ibid., p. 26.  
<sup>126</sup> Ibid., p. 26.  
<sup>127</sup> Ibid., p. 26.  
<sup>128</sup> Ibid., p. 26.  
<sup>129</sup> Ibid., p. 26.  
<sup>130</sup> Henry County Works! p. 21.  
<sup>131</sup> The Defiance Area School-to-Work Initiative, p. 26.  
<sup>132</sup> Ibid. From a January 21, 1997 letter to the STW Grant Committee from the Defiance Private Industry Council.  
<sup>133</sup> Ibid. p., 15.  
<sup>134</sup> Ibid., p. 17.  
<sup>135</sup> Ibid. Letter to the Defiance City Schools from Northwestern State Community College Defiance  
<sup>136</sup> National Skills Standards Board meeting minutes February 22, 1996. pp.16-17.  
<sup>137</sup> Ibid., p. 49.  
<sup>138</sup> Metal Working Skills Program Certification Partnership. Letter from Debra Bowland, Administrator of the Ohio Bureau of Employment Services to the Automatic Feed Company.  
<sup>139</sup> Metal Working Skills Program Certification Partnership, p. 2.  
<sup>140</sup> Ibid., p. 2.  
<sup>141</sup> Ibid., p. 1.  
<sup>142</sup> Ibid., p. 6.  
<sup>143</sup> Ibid., p. 6.  
<sup>144</sup> Ibid., p. 12.  
<sup>145</sup> Ibid., p. 1.  
<sup>146</sup> Ibid., p. 4.  
<sup>147</sup> Ibid., p. 4.

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- <sup>148</sup> *ON OCCUPATIONAL CLUSTERS: Early Thoughts on Organizing the Work of the National Skill Standards Board*, Workforce Skills Program, National Center on Education and the Economy. (Dept. of Labor contract # F-4322-3-00-80-30). p. 8.
- <sup>149</sup> *ON OCCUPATIONAL CLUSTERS: Early Thoughts on Organizing the Work of the National Skill Standards Board*, Workforce Skills Program, National Center on Education and the Economy. (Dept. of Labor contract # F-4322-3-00-80-30). p. 8.
- <sup>150</sup> *Ibid.*, p. 33.
- <sup>151</sup> *Ibid.*, p. 8.
- <sup>152</sup> Metal Working Skills Program Certification Partnership, p. 4.
- <sup>153</sup> Patrick T. Gray, Licking Heights, Local Board of Education, School-to-Work Pilot Study and Questionnaire (Newark, OH: Licking County Educational Service Center. August, 1996).