

Phase II: Assessment

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Components of Sex-Equity Assessment

This phase of the Wisconsin Model explains the process for conducting an equity needs assessment in the local district. The process has been carefully planned to provide a comprehensive picture of equity on which to base a local plan. The outcome of the assessment will answer the question “what is” as compared to “what ought to be.” Part of “what is” is defined in the requirements of the Carl D. Perkins Vocational and Applied Technology Education Act of 1990. The Secondary Vocational Education Measures and Standards for Wisconsin include a state measure for equity. It is the “rate of participation within any vocational education program by each gender will exceed 25 percent.” In addition, every school district accessing Carl Perkins Title IIC funding must have a local sex-equity plan developed and on file with the Department of Public Instruction.

The end result of the assessment will provide a list of needs statements based on local data. A flowchart diagramming the assessment process appears in Figure 9.

Three major types of information are collected for the assessment.

- Component A: Statistical information
- Component B: Student surveys for grades 3, 6, 8, 10, and 12
- Component C: Staff surveys for administrators, guidance counselors, and teachers

Additional school district sources that may provide input in the equity needs assessment include Title IX advisory reviews; Office for Civil Rights (OCR) review; Department of Public Instruction (DPI) Secondary Vocational Program Evaluation report, if available; achievement test scores; Pupil Nondiscrimination Self-Evaluation; and previous equity efforts conducted by the district or school.

The assessment planning grid on pages 27-28 (Figure 11) will help in the planning of the local assessment. Forms and surveys appear in Appendixes B, C, and D. Data collection charts appear in Appendix E.

Feedback from the Assessment

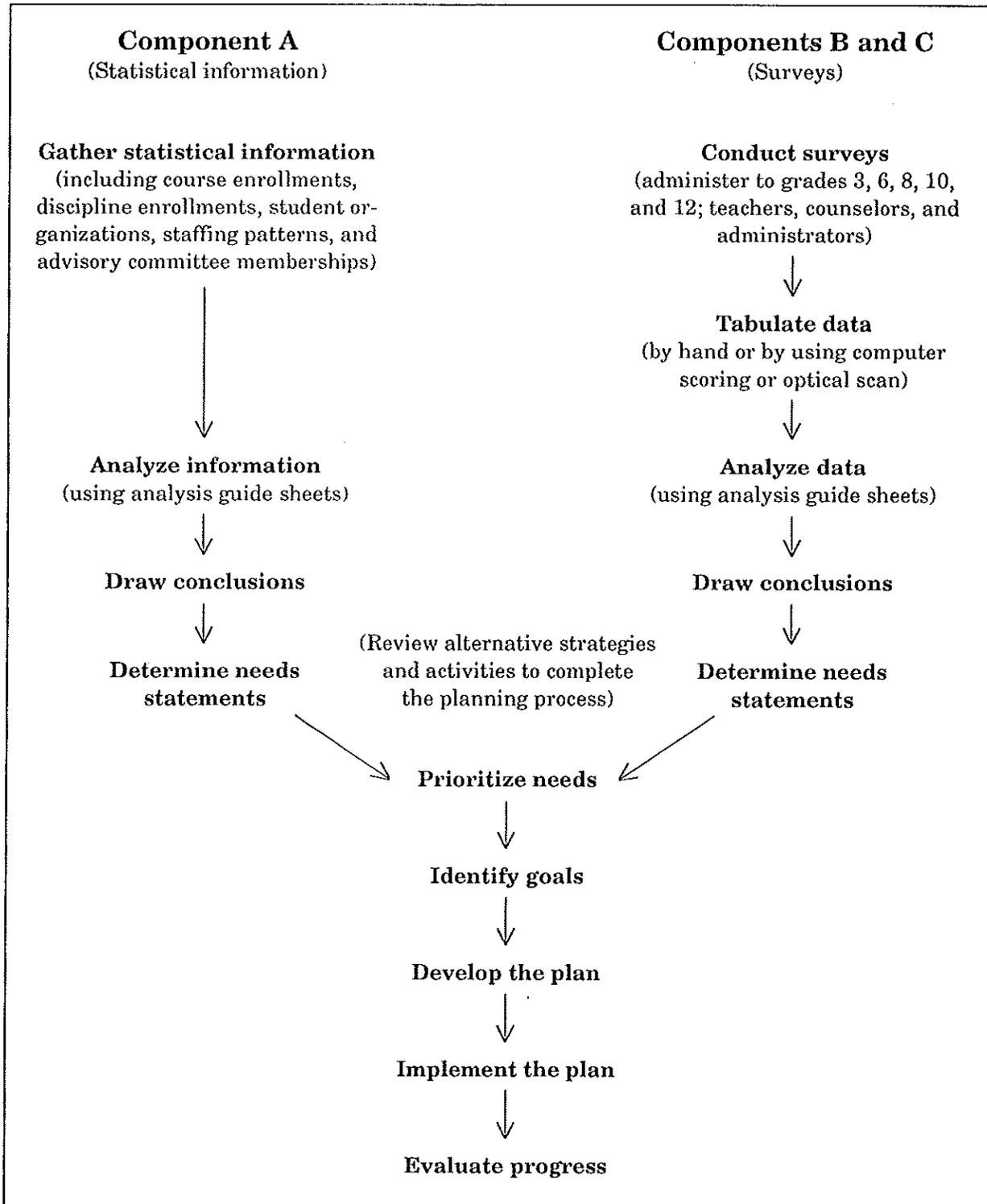
The data gathered from compiling the statistical information and conducting the surveys generate a great deal of feedback to help the equity planning team determine the school's needs. The following list points out the feedback generated from particular aspects of the assessment process.

