

DISCUSSION

As rapid technological advancement shortens product life cycles and the presence of foreign competitors increases competition on both quality and price, businesses must be able to bring novel high-quality products to market. This requires significant financial, human, and technological resources, which many firms are unable to provide on their own. Development of complex products requires heavy investment in capital and equipment, but particularly for firms in rural states and regions, access to venture capital and other start-up financing is often unavailable. In both rural and urban areas, the percentage of the labor force with four-year college degrees is leveling off and the number of workers with two-year degrees and vocational certificates falls short of the economy's needs. Furthermore, existing businesses are hesitant to invest in education and training, due to high turnover rates.

As a result, state governments have been challenged to help businesses access increasingly complex resources. They face several obstacles, including tight budget constraints, lack of coordination among the essential public and private stakeholders, and the challenge of meeting the unique needs of individual industries.

Two of the most successful approaches, used by states to develop high-quality jobs in the face of globalizing markets, have been sector and cluster strategies. These strategies are distinct, in that sector strategies place more emphasis on workforce development in particular industries while cluster strategies devote more attention to supporting entrepreneurship in multiple connected industries. Yet both strategies operate at the state and regional levels, address the problem of high-quality job creation, and utilize many of the same policy tools. Because both business development and workforce development are essential components of effective state economic development policy, sector and cluster strategies are usually developed in tandem.

The National Governor's Association's Center for Best Practices identifies sector strategies as "regional approaches that focus on the workforce needs of key industries in a regional labor market." As opposed to all-purpose workforce development initiatives, which often limit their efforts to vocational training and job placement programs, sector strategies seek to achieve broader "systems change" by overcoming the structural issues that inhibit high-quality job creation. Instead of treating businesses like clients and allowing their involvement to vary with short-term need, sector strategies involve businesses in identification of the focus sector, program development, monitoring, and evaluation.

The benefits are clear. An Aspen Institute study found that the median annual income of workers in six sector-based programs rose from \$8,580 to \$14,040 after one year of participation, and up to \$17,732 in the second year following training.

About CSI

The Center for State Innovation (CSI) believes every state can achieve shared prosperity, environmental sustainability, and efficient democratic government. We offer evidence-based, outcome-measured, fiscally prudent strategies for doing so.

A non-partisan, not-for-profit institution, CSI provides many types of assistance to state executives interested in implementing progressive policies.

To learn about CSI's Policy Briefings, Strategy Academies, and other services offered at no cost, visit www.stateinnovation.org.

The Council on Competitiveness identifies a cluster as “a group of interdependent companies, organizations, and institutions in a geographic region with common or complementary interests that have reached sufficient scale to develop specialized expertise, services, resources, suppliers, and labor.” In order to create this type of regional economy, cluster strategies respond to the globalizing market’s demand for increasingly innovative and specialized products by providing regional businesses with a range of relevant resources. Beyond the workforce development programs and public-private linkages that sector strategies promote, cluster strategies encourage innovation by supporting increased collaboration between small firms, identifying and attracting capital sources for new entrepreneurs, promoting aesthetic design and manufacturing process improvements through cluster-specific university business incubators, and developing cluster-based international exchanges to attract new businesses and learn best practices.

COSTS

The costs of sector and cluster strategies vary depending on the targeted industries, but one founding principle of these programs is to leverage existing resources in innovative ways instead of investing significant government money without stakeholder buy-in. This is accomplished by using existing industry organizations as ‘workforce intermediaries’ and emphasizing low-cost solutions, like changes in regulatory policy, that state agencies can make to encourage innovation. Training programs also achieve cost-savings by providing a resource, which is sufficiently specific to the needs of a particular industry while providing this service to a number of firms.

In terms of costs at the state level, in FY 2008-2009 Pennsylvania invested \$20 million dollars in cluster initiatives. Of this sum, \$15 million was allocated for training programs and \$5 million for the Industry Partnership Program.

At the individual firm level, cluster strategies have demonstrated a return on investment. For example, according to the Arizona Strategic Plan for Economic Development, one firm reported that \$50,000 spent toward cluster activities yielded \$700,000 in new business.

