

OVAE Customized Technical Assistance to States

Improving Perkins Performance in Ohio



Prepared under contract to
Office of Vocational and Adult Education
U.S. Department of Education

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Background

In September 2008, the Office of Vocational and Adult Education (OVAE), U.S. Department of Education, invited states and discretionary grantees to submit requests for individualized technical assistance to improve the quality of their Carl D. Perkins Career and Technical Education Improvement Act of 2006 (Perkins IV) accountability systems. The Ohio Department of Education and Ohio Department of Regents requested guidance for improving performance on nontraditional measures, assistance in identifying strategies for capturing postsecondary special populations data, and the development of a crosswalk of career clusters, program codes, and related industries.

Amanda Richards, from the Preparation for College and Careers program area at MPR Associates, Inc., provided consultation services to Ohio. MPR communicated with Ohio via telephone and email. During the technical assistance period, MPR staff consulted with Ohio to create a crosswalk that will meet Ohio's needs for a link among career clusters, programs, and industries. MPR also prepared an overview of recommended practices for exploring and improving performance on nontraditional measures and recommendations for collecting special populations data. This memo represents MPR's final report regarding Ohio's technical assistance.

Crosswalk of Career Clusters, Programs, Occupational Codes, and Industry Codes

MPR used available and existing information linking career clusters, programs (CIP codes), occupations (SOC codes), and industry codes (NAICS codes) to create a single crosswalk including all of these elements. Researchers linked information from existing crosswalks in several stages to develop the aggregate file using several different types of crosswalks, which are described below.

TERMS

CIP = Classification of Instructional Programs

NAICS = North American Industry Classification System

SOC = Standard Occupational Classification system

Researchers used an existing crosswalk that includes CIP 2000 codes and Career Clusters as the initial foundation for the new crosswalk. The original crosswalk document was created in 2007 by DTI Associates under contract with the U.S. Department of Education, Office of Vocational and Adult Education. The crosswalk can be found on the Peer Collaborative Resource Network website at <http://cte.ed.gov/accountability/crosswalks.cfm>.

MPR linked SOC 2000 codes to the CIP 2000 and Career Clusters codes using the SOC-CIP crosswalk created by the National Crosswalk Service Center (NCSC). The crosswalk links SOC 2000 codes and titles to CIP 2000 codes and titles. The crosswalk can be found on the NCSC

website at

http://www.xwalkcenter.org/index.php?option=com_content&task=view&id=39&Itemid=46.

The only link that currently exists between NAICS codes and CIP or Career Clusters codes is through SOC codes. Researchers merged NAICS information onto the crosswalk using a SOC/NAICS crosswalk as the key. The crosswalk can be found at the NCSC site at the following web address:

http://wwwxwalkcenterorg/indexphp?option=com_content&task=view&id=39&Itemid=46.

The crosswalk was nearly complete when it was announced that the CIP 2010 information would soon be available. In order to provide Ohio with the most current information, researchers merged CIP 2010 codes into the crosswalk using a crosswalk of CIP 2000 codes to CIP 2010 codes from the National Center for Education Statistics (NCES). The NCES crosswalk can be found at <http://nces.ed.gov/ipeds/cipcode/crosswalk.aspx?y=55>. These new codes were not intended to replace the CIP 2000 codes, since much of the work done to link CIP 2000 codes to Career Clusters and Pathways has not yet happened for CIP 2010 codes. The addition of CIP 2010 codes was done solely to provide additional information to the state.

Considerations:

1. This crosswalk is an example of a “many to many” linkage. Numerous occupations link to a single industry, just as numerous industries link to a single Career Cluster. In some cases, the linkages created in disparate crosswalks do not appear immediately and logically apparent when combined into one aggregate crosswalk. Recent discussions of the Next Steps Working Group members and the National Research Center for Career and Technical Education (NRCCTE) may result in the NRCCTE taking on long-term responsibility for maintaining the files and identifying a process for making judgments regarding questionable linkages.
2. The structure of the 2000 Standard Occupational Classification system creates challenges when linking SOC codes to industries, clusters, and CIP codes. Occupations are combined to form 23 major groups, 96 minor groups, and 449 broad occupations. Each broad occupation includes detailed occupations. In this crosswalk, CIP code fields corresponding to major SOC groups are blank. Each major SOC group code and corresponding NAICS code could match with multiple CIP 2000 and CIP 2010 codes.

Overview of Preferred Practices to Improve Performance on Nontraditional Measures

Ohio is interested in improving the state's performance on measure of nontraditional participation and completion. Ohio requested assistance in identifying a process for identifying problem areas and addressing those issues with promising practices. Following consultation with Ohio state staff, MPR recommended the state use the U.S. Department of Education (2002) document, *Improving Performance: A Five-Step Process*, as a framework to begin its efforts to improve nontraditional performance. The *Five-Step Process* offers detailed information about identifying, analyzing, and selecting root causes of performance gaps in the Perkins non-traditional indicators. The five steps of the process are as follows.

Step 1: Document Performance Results.

The purpose of Step 1 is to understand performance on the Perkins core indicators (in this case, nontraditional indicators), by looking at performance at the state, institutional, program, and student population levels over a period of time. States can use basic statistics as well as charts, tables, and graphs to present and view performance data. States and their local partners will review the data to identify opportunities for improving performance and anomalies in the data that need exploration and explanation.

Step 2: Identify Root Causes.

Step 2 is focused on using data as well as other sources of information (survey data, focus groups with education providers, etc.) to narrow down the causes of gaps in performance. States are asked to use many different approaches to identify root causes for performance issues and will then select a few to address throughout the rest of the process.

Step 3: Select Best Solutions.

Identifying and appraising various solutions to performance problems is the focus of Step 3. States and their local partners are encouraged to consider both the face validity of the approach (does it make sense, especially for our state and students) as well as any empirical evidence that may exist in order to select the most effective solutions.

Step 4: Pilot Test and Evaluate Solutions.

Step 4 asks States and their partners to begin piloting and evaluating the solutions they identified in Step 3. This approach allows providers to focus their attention on a few pilots and their outcomes, prior to implementing a solution on a wide scale.

Step 5: Implement Solutions.

In the last step, the state will implement the selected and tested solutions throughout their institutions and regions.

To assist Ohio with Step 1 of the process, MPR, with OVAE approval, provided Ohio with Perkins performance data for all states for 2005–06 and 2006–07. These data are contained in Excel files, which mirror the information released as part of the 2005–06 and 2006–07 Perkins Reports to Congress. The state plans to use the data regarding nontraditional indicators to compare Ohio results to those of other states as well as look at the internal state data to identify questionable or problematic performance in disaggregated student categories.

Once the state has identified its priority areas, it will use the information provided in Appendix A, *Strategies for Identifying Root Causes of Performance Gaps in the Perkins Nontraditional Measures*, to work at both the state and local levels to ascertain what approach it would like to take to address the issues. Appendix A presents available information regarding how a state can go about identifying root causes for performance gaps in the Perkins nontraditional indicators. The information contained within it is publicly available and documents are identified with source information.

Improving Collection of Postsecondary Special Population Data

The following section presents brief information regarding practices for identifying special populations in Ohio.

What criteria can be used to identify economically disadvantaged students?

The term *economically disadvantaged family or individual* refers to such families or individuals, including foster children, who are determined by the Secretary to be low-income according to the latest available data from the Department of Commerce (Illinois Center for Specialized Professional Support n.d.).

The following criteria may be used to identify students at the secondary level:

- Eligibility for free or reduced-price school lunch.
- Eligibility for participation in programs assisted under the Workforce Investment Act.
- Eligibility for TANF/public assistance funds.
- Annual income of the individual or family is at or below the national poverty level or the Self-Sufficiency Standard for the State.

- Foster children.

The following criteria may be used to identify students at the postsecondary level:

- Recipient of a Pell Grant, Bureau of Indian Affairs assistance, or comparable state program of need-based financial assistance.
- Annual income of the individual or family is at or below the national poverty level or the Self-Sufficiency Standard for the State.
- Participant or participant's family is a recipient of public assistance.
- Participant is eligible for participation in programs assisted under the Workforce Investment Act.
- Foster children.

States have some flexibility in interpreting this definition, due to the inclusion of state programs. New York, for example, has defined an economically disadvantaged individual as one who participates in any one of the following economic assistance programs (New York State Education Department 2009):

- Pell Grant, Tuition Assistance Program (TAP), Aid for Part-Time Study (APTS), Educational Opportunity Program (EOP).
- Higher Education Opportunity Program (HEOP); Search for Education, Elevation and Knowledge (SEEK); and College Discovery (CD).
- Bureau of Indian Affairs Higher Education Grant Program (BIA); Temporary Assistance to Needy Families (TANF) Funded Services and Assistance; Workforce Investment Act; Social Security Insurance; Women, Infants, and Children (WIC).
- Other public assistance programs serving economically disadvantaged, such as Food Stamps, Home Energy Assistance Payments (HEAP), Supplemental Security Income, Trade Readjustment Act, and Refugee and Immigration Affairs Assistance.
- Or who may be documented as low income: An adult with a total family income below \$15,140 for single persons, \$20,390 per couple, or \$25,650 for a family of three, with an additional \$5,250 per dependent child.

What criteria can be used to identify students with limited English proficiency?

Currently, there is a lack of clarity on how to define students with limited English proficiency, which causes states difficulty in identifying those students for Perkins reporting. States have adopted a few different approaches, outlined below.

- Self-report on initial registration form

- Enrollment in an ESL course in the reporting year
- Enrollment in an ESL course at any time

What criteria can be used to identify displaced homemakers and single parents?

Very few colleges require students to answer questions relating to their parenting and home situations. While this approach protects the privacy of students, it creates challenges for institutions and states trying to report Perkins data. There is no concrete way to overcome this need to balance privacy and data reporting, but some colleges have been able to identify some of these students because they enter the college through a partner non-profit program specifically designed to support displaced homemakers or single parents. These programs may not be partners with all colleges, but it is one approach that could help identify some students.