Component A. Student enrollment and membership information

- shows which courses, disciplines, and student organizations have enrollments or memberships composed of more than 75 percent of one sex.
- identifies male/female enrollment trends over time.

■ Figure 9

Assessment Process Flowchart



- records how male and female students select or are assigned different courses.

- provides a basis for comparison with enrollments elsewhere (in other districts or statewide).

School staff information

- illustrates male/female staffing patterns to reflect either an equitable or inequitable balance.

Advisory committee information

- describes the male/female composition of advisory committees.

Component B. Student career surveys

- measure career and vocational sex-equity knowledge and perceptions in four areas: school, work, family, and self-awareness.

- show differences and similarities in male and female responses.

- provide for comparison within a grade and between grades.

Component C. Staff surveys

- describe current efforts to address equity.
- describe equity actions that school staff members have undertaken.

Components B and C. Scoring the surveys

- creates a districtwide description of the equity efforts that have been tried and their results.

- conceptualizes equity and how it can be planned and implemented.

- compares staff action with student perceptions.

- describes forces that work for and against the achievement of sex equity.

- determines the information needs of various groups.

Logging scores into tables

- provides a method for concretely examining student and staff responses.

- examines responses for each item.

- shows trends in the four areas addressed in the student surveys.

- illustrates trends between and across grades.

Conducting the Assessment

Component A: Statistical Information

The statistical information collected in this component is perhaps the most concrete evidence

of sex equity that can be identified. Examine male/female student participation in three categories: by course, by discipline, and by student organization membership. Some key questions to examine include: How many males? How many females? What do the enrollment patterns indicate? Have the patterns changed over time, and if so, how have they changed?

The data collection charts in Appendix E summarize enrollments over the past five years. If no data exist for that period of time, use what is available. If the district has not collected this kind of enrollment data before, begin with the current year's enrollments and plan to collect it in the future.

Locating Enrollment Data

Some schools collect course enrollments by male/female. If so, either use the data in the district's format or complete Charts 1 and 2 in Appendix E. If the male/female enrollment data are not available, check the following sources.

Student Data Sources

- Vocational Education Enrollment Reporting System (VEERS) data (available for vocational programs only) in districts participating in federal funding for vocational education

- DPI Secondary Vocational Program Evaluation data in districts that previously participated

- DPI three-year curriculum study data. Male/female enrollments are completed by every Wisconsin school district every three years. Check with your district office for a copy or contact the Wisconsin Center for Educational Statistics, (608) 266-1746.

Staff Data Sources

- DPI Support Staff Report, Form No. 1289; filed annually.

- DPI Professional Staff Report, Form No. 1202; filed annually.

Explanation of the Data Collection Charts

The six charts presented in Appendix E provide a format to organize the statistical information.

Chart 1: Student Enrollment Data by Course or Group Title—Five Years. List each course taught in vocational and critical filter areas. Critical filter courses refer to those that have an important influence on students' career preparation and include computer science, English, mathematics, and science. Include other areas as desired.

List the total number of students for each course. Then give the number and percent of males and females. Use the first column as the base year. Then move to the right with the previous year information. Continue recording the data for the past five years. If you do not have data for the past five years, use the data that are available. If nothing is available, use this year's enrollments as the base year and begin to collect this information. This data by course will provide a concrete part of the sex-equity picture in your district.

Chart 2: Student Enrollment Data by Discipline—Five Years. Record the totals from the course enrollments from Chart 1 onto Chart 2. List the total number enrolled for each discipline area, then number and percent of males and females. Note that this will be a duplicated count but will provide a comparison between the disciplines for male/female enrollment patterns over a period of time.