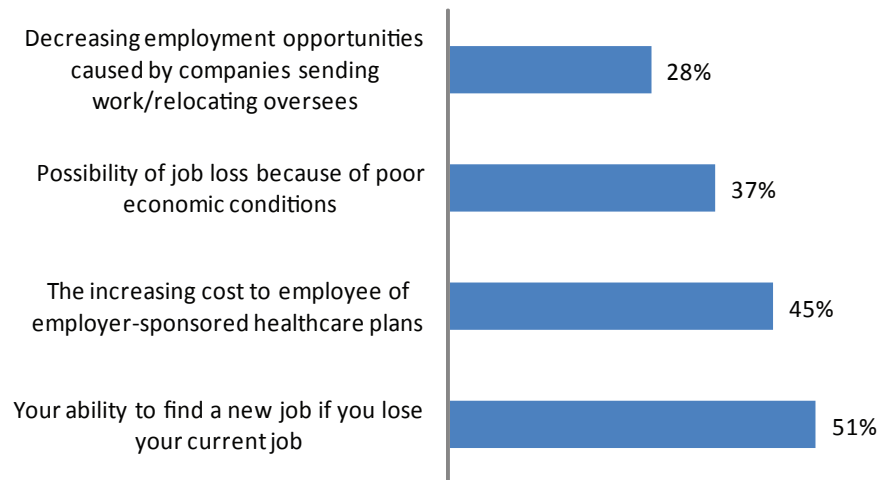
PUBLIC PERCEPTION

A 2008 national poll conducted by the Employment Law Alliance suggests that job security and the ability to find replacement jobs, if necessary, are key issues for American workers. Of the 1,159 workers polled, 51% expressed worry about finding a new job if they lose their current one, 37% expressed fear about losing a job due to poor economic conditions, and 28% were concerned about fewer job opportunities due to outsourcing (See Chart).

According to the 2006 German Marshall Fund Trade and Poverty Reduction Survey, 62% of respondents think that the United States government does a bad job using education and training to help workers adjust to new global competition due to freer trade. Approximately 95% of respondents believe that investing in education and job training or investing in new technologies can help increase national competitiveness.

CHART

**Top Workplace Issues Worrying American Voters,
% Ranking Issue Top or Second Most Worrisome
Total (n=1, 159)**



Source: Employment Law Alliance

TALKING POINTS

Most states already offer a range of services and products that address the issues of job creation and workforce development. Why should states devote more resources to a new program whose services will be similar to what they already have?

Cluster and sector strategies build on existing private and public institutions, and achieve their cost effectiveness as a result. State sector and cluster strategies empower existing stakeholder groups to identify the challenges their industries face and articulate the solutions. The added value of cluster and sector strategies is that, by identifying the common needs and challenges of a single industry or set of related industries, more specific and useful products and services can be provided at scale.

Sector and cluster initiatives involve a re-orientation of the frames government agencies use to assess and plan their policies. Even when this does require the dedication of new resources, it can expose previously unrecognized benefits. By encouraging agencies that are not traditionally involved in job creation and workforce development to consider the effects of their policies in these terms, sector and cluster strategies seek to realize 'systems change'. The emergence of an environmental technology cluster in California helped spur the state Environmental Protection Agency to increase efficiency and emissions regulations, which in turn raised demand and led to a growth in that industry. In this case, by re-framing an issue along cluster lines, the state realized both economic and environmental benefits.

WHO ELSE IS DOING IT?

Because sector and cluster strategies are headed by associations, which may be public or private and because the potential policies implemented in tandem with a sector or cluster policy are diverse, it can be misleading to definitively say whether a state is or is not implementing a sector or cluster policy.

- A collaborative project on Accelerating State Sector Strategies, headed by the National Governor's Association, has identified and now supports five states just beginning to implement sector strategies (Georgia, Minnesota, North Carolina, Oklahoma, Oregon) and six states with significant experience in sector strategies (Arkansas, Illinois, Massachusetts, Michigan, Pennsylvania, and Washington).
- The National Network of Sector Partners lists the following states as those providing model sector strategies: Illinois, Massachusetts, Michigan, Pennsylvania, and Washington.
- The University of Minnesota State and Local Policy Program identifies Arizona, Connecticut, Kentucky, Maine, Minnesota, New York, North Dakota, Oregon, and Wisconsin as state governments that implement model cluster-based economic development policies.