What criteria can be used to identify students with disabilities?

Students with disabilities fall into several categories, including:

- Students with disabilities who notify the institution and receive related services
- Students with disabilities who notify the institution and do not receive related services
- Students with disabilities who do not notify the institution and do not receive related services

Most institutions are unable to identify student with disabilities who do not officially notify the college. In addition, not all students with disabilities require related services, and therefore, Perkins funds are not explicitly expended on these students.

For those students who do notify their institution and receive related services, barriers still exist to gathering and reporting information. Many institutions are reluctant to share this information because they feel it violates the privacy and dignity of students. However, at this time, that is the only information institutions and states can feasibly collect and report.

References

DTI Associates, Inc. (2007). *Instructional Programs by Clusters/Pathways, Table 2: CIP-Pathway-Cluster*. Available through <http://cte.ed.gov/accountability/crosswalks.cfm>.

Illinois Center for Specialized Professional Support. (n.d.). *Economically Disadvantaged*. Available through <http://www.icsps.ilstu.edu/info/resources/disadvantaged/economic.html>.

National Center for Education Statistics. (n.d.). *CIP 2010 Crosswalk*. Available through <http://nces.ed.gov/ipeds/cipcode/crosswalk.aspx?y=55>.

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National Crosswalk Service Center. (n.d.-b). *SOC to NAICS (Occupational Employment Statistics): OCCINDO*. Available through http://www.xwalkcenter.org/index.php?option=com_content&task=view&id=39&Itemid=46.

New York State Education Department. (2009). *New York State Perkins IV Guide Frequently Asked Questions*. Available through <http://www.emsc.nysed.gov/cte/perkins4/docs/NYPerkinsIVGuide0508.htm>.

U.S. Department of Education. (2002). *Improving Performance: A Five-Step Process*. Division of Vocational and Technical Education. Available through [http://www.stemequitypipeline.org/documents/Guidebook\[1\].pdf](http://www.stemequitypipeline.org/documents/Guidebook[1].pdf).

Appendix A

Strategies for Identifying Root Causes of Performance Gaps in the Perkins Nontraditional Measures.

Strategies for Identifying Root Causes of Performance Gaps in the Perkins Nontraditional Measures

This document collects available information regarding how a state can go about identifying root causes for performance gaps in the Perkins nontraditional indicators. The information contained within it is publicly available and documents are identified with source information.

Process for Identifying Root Causes

A U.S. Department of Education document, titled *Improving Performance: A Five-Step Process* (2002), offers detailed information about identifying, analyzing, and selecting root causes of performance gaps in the Perkins non-traditional indicators. A section of that report is excerpted below and may be found in its entirety at [http://www.stemequitypipeline.org/documents/Guidebook\[1\].pdf](http://www.stemequitypipeline.org/documents/Guidebook[1].pdf).

IDENTIFY ROOT CAUSES

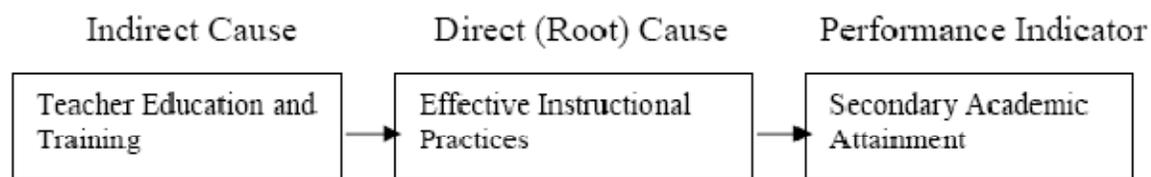
Once you have described performance results and identified improvement priorities, the next step is to identify the most critical direct causes of performance problems—what are called root causes. Your analysis in Step 1 uncovered which students are attaining the desired outcomes and which students are not, but it did not tell you why. Step 2 is designed to address the why questions—why do these performance problems and student differences exist? What are the major root causes that determine performance and explain student differences in performance? Which of these causes should we address first in our improvement efforts?

The search for root causes should be done through a systematic process that first identifies all potential causes, both within your control and outside your control, then determines whether causes within your control are direct root causes or indirect causes, and finally selects the most critical root causes to target for improvement efforts. This section will assist you in identifying and evaluating the root causes of performance to help guide your search for solutions.

Why Search for Root Causes?

Most of us want the quick fix. Responding to day-to-day problems consumes time, and often we don't feel we have the time to examine systematically what is really going on—what works, what doesn't work, and why not. Many times, we settle for conventional wisdom or accept convenient answers to performance problems rather than taking the time to question whether we really understand what is happening. We jump for the “silver bullet” answer heard at a conference or meeting, without trying to understand whether it really addresses problems at our

own schools and colleges or can explain our current performance gaps described in Step 1. We want to adopt a new idea or innovative practice without asking whether it will really address the true underlying causes of the problem and have an impact on performance. Quite often, this means that we invest a lot of time and effort in improvement activities that do not achieve the expected results and, worst of all, we don't know why. Program improvement is, in part, a search for answers to a very basic question: what causes poor performance? Root causes are those conditions or factors that directly cause or permit a performance gap to occur. They are direct, not indirect, causes. For example, effective instructional practices are a direct cause of student academic achievement because they have a direct impact on academic achievement. In contrast, teacher training is an "indirect" cause because it has an effect on student achievement only to the extent that the training results in improved instructional practices in the classroom, which, in turn, affect academic achievement.



Indirect causes can be either within the control of schools and colleges or outside the control of schools and colleges. For example, teacher education and training is an indirect cause of academic attainment, but schools and colleges can take actions to increase teacher education and training. However, another indirect cause may be overall school resources. Although federal and state governments and local taxing districts can increase school and college funding, this may be considered an indirect cause outside the control of school and college staff for the purposes of improvement planning.

How to Identify Root Causes

Determining root causes is a search for the most direct and highest impact causes of performance gaps on core indicators that are within the control of schools and colleges. This search should employ a systematic evidence-based process, one that allows for the formulation and testing of theories or hypotheses about the underlying cause-effect relationships for each core performance indicator. It should draw on current research and evaluation, and use multiple methods and data sources to test specific hypotheses. Rarely are performance problems caused by a single factor; rather, they are caused by a combination of root causes and indirect causes some of which are beyond the immediate control of schools and colleges.

There are many different approaches to identifying root causes, but most approaches involve three basic phases: (1) identify potential causes, (2) analyze and evaluate potential causes, and (3) select a critical few root causes.

Phase 1: Identify Potential Causes

Start the process by first developing a comprehensive list of all possible causes. Use multiple methods to develop lists so that you can take advantage of multiple sources of information and multiple perspectives from students, faculty, and other internal and external stakeholders.

Methods	Advantages and Contributions
Reviewing Research Literature	Reviewing the literature provides insights from researchers on major causes of performance gaps from a wide variety of school and college settings.
Reviewing Program/Institutional Evaluations and Effectiveness Reviews	Assessing evaluation data may provide you the perspective of external evaluators, peers, and stakeholders on what they think are potential root causes of performance gaps at your school, college, or a peer institution.
Analyzing Student Data	Analyzing your own student data offers a unique opportunity to identify and evaluate potential causes by attempting to explain why some students achieve desired outcomes and others do not, even those students with similar backgrounds and characteristics and those in the same programs. This could be done for all students or a sample of students.
Conducting Focus Groups	Conducting meetings with students and professional staff provides a mechanism to gain the perspective of customers and stakeholders on what they feel are the major causes. This subjective information can then be used to develop and test hypotheses using objective methods. This method provides a basis for customers and stakeholders to take ownership of your conclusions.

Brainstorming	Providing people a way to freely express their opinions and generate new ideas is important in identifying all potential causes, including those that may be counterintuitive or outside conventional wisdom. This method provides a systematic approach for generating new ideas that can be more fully tested and evaluated by other methods. It also provides the basis for ownership of your conclusions and the search for solutions.
Peer Benchmarking	Networking with peers provides an opportunity to exchange information and perspectives on root causes and may save valuable time. Focus your peer exchange with similar peers and best performers, so that you can make sure to identify the major causes that best performers believe are the most critical causes that must be addressed and controlled to achieve performance excellence.

Phase 2: Analyze and Evaluate Potential Causes

After identifying a potential set of causes, group these causes into two major categories: (1) causes within your control that could potentially be addressed by improvement strategies, and (2) causes beyond your control that to consider when developing improvement strategies. For example, for secondary academic attainment, you may start a listing of your causes in a table like the one below.

Causes Within Control	Causes Outside Control
<ul style="list-style-type: none"> ● Student Motivation and Engagement ● Effective Instructional Practices ● Teacher Training/Education ● School Expectations/Incentives ● Perceived Career Relevance 	<ul style="list-style-type: none"> ● Student Transfer/Mobility Levels ● Family Income ● Parents' Education ● School Resources

Then, use many of the same methods used to identify potential causes to fully test and evaluate them. Although all potential causes should be tested and evaluated, spend most of your time and resources on those that you have determined to be within your control. Evaluate those causes by addressing the following criteria:

Theory

Is there a clear and compelling theory or rationale for the cause?

Evidence

Is there strong and compelling evidence that this is a major cause of performance problems? Is there evidence to suggest that it is a major cause at your school or college or at peer institutions?

Root or Indirect Cause

Is this cause a direct cause of performance gaps or is it an indirect cause that is has an impact only through another related cause?

Need

Does this cause represent a major problem? Do conditions exist that make it an obvious factor to be addressed? Has this cause already been successfully addressed at your school or college?

Impact

Are there opportunities and resources to address this cause and make major impacts on performance gaps?

Stakeholder Support

Do major stakeholders who must develop and implement solutions support the cause widely?