Chart 3: Student Organization Membership—Five Years. List student organizations in your school, including vocational student organizations, organizations that relate to the critical filter courses (mathematics, science, computer science, and English organizations), and any others. This information will provide a look at male/female membership patterns over time.

Chart 4: Staffing Pattern Data by School—Five Years. On this chart, collect the school level staffing data by male/female for teachers, administrators, and support staff. As you record this data over a period of time, it will identify how positions are staffed according to gender. Fill in total number, then number and percent for males and females.

Chart 5: Staffing Pattern Data by District—Five Years. Staffing patterns at the district level

are examined for number and percent of males/females by job title. List all job titles that are appropriate to each category listed on the chart.

Chart 6: Advisory Committee Membership—Five Years. Advisory committees are an important part of education for employment and career and vocational education. They provide for local input by those knowledgeable and working in a specific area. Complete Chart 6 by filling in either section A, for an overall vocational advisory committee, or B, for an advisory committee formed in each vocational area. List other advisory or local/community/school partnership committees as you feel appropriate.

Analyze the Information

After you collect the information, you are ready to analyze what it means for sex equity in your district using the analysis guide sheets provided in Appendix H. The questions in the guide sheets will help you determine your local needs. There are three analysis guide sheets for Component A.

Analysis Guide Sheet 1: analyzes information from Charts 1, 2, and 3

Analysis Guide Sheet 2: analyzes information from Charts 4 and 5

Analysis Guide Sheet 3: analyzes information from Chart 6

Draw Conclusions

After analyzing the information, draw tentative conclusions.

Determine Needs Statements

Determine needs statements based on the conclusions drawn from the analyses.

The entire equity planning team should develop a sense of what the enrollment/staffing pattern and advisory committee data are for the local district. Look at the data. What do they indicate? Are there clear patterns? Are there any problem areas? What good news is indicated by these patterns? Other sources may provide supplementary information.

- Title IX Advisory Review
- Office for Civil Rights Review

- DPI Secondary Vocational Program Evaluation (SVPE) report, if available
- School Evaluation Consortium (SEC) report
- district reports related to educational improvement
- s. 118.13 five-year self-assessment

Component B: Student Career Surveys

The five student career surveys provided with the Wisconsin Model measure students' knowledge and skills related to equity. Their responses reflect the students' perceptions in four areas—school, work, family, and self-awareness. Each survey is geared to a particular grade level (grades 3, 6, 8, 10, and 12). The surveys may be given to students in adjacent grades, depending on the students' reading and comprehension level. For example, the third-grade surveys also could be given to second-graders or fourth-graders. Reproducible copies of each survey can be found in Appendix C.

Pilot tests of the model indicated that the surveys provide useful information on students' perceptions of education for employment programs, career and vocational education, and educational equity in general.

Survey Sample Size

The number of students surveyed often depends on the school's budget and available time. While it is usually not necessary to survey the entire student population, keep in mind that the smaller a sample becomes, the less accurately it reflects the entire population. (See Figure 10 for instructions on establishing a sample size.)

Preparing to Survey Students

A school district may have a local research committee that could be involved with the student surveys. Check with your local district as to the policies and procedures that may exist.

As with any survey, the students' right to privacy needs to be protected. The Hatch Amendment, which is part of the federal General Education Provisions Act, is designed to protect students from intrusions. When administering

student surveys, consider the following criteria to ensure that student rights are protected under the Hatch Amendment.

- Make the surveys available for parents to review before they are administered to students.
- Include on the surveys the voluntary compliance statement developed by the DPI's legal staff. Those who administer the test need to make students aware that completion of the survey is voluntary.
- Avoid using a student's name or any identifying number on the completed survey.
- Consider obtaining parental permission before administering the survey; however, it is not required. Be sensitive to local needs in determining what is appropriate.

For a copy of the entire amendment, consult your school attorney.

Identify who will administer the student surveys and the deadline for completion. A planning grid is provided (see Figure 11). If those administering the student surveys are not a part of the equity planning team, provide them with an overview of the project. Include a discussion of why the surveys are being given and the importance of student input to the assessment process. Explain that the information will be used to develop a local sex-equity plan.

Sample directions are provided in Appendix C. You may choose to use these, modify them, or develop your own.

Component C: Staff Surveys

There are three surveys for school staff—one each for administrators, teachers, and guidance counselors. The surveys are designed to identify what is being done as well as what can be done to promote equity.

As with the student surveys, consider the school's resources and local situation. If the number of administrators and counselors is relatively small, try to include them all. Otherwise, select a reasonable sample size (see Figure 10). For the teaching staff, include vocational staff as well as secondary-level teachers from critical filter areas (mathematics, science, computer science, and English) and elementary-school teachers.