SPOTLIGHT ON INNOVATION

Pennsylvania: Under the leadership of Governor Ed Rendell, Pennsylvania's Department of Labor and Industry has organized three interrelated programs, which support high-quality job creation and workforce development in nine industries linked by common product markets, labor pools, similar technologies, and supply chains. The Industry Partnership Program allocates funds of \$5,000 to \$150,000 to existing associations, or groups of firms that seek to develop an association, in one of the targeted industries. Funds must be used towards planning and capacity building efforts, but not direct services like training or business investment. The Incumbent Worker Training Fund Program enables Industry Partnerships to apply for financial support for workforce development programs that train workers for both improved skills and career advancement. Preference is given to applicants who propose to use existing educational resources, that emphasize employee retention, and that reach out to small and medium sized businesses. Thirdly, Job Training Fund Equipment Grants support equipment purchases for non-profit training providers and public educational institutions that provide job training in the nine high-need industries. Grants are also limited to providers in low-income counties.

WHAT CAN YOU DO?

As the Pennsylvania case illustrates, states can implement policies that simultaneously address the employment needs of individual sectors and the cross-cutting needs of clusters. In general, programs that combine sector and cluster strategies can include the following aspects:

Develop Networks

- Bring relevant and interested parties together, including state bureaucrats, non-governmental organizations, business associations, and entrepreneurs.
- Provide financial or administrative support to institutionalize relationships, so that common understandings of needs and challenges can be developed and monitored.
- Support the development of a 'workforce intermediary' organization which has a deep understanding of worker and employer issues but is also supported by state government. As a result, it has the industry knowledge and the authority to lobby public agencies to cooperate in innovative ways that will benefit the sector.

Increase Awareness

- Support identification and mapping of existing sectors and clusters.
- Aggregate economic information that captures the value and contribution of sectors and clusters, both as a lobbying tool and as a benchmarking mechanism.
- Encourage state regulatory agencies to consider cluster and sector effects of potential policies.

Improve Workforce Resources

- Initiate partnerships between educational institutions, both academic institutions and non-profit training organizations, in order to develop programs to meet the specific needs of clusters and maximize outreach to potential employees.
- Positive employment advancement and wage gains are better realized when job training programs are supplemented with child care, transportation, counseling and other support services.

Promote Innovation

- Once sectors and clusters, as well as their common needs and challenges, have been identified, invest in relevant technology development. This can include direct funding to university research centers, grants to establish cluster-based innovation centers, challenge grants, and matching dollars for federal research grants.

Increase Market for Regional Goods

- State governments can support sectors and clusters by encouraging the use of regional goods and services among agencies.
- State delegations abroad can connect clusters and sectors to foreign markets and lobby relevant foreign corporations to establish locations in the state.

RESOURCES

Policy Reports

Aspen Institute, Workforce Strategies Initiative

- The Labor Market Progress of Participants of Sectoral Employment Development
<http://www.aspenwsi.org/Publications/O2-O10.pdf>
- Sectoral Strategies for Low-Income Workers
<http://www.aspenwsi.org/publications/O7-O14.pdf>

Commonwealth Corporation

- Benefits of a Sector-Based Approach, Research and Evaluation Brief
<http://www.cbwl.org/researchandevaluation/pdf/ResearchBrief2-O3.pdf>

The Competitiveness Institute

- <http://www.competitiveness.org/>

Insight Center for Community Economic Development

- National Network of Sector Partners
<http://www.insightccd.org/index.php?page=nnspp-homepage>

National Governors Association, Center for Best Practices

- State Sector Strategies: Regional Solutions to Worker and Employer Needs
<http://www.nga.org/Files/pdf/06STATESECREG.PDF>
- State Sector Strategies
<http://www.nga.org/portal/site/nga/menuitem.1f41d49be2d3d33eacdcbbeb501010a0/?vgnnextoid=5a5e912a4824e010VgnVCM1000001a01010aRCRD>

National Governors Association, Council on Competitiveness

- Cluster-Based Strategies for Growing State Economies
<http://www.nga.org/Files/pdf/0702INNOVATIONCLUSTERS.PDF>