Of the methods listed above, the two that are most helpful for evaluating root causes are analyzing student data and conducting focus groups. For example, if during exploratory focus groups and brainstorming “established student career objectives” was identified as a cause affecting secondary placement rates, you could then evaluate and validate the extent of a cause-effect relationship. This can be accomplished by analyzing your current data to see if those students who had clear career objectives after completing career exploration and planning activities were more likely to transition to employment and/or further education. In absence of this data, you could survey students prior to high school completion to see if those receiving career services had clear objectives and whether those students have greater likelihood of transitioning to employment or further education the following school year. Since this would take time, an alternative would be to conduct surveys or focus groups with students, faculty, and staff to review and confirm your hypotheses.

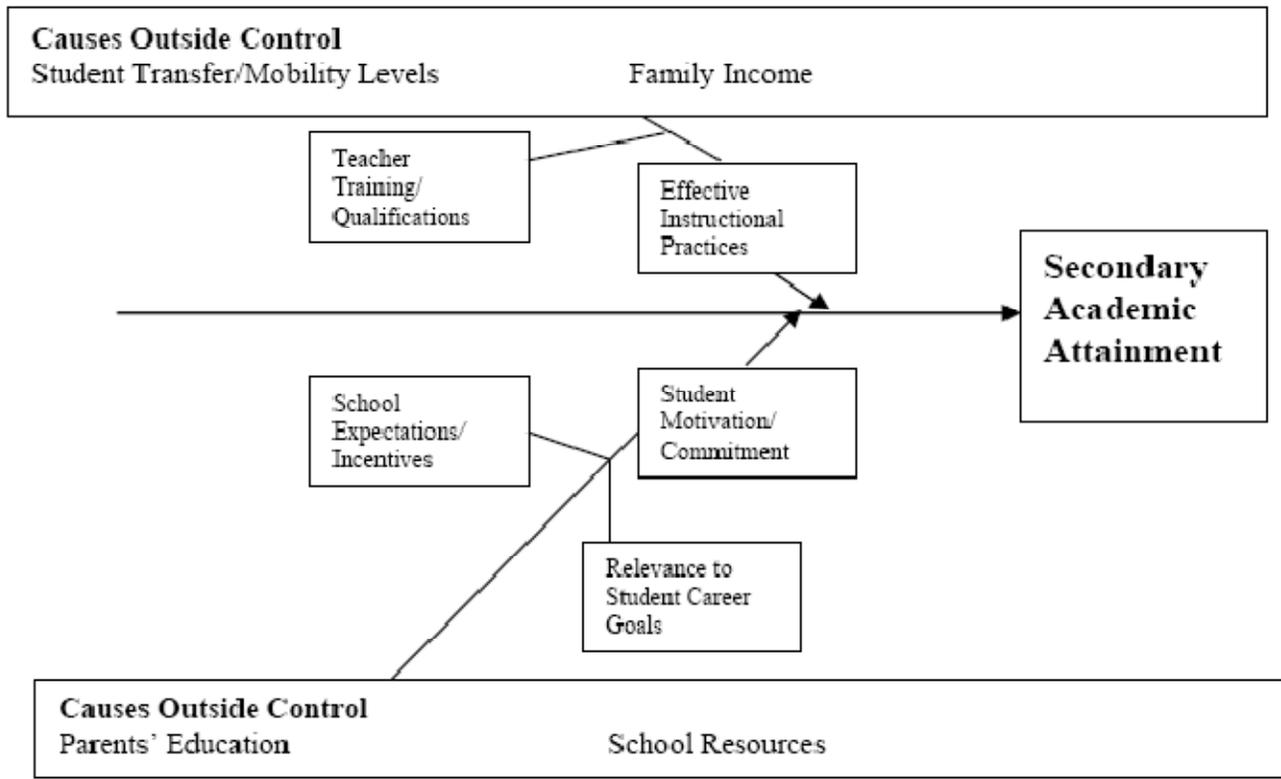
This will result in an overall evaluation of the potential causes within your control similar to the example provided below.

Causes Within Control	Theory	Evidence	Root/Indirect	Need	Impact	Support
Effective Instructional Practices	Strong	Strong	Root	High	High	High
Teacher Training/Education	Strong	Strong	Indirect	High	High	High
Student Motivation/Engagement	Strong	Strong	Root	High	High	High
School Expectations/Incentives	Strong	Moderate	Indirect	High	High	High
Perceived Career Relevance	Strong	Weak	Indirect	High	High	Moderate

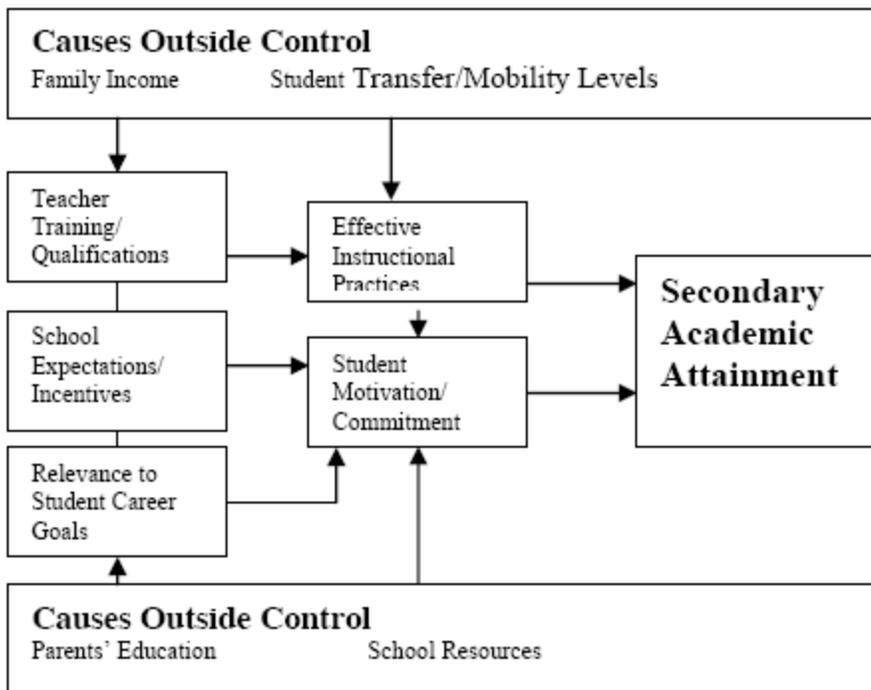
Phase 3: Organize Your Theory and Select the Most Critical Root Causes

After completing your evaluation, attempt to formulate and gain consensus on a comprehensive theory of performance for a core indicator.

It may be useful to use visual models to communicate your theory of performance on a core indicator. Many different visual models are useful, but the rule in developing these visual models is to “keep it simple.” One approach is to construct a modified fishbone diagram like the one shown on the next page. In this example, the model demonstrates the causal relationships among various causes outside of and within your control on secondary academic attainment.



Another is to use a cause-effect model like the one below.



After organizing and gaining consensus on your overall theory of performance, select the most critical root causes on which to focus in developing solutions. You can rarely address all of the root causes at one time—set priorities and address the most critical causes first.

Use the results from your testing and evaluation to select those root causes that have the strongest theory and evidence to support them, address the most critical needs, and provide the best opportunity to have high impacts on performance.

Moving to the Next Step

Before you move to the next step and start the search for solutions, make sure you have laid the necessary foundation. Have you done the following:

- Used multiple approaches to identify potential causes based on data and perspectives of stakeholders?

- Grouped potential causes into those within your control and those outside your control?
- Used multiple approaches to analyze and evaluate potential causes and assess them according to objective criteria?
- Organized your theory of the causes of performance into a visual model or figure that shows: (1) root causes, (2) indirect causes, and (3) causes outside your control?
- Identified the most critical root causes on which to focus efforts in searching for solutions?

Excerpted from U.S. Department of Education. (2002). Improving Performance: A Five-Step Process. Division of Vocational and Technical Education. Available through [http://www.stemequitypipeline.org/_documents/Guidebook\[1\].pdf](http://www.stemequitypipeline.org/_documents/Guidebook[1].pdf).

Resources for Identifying Root Causes

Click on the hyperlinks included in the “examples and resources” column to go directly to the document or resource. Many documents were included within this document when possible. Others are linked to their online location.

Method	Description	Examples and Resources
Environmental Scans and Surveys	Surveys of teachers, administrators, counselors, and other providers of CTE instruction in schools and colleges.	<p>The Stem Equity Pipeline: Environmental Scan is a survey designed to be answered at the “site” level. It includes questions that are appropriate for teachers, administrators, and counselors about materials and resources, mentoring, staff development, behavior, communication, and policies.</p> <p>The Assess Readiness for Successful Nontraditional Programs survey asks questions of teachers, counselors, and administrators to determine if a site and/or program have tools in place to support nontraditional program success.</p> <p>Building Level Assessment: An Equity Manual provides a bank of equity related assessment statements that schools, districts, or states can use to develop questionnaires. The questionnaires provide an opportunity for teachers to assess themselves and to allow faculty, parents, students, and/or support staff to assess their schools for equity.</p> <p>The Guidance Counselor Sex Equity Survey was developed to assist guidance counselors in identifying equity issues and planning for equity in counseling programs. The survey is designed to be used by guidance counselors at the secondary level. However, elementary guidance counselors also may find the survey helpful as many strategies are appropriate for both levels.</p>

		The Instructor Survey for Retaining Men and Instructor Survey for Retaining Women in Nontraditional Programs assist in identifying root causes and opportunities for change in schools.
Checklists	Checklists for teachers, counselors, or administrators to illuminate areas where gender bias may arise.	<p>The Achieving Gender Fair Teaching: Teacher Checklist asks teachers to rate their behavior and assess what kind of model they are to their students.</p> <p>The Checking Your Schools for Sexism checklist helps schools determine if sexism exists in the institution, and to what degree.</p> <p>The Am I a Fair Counselor checklist is intended to highlight problems and opportunities to mitigate gender bias in counseling practices.</p>
Self-Studies	Comprehensive tools to assist states, sites, or districts to identify and assess root causes.	The Michigan Self-Study tool has questions relating to several topic areas, including outreach and recruitment, retention and support, and placement and post-placement.
Online Tools	Online tools for identifying root causes of performance gaps.	<p>The Illinois Center for Specialized Professional Support, through Illinois State University, College of Education, offers an online “New Look” tool to assist providers in self-studies. The online tool is free and publicly available, but does require you to request login information from the Center.</p> <p>The NAPE Root Causes and Strategies online tool allows users to electronically explore root causes, theories, and strategies categorized within five areas: education, career information, family, internal/individual, and societal issues.</p>
Research Findings	Research relating to identifying root causes.	The 2003 Improving Performance on Perkins III Core Indicators: Summary of Research on Causes and Improvement Strategies report summarizes research on causes for performance gaps for every Perkins III performance indicator. While states are now implementing Perkins IV indicators, the nontraditional indicators have remained the

same, and the root causes information is likely to still be relevant.