Opinion Polls**Employment Law Alliance**

- America At Work National Poll
<http://www.employmentlawalliance.com/files/ELA%2019%20Presidential%20Priorities%20Poll%20Results.pdf>

German Marshall Fund

- Perspectives on Trade and Poverty Reduction
http://www.gmfus.org/doc/GMF_TradeSurvey%202006.pdf

State Programs**Arizona****Arizona Strategic Plan for Economic Development (Mary Jo Waits, Arizona State University)**

- “The Added Value of the Industry Cluster Approach to Economic Analysis, Strategy Development, and Service Delivery”
<http://www.nga.org/cda/files/ClusterWaits.pdf>

Arkansas**Arkansas Career Pathways**

- <http://www.arpathways.com/home.html>

Connecticut**Connecticut Department of Economic and Community Development**

- Connecticut Industry Clusters
<http://www.ct.gov/ecd/cwp/view.asp?a=1100&Q=249794&ecdNav=1>

Georgia**Georgia Governor’s Office of Workforce Development**

- National Governor’s Association Center for Best Practices State Sector Strategies: Innovative Workforce Policies to Address Worker and Employer Needs
http://www2.gowfd.ga.gov/vgn/images/portal/cit_1210/55/62/67684564NGA%20Sector%20Policy%20Academy%20Proposal.pdf

Illinois

Illinois Department of Commerce and Economic Opportunity

- Critical Skills Shortage Initiative
http://www.commerce.state.il.us/dceo/Bureaus/Workforce_Development/Resources/CSSI.htm

Maine

Maine Office of Innovation

- Maine's Technology Sectors and Clusters: Status and Strategy
http://www.maineinnovation.com/mie/pdfs/Cluster_Report_Full_Report_FINAL_040908.pdf

Massachusetts

Massachusetts Workforce Board Association

- Workforce Competitiveness Trust Fund
<http://www.massworkforce.com/baystate-works.php>

Michigan

Michigan Regional Skills Alliances

- <http://www.michigan.gov/rsa/>

Minnesota

University of Minnesota - Hubert Humphrey Institute of Public Affairs

- Industry Clusters: An Economic Development Strategy for Minnesota
http://www.hhh.umn.edu/centers/slp/economic_development/pdf/econdev_strategy_mn_industry_cluster.pdf

Minnesota Department of Employment and Economic Development

- <http://www.deed.state.mn.us/index.htm>

New York

Empire State Development

- Industry Clusters List
http://www.nylovesbiz.com/NYS_Home_To_Business/Industry_Clusters/default.asp

North Carolina

North Carolina Community College System BioNetwork

- <http://www.ncbionetwork.org/>

North Dakota

North Dakota Chamber of Commerce

- New Economy Initiative
<http://www.ndchamber.com/neweconomy/index.html>

Oklahoma

Oklahoma Governor's Council for Workforce and Economic Development

- <http://www.okcommerce.gov/council>

Oregon

Oregon INC

- <http://www.oregoninc.org/index.shtml>

Oregon Economic & Community Development Department

- Oregon Industry Clusters
<http://www.oregon4biz.com/clusters.htm>

Pennsylvania

Pennsylvania Department of Labor and Industry

- <http://www.dli.state.pa.us/>

Pennsylvania Workforce Development

- Industry Partnership Program
http://www.paworkforce.state.pa.us/professionals/lib/professionals/pdf/industry_partnership.pdf
- Incumbent Worker Training Program
http://www.paworkforce.state.pa.us/professionals/lib/professionals/pdf/incumbent_worker_guidelines.pdf
- Job Ready PA Update
http://www.paworkforce.state.pa.us/about/lib/about/pdf/skilled_workforce_budget_support/job_ready_update_10-08.pdf
- Job Training Fund Equipment Grant
<http://www.paworkforce.state.pa.us/professionals/cwp/view.asp?a=467&q=153149>

Washington

Washington Workforce Board

- High Skills, High Wages Strategic Plan 2008-2018
http://www.wtb.wa.gov/Activities_HighSkills.asp

Wisconsin

Wisconsin Department of Commerce

- Fostering Cluster Development in Wisconsin
<http://www.wisconsin.edu/summit/papers/FosteringClusters.pdf>