The 2009 National Alliance for Partnerships in Equity report, *Nontraditional Career Preparation: Root Causes & Strategies*, examines effective approaches to encouraging gender equity. Part I of the document contains a summary of root causes, theories, and strategies. Part II is much more detailed and goes through each element at length.

Activities

Group or individual activities designed to assist users to identify root causes and/or strategies for improvement

Examples and Resources

The following documents were included to assist in the easy identification of resources. All of these documents are also available online, and information about obtaining the originals is included in the “source” information included after each document.



Environmental Scan

Directions: Take some time to read and respond to these questions. They will help us better understand details about your site and should lead you to reflect on things that could easily go unnoticed atop all the other work that is being done at your schools and colleges. Please be honest in your responses and understand that the information will not be used to evaluate your site as “good” or “bad.” The more time you’re able to spend exploring elements of your school, the more helpful this work could be. We suggest you divide these questions among people on your team according to individuals’ roles (e.g., questions (1), (2), and (7) might be most appropriate for counselors and support staff personnel, questions (3) and (8) might be most appropriate for teachers/instructors, questions (6) and (12) might be most appropriate for administrators, and the remaining questions could be appropriate for a variety of people).

1. List publications students receive from your secondary/postsecondary site that give information about nontraditional occupations (Note: These publications needn’t state that they focus on nontraditional occupations. The only requirement is that they provide information on nontraditional occupations such as welding or child care.).

2. Of the publications listed in your response to (1), select one or two that seem roughly representative of the others and look through them to answer the following:

- Examine the illustrations. How are men and women depicted in most of them? Explain, providing examples if they’ll clarify your responses.

[Some suggested questions to consider are: Are men often depicted in traditionally masculine roles and/or women in traditionally feminine roles? Are members of one gender predominantly seen as helpers? Leaders? Figures of authority? Are members of one gender mainly seen in passive roles such as watching, sitting, or waiting, while members of the other gender are seen in more active roles?]

- Among stories presented in these publications, are **women** portrayed in nontraditional roles? If so, how often and in what contexts?
- Among stories presented in these publications, are **men** portrayed in nontraditional roles? If so, how often and in what contexts?
[Note: Responses to the above two might be surprisingly different, possibly because occupations that are nontraditional for one gender are higher paying, and often more highly valued in society, than nontraditional occupations for the other gender.]
- Scan the text. How often is “he” used for both sexes? If the text uses both “he” and “she,” do these words tend to appear in different contexts? For example, is “she” more prevalent when discussing nurses while “he” is more prevalent when discussing engineers?

- In your opinion, how well does the text encourage members of both sexes to consider a wide range of careers and activities? What about the text led you to develop this opinion?

3. Review some textbooks that are used in CTE courses at your secondary/postsecondary sites. Select one or two texts that are representative of the majority of books through the CTE programs and look through them to answer the following:

- Examine the illustrations. How are men and women depicted in most of them? Explain, providing examples if they’ll clarify your responses.

[Some suggested questions to consider are: Are men often depicted in traditionally masculine roles and/or women in traditionally feminine roles? Are members of one gender predominantly seen as helpers? Leaders? Figures of authority? Are members of one gender mainly seen in passive roles such as watching, sitting, or waiting, while members of the other gender are seen in more active roles?]

- Among stories presented in these publications, are **women** portrayed in nontraditional roles? If so, how often and in what contexts?
- Among stories presented in these publications, are **men** portrayed in nontraditional roles? If so, how often and in what contexts?
[Note: Responses to the above two might be surprisingly different, possibly because occupations that are nontraditional for one gender are higher paying, and often more highly valued in society, than nontraditional occupations for the other gender.]
- Scan the text. How often is “he” used for both sexes? If the text uses both “he” and “she,” do they tend to appear in different contexts? For example, is “she” more prevalent when discussing nurses while “he” is more prevalent when discussing engineers?
- In your opinion, how well does the text encourage members of both sexes to consider a wide range of careers and activities? What about the text led you to develop this opinion?

4. List the names and titles of nontraditional role models who have served teaching, presenting, or mentoring roles at your secondary/postsecondary site. Please explain the role that best describes the interaction of this role model with students.

NAME	TITLE	ROLE

5. If mentoring opportunities exist(ed) at your site, please list the following:

- Indicate numbers and percentages of NTO learners participating in mentoring.

- Describe the formality/informality of the program(s).
- Summarize any anecdotal evidence of effectiveness (in this response, note evidence related to how well organized it is too).

6. List staff development opportunities concerning nontraditional occupations that have occurred since academic year 2005-2006 for people at your secondary/postsecondary site and record the level at which the opportunity was offered: local, regional, state, or national. For each of these opportunities, please record the following information: target audience, titles/duties of attendees, time of year offered, and topic(s) addressed.

Opportunity: Level:			
Target audience	Titles/duties of attendees	Time of year offered	Topic(s) addressed

7. Counselors and support personnel should review materials they supply to students and reflect on their own behavior and the behavior of their peers at the site that hold similar roles when answering the following:

- Describe any actions we take to encourage students to pursue careers in fields where the majority of workers are of the opposite sex.
- Describe when (i.e., in what context) we discuss job salaries with students and if we're just as likely to discuss these topics with both male and female students.
- Describe instances in which we point out that typical jobs that are overwhelmingly female usually have lower salaries than typical male jobs (and also note how often such conversations arise).
- Describe when, if ever (e.g., when they are about to enter the workforce), students are supplied with information about employment rights and discrimination laws.
- Describe how counselors and support personnel react when male students express interest in pursuing a career as a nurse or an administrative assistant. In what ways are they encouraged or discouraged?

- Describe what barriers, if any, you believe young women impose on themselves in response to socialization pressures and how these barriers might intersect with your responsibilities as counselors and support personnel.

8. Teachers should consider their behavior and the behaviors of their colleagues when answering the following:

- Describe how conscious you are to use gender-fair language (e.g., avoiding “he” and “she” when referring to specific workers, such as “he” for welders and “she” for nurses).
- Explain how important it is for you to search for and use instructional materials that depict multicultural men and women in a variety of occupational and recreational activities. If it is important, describe how you go about these searches and note any materials that you would recommend to other people.
- Describe if there are any explicit, purposeful actions you take to support students who are enrolled in career and technical education programs not traditional for their gender.
- Describe if and how equity topics are infused into the curriculum, such as awareness and prevention of harassment and discrimination. If these topics are not infused into the curriculum explain how or if you think they could be infused into it.
- Describe any conscious actions you take to increase the likelihood that you provide equal attention, instruction, feedback, academic criticism, and praise to students of both sexes.
- Describe if you have unique achievement expectations for female and male students in your classes in regards to grading, discipline, and behaviors.
- Describe ways in which you interact with female and male students similarly and differently.
- Describe how you react when male students express interest in pursuing a career as a nurse or an administrative assistant. In what ways are they encouraged or discouraged?

9. Consult with computer lab staff members and complete the table below. Depending on factors present at your secondary/postsecondary site (such as the size), the numbers you record might differ greatly from lab-to-lab on your campus. Consider what factors might affect that outcome.

	# of men	# of women
Computer science teachers		
Media specialists		
Representative sample of characters (e.g., adults, children,		

animals, and creatures) referenced in software used by students (consider using the most popular student software)		
Student-helpers that assist in labs and maintain the computers		
Approximate weekly number of students in the computer labs during free time (e.g., after school, during lunch breaks, in study halls)		
Approximate number of participants in extracurricular activities that focus on computers or technology		

10. What communications between administration, staff, students, or parents throughout the past year have included the topic of nontraditional occupations?

11. Explore ways that the site and its climate can communicate institutional gender equality by answering the following:

- Describe any policy statements the school/college has that support learners in nontraditional classes and prohibit unlawful discrimination towards learners in nontraditional classes.
- Describe any actions that have been taken to promote the development of support groups for learners in nontraditional classes and help pair NTO learners with mentors.
- Describe any formal mechanisms that are in place for learners in nontraditional classes to resolve concerns and needs.
- Describe if efforts are made to place more than one NTO learner in an NTO class whenever possible.
- Describe assistance provided to parents who are preparing for nontraditional occupations that might increase the likelihood that they could complete the programs (e.g., provide, or help support, child care for parents).
- Describe efforts made to ensure that tools, equipment, and clothing meet the NTO learners’ size requirements.

12. The following have to do with some policies and training at your site and might be most appropriate for one or more administrators to complete:

- Describe any policies the secondary/postsecondary site has that explicitly condemns racially, sexually (including sexual orientation), and ethnically biased behavior.
- If there are such policies in place, describe how consistently these policies are enforced.

- Describe any efforts the site has made to routinely collect data on incidents of cross-cultural friction such as harassment of females in nontraditional classes. Additionally, note any special programs or policies that have been put in place as a result of such data analyses.
- Describe any training staff members receive about how to use language that is free from racial, ethnical, and sexual bias or slurs. Comment on the degree to which staff members’ language is free of such bias and slurs.
- Describe how well (or poorly) pictures, decorations, and bulletins in the school reflect the diversity of the school population and emphasize messages of unity and diversity.
- Describe any culturally sensitive and inclusively planned staff development about diverse cultural norms, communications, and learning styles.
- Describe any plans this secondary/postsecondary site has for improving intergroup relations and explain whether or not there is adequate funding and administrative support to carry out a successful plan.

13. List the businesses and industries with which this secondary/postsecondary site has a relationship and, for each entry, note the activities with which it was involved with your site (e.g., participated in a career fair, posted position openings, participated in advisory boards, etc.)

Business/Industry	Activity

14. If your school/college works with businesses, how do you inform employers, if at all, that your secondary/postsecondary site will not tolerate discrimination?

15. List role models from businesses and industries who are involved with NTO learners in the educational organization and identify the gender of the role model.

Adapted from the New Look Self-Study, Illinois Center for Specialized Professional Support. For more information go to www.icsps.ilstu.edu

Citation Information: National Alliance for Partnerships in Equity Education. (n.d.). Stem Equity Pipeline: Environmental Scan. For the National Science Foundation. Available through <http://02b47b1.netsolhost.com/foundation/page.php?14>.

Achieving Gender Fair Teaching: Teacher Checklist

As an instructor, you serve as a model for your students. You significantly affect students' attitudes and behavior. Use the following checklist to assess the model you are to your students.

In teaching, I:	Always	Usually	Do Not
1. Provide the same course content for both genders.			
2. Provide the same learning activities and projects for students (rather than different ones such as more labs for males, more seat work for females).			
3. Set the same standards of behavior for all students in my classroom (i.e., attention, quiet, visiting, etc.).			
4. Allow all students equal access to tools and equipment with the same standards for use.			
5. Encourage all students to be equally considerate and courteous of others.			
6. Administer the same reprimands of disciplinary actions to students for misbehavior.			
7. Avoid comparing men with women or vice versa in respect to behaviors, attitudes, and accomplishments (i.e., The women in the class are setting an excellent example.)			
8. Use gender free terms and occupational titles rather than gender-specific ones.			
9. Give equivalent attention to both genders (rather than more criticism for men, support for women, or vice versa).			
10. Establish a classroom environment so that harassment on basis of gender, race, or disability is unacceptable and does not exist.			
11. De-emphasize competition on the basis of gender.			
12. Expect a variety of academic preferences for both males and females.			
13. Establish the same safety and/or sanitation and dress requirements for all students.			
14. Establish and apply the same grading system to both genders.			
15. Incorporate the topic of gender discrimination, stereotyping, and bias into regular course content and discussions whenever possible.			
16. Provide information about expanding occupational and/or family activities for both genders in areas that have been traditionally considered appropriate for only one gender.			
17. Assist both genders in recognizing that their adult roles will probably include work, parenting, and homemaking.			
18. Involve students in identifying examples of gender discrimination, stereotyping, and bias in textbooks, curriculum materials, media, and other courserelated materials.			

In teaching, I:	Always	Usually	Do Not
19. Make an effort to change or supplement gender stereotyped instructional materials.			
20. Use resource people in the classroom who show changes in sex stereotyped roles (female auto mechanic, male child care worker, male nurse, female electrician, father who stays home with kids etc.).			

Source: Promoting Non-Traditional Career Options and Opportunities, Kansas Competency-Based Curriculum Center, Washburn University, Topeka, KS 1999. Available through [http://02b47b1.netsolhost.com/foundation/e107_images/custom/\(10b\)%20AchievingGenderFreeTeaching.pdf](http://02b47b1.netsolhost.com/foundation/e107_images/custom/(10b)%20AchievingGenderFreeTeaching.pdf).

Assess Readiness for Successful Nontraditional Programs

“Yes” answers indicate areas where your agency already has a head start. “No’s” indicate how you

Description: Use the checklists that follow to determine if sexism exists in your schools, and if so, the degree to which it exists.

can intervene to increase nontraditional student success.

√ For Teachers and Counselors	Yes	No
1. Have faculty and staff received training in the kinds of pro active encouragement known to be effective in retaining students, such as recognition of skills demonstrated, reducing isolation of nontraditional students right away by having male and female students work together, finding and making mentors regularly available?		
2. Is information regularly shared with all students on job placement and wages available in the nontraditional trades and technical occupations?		
3. Are occupational specific math skills, tool identification and use, and physical conditioning offered in prevocational training to female and other under-represented students?		
4. Does your agency have a sexual harassment policy ?		
5. Are faculty, and both male and female students, trained in sexual harassment prevention and intervention ?		
6. Are internships available that allow students to develop skills in a safe, supportive environment ?		
7. Do instructors visit the workplace to prepare employers for female interns ?		
8. Are students aware that demonstrating high skills is the best antidote to workplace/classroom harassment or isolation?		
9. Are on site support groups available to nontraditional students?		
10. Do you offer workshops for parents emphasizing career futures in technical and nontraditional fields and the higher wages such jobs can offer?		

√ For Administrators	Yes	No
1. Do you provide comprehensive professional development in effectively recruiting, retaining, and placing students preparing for nontraditional employment?		
2. Do you disaggregate data by gender to analyze enrollment, retention, and placement patterns?		
3. Have you developed specific goals for increasing enrollment, retention, and placement in nontraditional occupational training areas?		
4. Have you appointed a staff committee to promote the recruitment, retention, and placement of women in nontraditional training and employment?		
5. Have you let all staff know that all the above interventions work in promoting high wage trades and technical careers for female and other special populations?		

Source: *Tools for Teaming*, Office of the State Director for Career and Technical Education, Honolulu, Hawaii, 1998. Available through

[http://02b47b1.netsolhost.com/foundation/e107_images/custom/\(10d\)%20AssessReadinessforSuccessfulNTprograms.pdf](http://02b47b1.netsolhost.com/foundation/e107_images/custom/(10d)%20AssessReadinessforSuccessfulNTprograms.pdf).

Checking Your Schools for Sexism

Description: Use the checklists that follow to determine if sexism exists in your schools, and if so, the degree to which it exists.

Hidden Curriculum Checklist

Almost Always Present				Almost Never Present	Un-known	Not Applicable	
1	2	3	4	5	U	NA	
							1. Competition between male and female students—for example, spelling bees, lining up quickly, sports—is discouraged. Neither group is ever held up as an example for the other.
							2. Teachers have similar expectations for male and female students in these areas. a. Reading
							b. Mathematics
							c. Science
							d. Athletics
							e. Family and Consumer Education
							f. Technology Education
							g. Other
							3. a. There are the same standards for males and females with regard to swearing.
							b. There are the same standards for males and females with regard to taking risks and showing emotion.
							c. There are the same standards for males and females with regard to fighting, aggressiveness, and hitting.
							4. Punishment is fair and unbiased. a. It is the same for males and females for the same offenses.
							b. Contact with or proximity to the other sex is not used as a form of punishment.
							5. The teacher intervenes to reduce derogatory comments about behaviors toward students of one sex by students of the other.
							6. Dress and appearance standards are the same for male and female students (for example, boys and girls may wear their hair as they choose.)
							7. Both male and female students are encouraged to consider a broad range of choices for jobs and careers a. by teachers.
							b. by counselors.
							c. by other students.
							8. Tests for vocational interests are a. reviewed annually for bias
							b. administered fairly, and
							c. interpreted without gender bias.
							9. Similar roles for and relations with male and female parents are maintained (for example, both mothers and fathers are invited to attend conferences, be room parents, attend PTA, go on field trips.)

Hidden Curriculum Checklist (continued)

Almost Always Present	2	3	4	Almost Never Present	Un-known	Not Applicable	
1	2	3	4	5	U	NA	
							10. a. Students who are pregnant are treated the same as other students.
							b. Students who have children are treated the same as other students.
							c. Students who are married are treated the same as other students.
							11. All classrooms and school jobs or honors are distributed evenly among male and female students.
							a. Patrol
							b. Guides
							c. Students of the week
							d. Other
							12. a. Leadership positions (for example, class and school officers) are evenly distributed among male and female students.
							b. If positions to which students are elected are sex stereotyped, school personnel are attempting to change this.
							13. Extracurricular activities are free from sex stereotyping and bias, for example:
							a. cheerleading, pompon squads
							b. computer club
							c. debate team
							d. future career clubs
							e. interscholastic sports
							f. others
							14. a. Males and females have comparable opportunities to take part in interscholastic sports.
							b. The school provides girls and boys interscholastic sports with equitable resources, such as coaching time, equipment, facilities, and money for travel.
							15. Female and male students have equal access to facilities.
							a. playground
							b. gym
							c. restrooms
							16. Teachers present good models to students in that they work and socialize at school in sex-integrated groups.
							17. Male and female teachers have the same extra responsibilities or job, such as hall or playground duty.
							18. Personnel policies and practices do not discriminate on the basis of
							a. pregnancy;
							b. the need for family leave; or
							c. marital status and family unit.
							19. a. There are fair, objective criteria for employment practices.
							b. The district has an affirmative action policy for promotion fair employment practices.

Overt Curriculum Checklist

Almost Always Present				Almost Never Present	Unknown	Not Applicable	
1	2	3	4	5	U	NA	
							1. Instructional materials show female and male main characters in literature with equal frequency.
							2. Instructional materials are free from stereotyped personality characteristics and activities. Girls are sometimes active, showing initiative, independent, solving problems, earning money, receiving recognition, being inventive, participating in sports; while boys are sometimes passive, fearful, helpless, receiving help, engaged in quiet play.
							3. Instructional materials reinforce nontraditional career patterns. For example, both men and women share housework and child rearing, both are engaged in a variety of careers, men are shown in traditionally female occupations, women are shown in traditionally male occupations.
							4. a. Instructional materials recognize the contributions of women in many fields (for example, politics, science, law, social services, the arts).
							b. Women and men from many racial/ethnic groups are shown in instructional materials.
							5. Instructional materials are free from specific derogatory stereotyped sex roles (for example: the sissy boy, the dominant mother, the wicked step-mother, the tomboy who should and does turn "feminine").
							6. Instructional materials are realistic in that they show the nature and extent of sex discrimination in society as an explanation for differences in role and career choices and personal characteristics.
							7. Instructional materials emphasize diverse standards of physical appearance for both men and women.
							8. Instructional materials use language free from sex bias. For example he/she us used instead of he, humans instead of men, ancestors instead of forefathers, letter carrier instead of mailman, chairperson instead of chairman.
							9. When instructional materials contain sex bias, teachers compensate by introducing supplementary materials or by discussing the bias in the materials with students.
							10. There is a written policy for selecting bias-free instructional materials.
							11. Personnel responsible for the selection of instructional materials receive training to make bias-free decisions.
							12. a. All courses are open to males and females. No course carries the implications that it is specifically for one gender.
							b. Faculty members encourage both male and female enrollment in courses that traditionally have been taken by student of only one gender.
							13. Activities <i>within</i> courses are open to both males and female and both are encouraged to become proficient.
							14. Gender is not used as a criterion to separate students.

Source: Bitters, Barbara and Susan Foxwell. *Wisconsin Model for Sex Equity in Career and Vocational Education*. Madison, WI: Department of Public Instruction, 1993. Available through [http://02b47b1.netsolhost.com/foundation/e107_images/custom/\(10h\)%20CheckingforSexism.pdf](http://02b47b1.netsolhost.com/foundation/e107_images/custom/(10h)%20CheckingforSexism.pdf).

Am I a Fair Counselor?

	Always	Often	Never
1. Do I encourage all students to make academic, career, and personal decisions on the basis of individual abilities, interests, and values rather than on the basis of gender?			
2. Do I encourage students to pursue a career even though the people in that field are primarily of the other sex?			
3. Do I discuss job salaries with both male and female students?			
4. Do I point out that typical female jobs usually have lower salaries than typical male jobs?			
5. Do I meet with students in programs nontraditional for their gender on a regular basis to support them in their pioneering role and to discuss any problems that may arise?			
6. Do I provide students about to enter the work force with information about employment rights and discrimination laws?			
7. Do I help students understand the changing roles of men and women, and the effect this may have on their work and family life?			
8. Do I provide realistic information about students' probable job futures (most women can expect to hold paying jobs even if they marry and have families)?			
9. Do I recognize barriers that young women impose on themselves in response to socialization pressures?			
10. Do I review all counseling and testing materials for sources of sex bias, and modify wherever appropriate?			

Source: Improving Sex Equity in Postsecondary Technical Programs: A Resource Manual, Austin, TX: North State Texas University, and adapted from MECCA Trainer's Guide, Utah State Department of Education.

Source: Gender Equity Lesson Plans and Teacher Guide for High Schools, ©1999. "Springfield Technical Community College reserves all rights to materials produced through the Western Massachusetts Gender Equity Center. These materials are not for sale or resale."

Available through

[http://02b47b1.netsolhost.com/foundation/e107_images/custom/\(10i\)%20FairCounselor.pdf](http://02b47b1.netsolhost.com/foundation/e107_images/custom/(10i)%20FairCounselor.pdf).

Guidance Strategies for Achieving Sex Equity

Retain this sheet for your information. Do not return it with the survey.

Guidance counselors can promote equity in several ways. They can

- recognize equity as an important issue and actively plan for it.
- incorporate equity concepts and actions into the K-12 guidance program.
- provide teachers with support materials that promote equitable career planning.
- ensure that they are meeting the requirements of Title IX and state laws outlining equity for counseling.

Guidance counselors can use the following strategies to promote sex equity at the school and district level.

1. Identify current strategies within the guidance program that are promoting equity and build on those activities.
2. When students are selecting courses and programs in which to enroll, encourage them to consider their options realistically. Remind them that
 - most men and women will hold paying jobs for most of their lives;
 - most men and women work out of economic need;
 - traditionally female jobs pay less than traditionally male jobs; and
 - even though greater choices are available, many students—especially girls—don't enroll in courses such as mathematics and science, which limit their choices in future coursework and employment.
3. Use career information that expands career choices:
 - materials that promote sex fairness;
 - bias-free language;
 - posters, graphics, displays, and other materials that expand career ideas; and
 - female and minority role models included as speakers on career days.
4. Reprogram computer career information systems to prompt students to explore nontraditional or higher wage and higher benefit occupations.
5. Review interest inventories and other assessment instruments and the interpretation of results for sex bias.



Guidance Counselor Sex Equity Survey

The following survey has been developed to assist guidance counselors in identifying equity issues and planning for equity in counseling programs. The survey is designed to be used by guidance counselors at the secondary level. However, elementary guidance counselors also may find the survey helpful as many strategies are appropriate for both levels.

The following survey items list actions counselors can take to work toward building an equitable school climate. This survey is intended to assess current efforts to provide for equity, to teach counselors what could be done, and to serve as a planning guide for future efforts. There is a "Comments" section following each group of items.

Many equity activities may have been tried in your district. A great deal can be learned both from those that worked and those that did not. For this reason it is important to record the results of activities and revise or continue them. In the "Comments" section, make note of the equity strategies you have tried and their results.

Complete the survey and use its results to determine which areas need to be focused on in building equity into your school's guidance program. Following the survey, "Guidance Counselor Strategies to Achieve Sex Equity" lists specific actions that can be used to promote equity. Please retain this sheet for your future reference.

Source: Bitters, Barbara and Susan Foxwell. *Wisconsin Model for Sex Equity in Career and Vocational Education*. Madison, WI: Department of Public Instruction, 1993.

Guidance Counselor Sex Equity Survey

School Name _____

It has been shown that guidance counselors are key people in building sex-equity programs in schools. What are you doing to promote sex equity in your school? Listed below are some activities and actions that contribute to sex-equitable guidance programs. For each item, please circle:

- 3 if it **has been** or is in the process of being done
- 2 if this is **in the planning stage**
- 1 if this **has not** been done

In the "Comments" sections, describe what equity strategies you have tried and how successful they were. Please provide dates, if possible.

	Has been done	Planning stage	Not done
Section 1: Career Exploration			
1. Encourage students to make academic, career, and personal decisions on the basis of individual abilities, informed interests, and need rather than on the basis of their sex	3	2	1
2. Publicize current information about work force trends to point out the importance of increasing male and female options in career choices	3	2	1
3. Provide realistic information about students' probable job futures (for example, most women and men can expect to hold paying jobs even if they marry and have families)	3	2	1
4. Encourage young women and men to take courses that lead to economic self-sufficiency	3	2	1
5. Remind both girls and boys that mathematics and science are required for jobs of the future and that they should include these courses in their schedules	3	2	1
6. Point out that there is wage inequity by job area (for example, typically "female jobs" pay lower salaries than typically "male jobs")	3	2	1
7. Discuss job salaries as they relate to career interest with both female and male students	3	2	1
Nontraditional career options are presented to students on a regular basis through:			
8. preregistration sessions	3	2	1
9. career fairs	3	2	1
10. guest speakers	3	2	1
11. career education materials and activities	3	2	1
Comments (<i>Describe activities and results</i>):			

Guidance Counselor Sex Equity Survey (continued)

	Has been done	Planning stage	Not done
Section 2: Enrollment			
12. Statistics are collected and analyzed by course and program to determine patterns in male/female enrollments on a regular basis. (More than 75 percent enrollment of one sex is considered an area of concern.)	3	2	1
Comments (<i>Describe activities and results</i>):			
Section 3: Recruitment and Retention of Students			
13. There is a plan in operation that encourages students to enroll in nontraditional classes	3	2	1
14. The school is initiating new and earlier opportunities for students to explore nontraditional options at elementary and middle/junior high levels	3	2	1
15. Nontraditional role models—both men and women—are used as speakers for career days, shadowing, mentoring, and classroom instruction	3	2	1
16. Students enrolled or who plan to enroll in nontraditional classes are supported through support groups and contacts with role models and counselors	3	2	1
Comments (<i>Describe activities and results</i>):			
Section 4: Materials			
17. Counseling materials, including tests and inventories, are reviewed; those that may reinforce bias and stereotyping are modified or eliminated	3	2	1
18. Career counseling materials are current, reflecting new and emerging and nontraditional occupations	3	2	1
19. Find and use materials that show the changing roles of men and women in our society, both in the family and in the workplace	3	2	1
20. Coordinate bulletin boards and displays that portray women and men working at a variety of jobs, including nontraditional jobs	3	2	1
Comments (<i>Describe activities and results</i>):			

Guidance Counselor Sex Equity Survey (continued)

	Has been done	Planning stage	Not done
Section 5: Equity Advocate			
21. Assist in planning staff development activities on equity issues	3	2	1
22. Model sex-fair behavior in actions and words, conveying to others the importance of equality and appropriateness for both sexes of a wide range of roles and interests	3	2	1
Comments (Describe activities and results):			

23. Developmental guidance is being implemented in this district	3	2	1
Comments (Describe activities and results):			

24. Please describe the content and duration of any training in sex equity you have had.

25. Check one (please do not omit): male
 female

Thank you for your time.

Guidance Strategies for Achieving Sex Equity

Retain this sheet for your information. Do not return it with the survey.

Guidance counselors can promote equity in several ways. They can

- recognize equity as an important issue and actively plan for it.
- incorporate equity concepts and actions into the K-12 guidance program.
- provide teachers with support materials that promote equitable career planning.
- ensure that they are meeting the requirements of Title IX and state laws outlining equity for counseling.

Guidance counselors can use the following strategies to promote sex equity at the school and district level.

1. Identify current strategies within the guidance program that are promoting equity and build on those activities.
2. When students are selecting courses and programs in which to enroll, encourage them to consider their options realistically. Remind them that
 - most men and women will hold paying jobs for most of their lives;
 - most men and women work out of economic need;
 - traditionally female jobs pay less than traditionally male jobs; and
 - even though greater choices are available, many students—especially girls—don't enroll in courses such as mathematics and science, which limit their choices in future coursework and employment.
3. Use career information that expands career choices:
 - materials that promote sex fairness;
 - bias-free language;
 - posters, graphics, displays, and other materials that expand career ideas; and
 - female and minority role models included as speakers on career days.
4. Reprogram computer career information systems to prompt students to explore nontraditional or higher wage and higher benefit occupations.
5. Review interest inventories and other assessment instruments and the interpretation of results for sex bias.

Source: Guidance Counselor Sex Equity Survey. Available through [http://02b47b1.netsolhost.com/foundation/e107_images/custom/\(10k\)%20GuidanceCounselorsurvey.pdf](http://02b47b1.netsolhost.com/foundation/e107_images/custom/(10k)%20GuidanceCounselorsurvey.pdf).

Questions from Electronic Self-Study

The ONTO Michigan Self-Study (excluding the Introductory Section) is comprised of the following questions:

Outreach and Recruitment

1. List publications which students receive from your educational entity which give information about nontraditional occupations.
2. Please check the box next to publications that are also available to parents/family members.
3. Please assess the development of marketing materials by selecting one or two main marketing items and completing "Identifying Bias in Materials." (See Checklists for Instructors, Counselors and Administrators for the questions asked on Appendix A—Identifying Bias in Materials.)
4. Please describe the activities used for outreach and recruitment by first giving a list of current outreach and recruitment events and identifying the target audience for the activity. Please select the audience that most closely describes the group you were targeting, or the majority of the audience targeted.
5. From the following list of outreach and recruitment activities, please provide further details: number of participants; supportive businesses; parents/family invited.
6. List funds dedicated to NTO recruitment and retention for FY00-06.
7. Which NTO publications illustrate or involve NTO role models?
8. List the names and titles of nontraditional role models who have served the NTO program by teaching, presenting, or mentoring. Please select the role that best describes the interaction of the NTO Role Model with students.
9. List staff titles and indicate percent of paid time dedicated to NTO recruitment and retention.
10. Please select the number of staff development opportunities available to the outreach and recruitment personnel in your area that have occurred in the past two fiscal years (on a local, regional, state, or national level).
11. Please list the staff development opportunities concerning nontraditional occupations which have occurred in the last two fiscal years and select the level at which the opportunity was offered: local, regional, state, or national.
12. For each staff development concerning NTOs in the last two years, please give the following information: target audience; titles/duties of attendees; time of year offered; topics addressed.



13. Based on the answers given above, please answer the following: Do you feel that the staff development opportunities for the outreach and recruitment personnel in your area have:
- Addressed strategies for avoiding gender-biased instruction?
 - Supplied ideas for addressing gender stereotyping and sexual harassment in and out of the classrooms and workplaces/mentoring locations?
 - Been sufficient in number?
 - Offered something for everyone on the staff?
 - Been offered at times convenient for the targeted audience?
 - Been offered at a variety of times during the year?
 - Addressed a sufficient variety of topics?
 - Addressed topics relevant to staff concerns?
 - Been attended by the target audiences?
14. Counselors and support personnel were requested to complete the Counselor’s Self-Study (See Checklists for Instructors, Counselors and Administrators for the questions asked on Appendix B—Counselor’s Self-Study)?
15. Instructors who have a major influence on outreach and recruitment were asked to complete the Instructor’s Self-Study (See Checklists for Instructors, Counselors and Administrators for the questions asked on Appendix C—Instructor’s Self-Study.).



Retention and Support

1. Instructors who have a major influence on outreach and recruitment were asked to complete the Instructor's Self-Study (See Checklists for Instructors, Counselors and Administrators for the questions asked on Appendix C—Instructor's Self-Study.).
2. A selected group of NTO students were asked to complete the Student Perception Checklist. (See Checklists for Instructors, Counselors and Administrators for the questions asked on Appendix H—Student Perception Checklist.).
3. Computer lab staff members in your area were asked to evaluate the educational organization's equity in the technical areas by completing the AAUW Tech Check (See Checklists for Instructors, Counselors and Administrators for the questions asked on Appendix D—Tech Check.).
4. Please evaluate the textbooks of the CTE courses within your educational organization. Select one or two textbooks representative of the majority of books throughout the CTE programs. Then complete *Identifying Bias in Materials* by answering the questions below. (See Checklists for Instructors, Counselors and Administrators for the questions asked on Appendix A—Identifying Bias in Materials.).
5. What communications between administration, staff, students, or parents throughout the past year have included the topic of nontraditional occupations?
6. Identify ways that the physical and climate characteristics of schools communicate institutional gender equality by completing the Checklist for NTO Classes. (See Checklists for Instructors, Counselors and Administrators for the questions asked on Appendix E—Checklist for NTO Classes.).
7. School administrators were asked to complete the Checklist for School Culture (See Checklists for Instructors, Counselors and Administrators for the questions asked on Appendix G— Checklist for School Culture.).
8. Examine the data for the last full fiscal year. What support services were offered last year? Select all that apply.
 - Mentoring
 - Support Groups
 - Tutoring
 - Book Rental
 - Notetaking/Interpreting
 - Transportation
 - Special Instructional Resources
 - Special or Adapted Equipment/Devices
 - Dependent Care
 - Other
9. How many students participated in nontraditional classes this past year? Please fill in the blank for FY06 or the last full year for which data is available.



10. For each of the support services which were available, please share the number of students served as well as the number of NTO students served.
11. Is the tutoring available and accessible at times and places where learners in NTO programs can take advantage of it (Answer yes or no)?
12. Describe any accessibility problems.
13. Is physical strength training included in the courses for current/prospective learners preparing for NTO?
14. Are visual/spatial perception skills training activities included in courses for current/prospective learners preparing for NTO (Answer yes or no) ?
15. List social/cultural activities/classes/curriculum in which students are prepared emotionally to succeed in studies leading to nontraditional careers. Do not neglect to include activities/curriculum offered to students through partnering organizations. (Example: Nontraditional mentoring program includes self-esteem curriculum.)
16. The following questions are about the mentoring opportunities which you listed as part of the support services available to NTO students.
 - Indicate numbers and percentages of NTO learners participating in mentoring.
 - Describe the formality/informality of the program(s):
 - Summarize any anecdotal evidence of effectiveness.
17. In your opinion, is the mentoring program?
 - Well organized?
 - Sufficiently formalized?
 - Well utilized by NTO students?
 - Effective overall?



Placement and Post-Placement

1. List the businesses and industries with which the educational organization has a relationship.
2. For each business/industry input in the previous question, please select the activities with which the business/industry was involved with your educational institution.
 - Participating in Career Fair
 - Receiving/Posting Position Openings
 - Participating on Advisory Boards
 - Other Activity
3. Please list any additional activities that each business participates in with your educational entity.
4. Is NTO employment disaggregated in your employment tracking system?
5. What activities are conducted by the CTE program, alone or in conjunction with others, to initiate and strengthen relationships with employers (e.g., arranges annual focus groups or holds open house for employers)?
 - Which of these includes a component on the benefits of nontraditional with respect to gender learners?
6. How do you inform employers that the educational entity will not tolerate discrimination?
7. List role models from businesses and industries who are involved with NTO learners in the educational organization. Identify the gender of the role model listed.
8. List the workforce organizations, such as unions or trade associations, with which the CTE program has a relationship. Do these organizations promote nontraditional occupations at the organization level?
9. Please list what projects/activities the CTE program participates in with each entity. Also, identify whether the collaborative projects/activities which involve nontraditional occupations.
10. Please select the opportunities nontraditional learners have for gaining a realistic picture of future employment.
 - Job Skills Training Curriculum, including:
 - Physical capabilities demanded by particular occupation
 - Work culture description
 - Rights/responsibilities concerning sexual harassment
 - Other
 - Field Trips to Job Sites
 - Presentations by Current Employees

Of the opportunities listed above, how many are open or available to family members? Is the importance of Job-Placement services stressed to students? Family members?

11. How are nontraditional students made aware of career placement services?
 - Presentations by Career Placement Services in NTO classes
 - Disseminations of printed or electronic information (e.g., poster, websites)
 - Referrals by instructors
 - Integration of placement information in curriculum
 - Career fairs
 - Posting of job openings
 - Other:
12. What support services are provided for NTO students currently in placements?
 - Mentoring
 - Workshops concerning sexual harassment
 - Publications specific to the needs of those in placement opportunities
 - Workshops encouraging further training, promotion, salary negotiation, etc...
 - Internship evaluation process
 - Continued job placement services
 - Other:
13. What support services are provided for NTO graduates?
 - Mentoring
 - Workshops concerning sexual harassment
 - Alumni Publications
 - Workshops encouraging further training, promotion, salary negotiation, etc...
 - Internship evaluation process
 - Continued job placement services
 - Other
14. Is there a general Career Services evaluation process to which all parties involved in placements can give input (Answer yes or no.) ?
15. What problems or issues have you observed/encountered in previous NTO student placements?



Source: Onto Michigan: Opportunities for Nontraditional Occupations. Available through [http://02b47b1.netsolhost.com/foundation/e107_images/custom/\(10p\)%20NEW%20Look%20Questions_List.pdf](http://02b47b1.netsolhost.com/foundation/e107_images/custom/(10p)%20NEW%20Look%20Questions_List.pdf).



Instructor Survey on Retaining Men in Nontraditional Programs

Directions: Please answer the following questions to assist school counselors and administrators in reviewing/implementing a school plan to better meet the needs of nontraditional students.

1. How many female students are in your program? _____
2. How many male students are in your program? _____
3. Over the past three years, is the number of male students in your program:
increasing _____ decreasing _____ stable _____
4. About what percentage of female students drop out of your program in an academic year?

5. About what percentage of male students drop out of your program in an academic year?

6. Research shows that there are predictable factors that cause males to drop out of nontraditional programs. Some of these are listed below. Mark the top three reasons in your experience. Of those three, circle the main reason you feel males drop out of nontraditional programs.

<input type="checkbox"/> Financial	<input type="checkbox"/> Children (sickness, daycare)
<input type="checkbox"/> Transportation	<input type="checkbox"/> Personal problems
<input type="checkbox"/> Weak basic skills (math, English)	<input type="checkbox"/> Sexual harassment
<input type="checkbox"/> Weak personal skills (work habits)	<input type="checkbox"/> Feelings of isolation
<input type="checkbox"/> Inadequate advising (program selection)	
<input type="checkbox"/> Negative pressure from family/peers	
7. List the top three reasons female students drop out of your program. Circle the main reason.

8. What resources are most important in retaining male students? Choose three, then circle the most important.

<input type="checkbox"/> Academic tutors	<input type="checkbox"/> Assertiveness training
<input type="checkbox"/> Referral to student services	<input type="checkbox"/> Support groups
<input type="checkbox"/> Training for NT instructors	<input type="checkbox"/> Mentoring programs
<input type="checkbox"/> Enforcement of sexual harassment policies	
<input type="checkbox"/> Other (Please explain.)	

Instructor Survey on Retaining Men in Nontraditional Programs

9. List the top three resources which are most important in retaining female students. Circle the main reason.

10. Below is a list of challenges you may face in working with male students. Check all that apply.

- Resentment by female students Gender-biased materials
 Lower starting salaries Difficulty in job placement
 Student-to-student sexual harassment Biased workplace language
 Excessive attention required by male students
 Female students being too helpful (doing work for males)
 Other (Please explain.)

11. Mark the three topics you feel should be addressed in a teacher workshop. Circle the most important topic.

- Changes in the Workforce
 Changing Roles for Men
 Gender-fair Language
 Gender-biased Instructor Behaviors
 Management Challenges in an Integrated Classroom
 Equitable Instructional Environment
 Sexual Harassment—Prevention
 Sexual Harassment—Recognition
 Sexual Harassment—Intervention
 What's Working to Retain Males in Other Schools

12. Indicate whether you Agree or Disagree with the following statements using the scale below.

- 1—Strongly Agree 3—Disagree
2—Agree 4—Strongly Disagree

Please keep in mind this survey is anonymous.

- I miss the easy-going atmosphere of the all-female classes.
 Now I feel like I am "walking on eggs", afraid to say or do anything or I'll get in trouble.
 I feel male students require more personal attention than female students.
 I think this "male attention" is unfair to the female students.
 I see resentment from female students when I give personal attention to male students.
 I address gender-bias issues when I see them in the classroom.
 I seek other support services to address gender-bias issues in the classroom.
 I treat male students differently than female students.

2

Instructor Survey on Retaining Men in Nontraditional Programs

13. It is important to increase the enrollment of male students in nontraditional programs because...(Please mark the three you agree with most, and circle the most important.)

- The schools will increase enrollment.
- The community unemployment rate will decrease.
- Schools will be able to develop new programs and expand their offerings.
- Men will increase their job satisfaction.
- Employers will have a more balanced workforce.
- The community will benefit from men in more visible and diverse roles.

14. What are the most important steps you take to encourage men to enter and remain in your training program?

15. What other resources and support (school and community) would be helpful in recruiting and retaining men?

Thank you for responding to this survey.
The results will be tabulated and shared with faculty and administrators.



Instructor Survey on Retaining Women in Nontraditional Programs

Directions: Please answer the following questions to assist school counselors and administrators in reviewing/implementing a school plan to better meet the needs of nontraditional students.

1. How many male students are in your program? _____
2. How many female students are in your program? _____
3. Over the past three years, is the number of female students in your program:
increasing _____ decreasing _____ stable _____
4. About what percentage of male students drop out of your program in an academic year?

5. About what percentage of female students drop out of your program in an academic year?

6. Research shows that there are predictable factors that cause females to drop out of nontraditional programs. Some of these are listed below. Mark the top three reasons in your experience. Of those three, circle the main reason you feel females drop out of nontraditional programs.

<input type="checkbox"/> Financial	<input type="checkbox"/> Children (sickness, daycare)
<input type="checkbox"/> Transportation	<input type="checkbox"/> Personal problems
<input type="checkbox"/> Weak basic skills (math, English)	<input type="checkbox"/> Sexual harassment
<input type="checkbox"/> Weak personal skills (work habits)	<input type="checkbox"/> Feelings of isolation
<input type="checkbox"/> Inadequate advising (program selection)	
<input type="checkbox"/> Negative pressure from family/peers	
7. List the top three reasons male students drop out of your program. Circle the main reason.

8. What resources are most important in retaining female students? Choose three, then circle the most important.

<input type="checkbox"/> Academic tutors	<input type="checkbox"/> Assertiveness training
<input type="checkbox"/> Referral to student services	<input type="checkbox"/> Support groups
<input type="checkbox"/> Training for NT instructors	<input type="checkbox"/> Mentoring programs
<input type="checkbox"/> Enforcement of sexual harassment policies	
<input type="checkbox"/> Other (Please explain.)	

Instructor Survey on Retaining Women in Nontraditional Programs

9. List the top three resources which are most important in retaining male students. Circle the main reason.

10. Below is a list of challenges you may face in working with female students. Check all that apply.

- | | |
|---|--|
| <input type="checkbox"/> Resentment by male students | <input type="checkbox"/> Gender-biased materials |
| <input type="checkbox"/> Physical limitations of women | <input type="checkbox"/> Difficulty in job placement |
| <input type="checkbox"/> Student-to-student sexual harassment | <input type="checkbox"/> Biased workplace language |
| <input type="checkbox"/> Lower female starting salaries | |
| <input type="checkbox"/> Excessive attention required by female students | |
| <input type="checkbox"/> Male students being too helpful (doing work for females) | |
| <input type="checkbox"/> Other (Please explain.) | |

11. Mark the three topics you feel should be addressed in a teacher workshop. Circle the most important topic.

- | |
|--|
| <input type="checkbox"/> Changes in the Workforce |
| <input checked="" type="checkbox"/> Changing Roles for Women |
| <input type="checkbox"/> Gender-fair Language |
| <input type="checkbox"/> Gender-biased Instructor Behaviors |
| <input type="checkbox"/> Management Challenges in an Integrated Classroom |
| <input type="checkbox"/> Equitable Instructional Environment |
| <input type="checkbox"/> Sexual Harassment—Prevention |
| <input type="checkbox"/> Sexual Harassment—Recognition |
| <input type="checkbox"/> Sexual Harassment—Intervention |
| <input type="checkbox"/> What's Working to Retain Females in Other Schools |

12. Indicate whether you Agree or Disagree with the following statements using the scale below.

- | | |
|------------------|---------------------|
| 1—Strongly Agree | 3—Disagree |
| 2—Agree | 4—Strongly Disagree |

Please keep in mind this survey is anonymous.

- | |
|---|
| <input type="checkbox"/> I miss the easy-going atmosphere of the all-male classes. |
| <input type="checkbox"/> Now I feel like I am "walking on eggs", afraid to say or do anything or I'll get in trouble. |
| <input type="checkbox"/> I feel female students require more personal attention than male students. |
| <input type="checkbox"/> I think this "female attention" is unfair to the male students. |
| <input type="checkbox"/> I see resentment from male students when I give personal attention to female students. |

Instructor Survey on Retaining Women in Nontraditional Programs

- I address gender-bias issues when I see them in the classroom.
- I seek other support services to address gender-bias issues in the classroom.
- I treat female students differently than male students.
13. It is important to increase the enrollment of female students in nontraditional programs because...(Please mark the three you agree with most, and circle the most important.)
- The schools will increase enrollment.
- The community unemployment rate will decrease.
- Women will have more opportunities for advancement.
- Schools will be able to develop new programs and expand their offerings.
- Women will increase their self-worth.
- Employers will have a more balanced workforce.
- Employers can hire women at less cost than men.
- The community will benefit from women in more visible and diverse roles.
14. What are the most important steps you take to encourage women to enter and remain in your training program?
15. What other resources and support (school and community) would be helpful in recruiting and retaining women?

Thank you for responding to this survey.
The results will be tabulated and shared with faculty and administrators.



What Are My Values and Beliefs?

Directions: Circle the response that best fits your values and beliefs.

- | | | | |
|---|---------------|--------------|---------------|
| 1. Do I find myself taking a different tone of voice with a girl than with a boy or with a person of different ethnicity? | Always | Often | Rarely |
| 2. Do I ever discourage a girl from going after a career—such as carpentry or engineering in which there are few women? | Always | Often | Rarely |
| 3. Do I expect boys to be more competitive or athletic than girls? | Always | Often | Rarely |
| 4. Do I react (perhaps “feel funny” inside) when I hear that a boy wants to pursue a career as a nurse or become a secretary? Would I discourage such aspirations in a boy? | Always | Often | Rarely |
| 5. Do I present careers to a girl as something to fall back on in case she needs it after marriage? | Always | Often | Rarely |
| 6. Do I expect girls to be better at literature and writing than boys? | Always | Often | Rarely |
| 7. Do I treat females and males and different ethnic groups similarly with regard to application of classroom rules and privileges? | Always | Often | Rarely |
| 8. Do I give similar encouragement to females and males in identifying strengths and assets? | Always | Often | Rarely |
| 9. Is my language free of sex bias with regard to: | | | |
| • Use of masculine terminology to refer to all people? | Always | Often | Rarely |
| • Use or acceptance of derogatory terminology to refer to members of either sex? | Always | Often | Rarely |
| • Use of word order which consistently places males first (he or she, boys and girls, men and women)? | Always | Often | Rarely |
| 10. Do I interact with females, males, and different ethnic groups similarly with regard to: | | | |
| • Maintaining eye contact with them? | Always | Often | Rarely |
| • Considering their points of view? | Always | Often | Rarely |
| • Waiting for answers to questions? | Always | Often | Rarely |

Source: Adapted from MECCA Trainer’s Guide, Utah State Department of Education.

Source: Gender Equity Lesson Plans and Teacher Guide for High Schools, ©1999. “Springfield Technical Community College reserves all rights to materials produced through the Western Massachusetts Gender Equity Center. These materials are not for sale or resale.”

Available through

[http://02b47b1.netsolhost.com/foundation/e107_images/custom/\(10x\)%20ValuesandBeliefs.pdf](http://02b47b1.netsolhost.com/foundation/e107_images/custom/(10x)%20ValuesandBeliefs.pdf).

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