Figure 10

Sample Size Chart

Population Size [#]	Sample Size	Accuracy	Population Size	Sample Size	Accuracy
25	24	± 5%	1,000	278	± 5%
50	44	± 5%	1,500	306	± 5%
75	63	± 5%	2,000	322	± 5%
100	80	± 5%	3,000	341	± 5%
150	108	± 5%	5,000	357	± 5%
200	133	± 5%	10,000	370	± 5%
250	152	± 5%	20,000	377	± 5%
300	169	± 5%	50,000	381	± 5%
400	196	± 5%	75,000	382	± 5%
500	217	± 5%	100,000	384	± 5%
600	234	± 5%	Populations Exceeding 100,000	250	± 7%
700	245	± 5%		1,000	± 4%
800	260	± 5%		1,500	± 3%
900	269	± 5%			

For populations between the sizes listed, interpolate from the same sizes given.

Assessment Planning Grid

Directions: This planning grid will help you plan and organize the assessment in your local district. Use the steps discussed in Phase II as a resource to list the activities as they will be conducted. Then indicate possible sources of the information. Determine who will be responsible for each activity and the date it should be completed. This example shows how such a planning effort might appear. A blank form for you to use is provided in Appendix B.

Activity	Possible Sources	Person(s) Responsible	Timeline
Plan the Assessment			
Obtain approval from district research committee for conducting assessment	District policies/procedures for conducting research	Equity leadership/administration	Spring, prior to fall when surveying is conducted
Select members of equity planning team		Equity leadership/administration	August
Select equity planning team leader			August
Review the assessment instruments		Equity planning team	August/September
Conduct the Assessment			
Conduct student and staff surveys:			
administrative survey	Introduced at administrative meeting; completed individually	F. Anderson	Completed by October 1
teaching staff and guidance counselor survey	Introduced and handed out during faculty meeting; completed individually and sent to D. Hanson	D. Hanson	Completed by October 1
elementary and middle school surveys	Given to all third, sixth, and eighth graders	C. Haugh	Completed by October 15
high school surveys	Given to all tenth and twelfth graders during English class on October 5	S. Zimmer	Completed by October 15

Figure 11 (continued)

Assessment Planning Grid

Activity	Possible Sources	Person(s) Responsible	Timeline
Process survey data	Send to CVTAE, UW-Stout, for processing. Returned from CVTAE by November 30	Equity team leader	October 20
Analyze survey data	Use analysis guide sheets	Equity planning team	Completed by February 1
Collect enrollment and staffing pattern data Student enrollment by course/discipline Staffing pattern data for school Staffing pattern data for district Student organization membership	Available through district computer file	M. Guerlin	Completed by November 10
	Available through district files	M. Guerlin	Completed by November 10
	Available through district files	M. Guerlin	Completed by November 10
	Questionnaire sent to advisors of student organizations	S. Zimmer	Completed by November 10
Analyze enrollment and staffing pattern data	Use analysis guide sheets	Equity planning team	Completed by December 15
Draw conclusions and determine local needs by combining and prioritizing needs from: Staff surveys Student surveys Enrollments and staffing pattern data	Use analysis guide sheet information	Equity planning team	Completed by March 1

Tabulating Student and Staff Survey Data

Several scoring alternatives have been developed for school districts to use based on the district's circumstances. Criteria that should be considered when selecting the appropriate data processing system include the number of surveys to tabulate, the available resources, surveying experience, and equipment available for data processing.

The suggested scoring alternatives for processing student and staff surveys are

- hand scoring;
- computer scoring: outside-the-district;
- computer spreadsheets; and
- optical scanning.

Hand Scoring

This method allows districts to score surveys without any equipment. Responses for each item are entered as provided on the hand-scoring grid (see Figure 12). This method would be best used with a small sample size since it is time consuming and labor intensive.

To begin the hand-scoring process, sort the surveys by group (all third-grade surveys together, all guidance counselor surveys together, and so on). Then, separate the surveys by male

and female for each group. Disregard any surveys that fail to indicate whether they were completed by a male or female.

Under "Item" on the hand-scoring grid, write the statement to which the students or staff members responded. After entering the item, record the responses in the appropriate columns. Figure 12 illustrates a completed grid. A reproducible page of blank grids is provided in Appendix B.

Computer Scoring: Outside the District

Completed student surveys may be machine scored. This service is available through the Center for Vocational, Technical and Adult Education at the University of Wisconsin-Stout, 218 Applied Arts Building, Menomonie, WI 54751; (715) 232-1382.

If the center processes the surveys, it scores the responses by "male" or "female," and the results include the mean, median, and standard deviation for each item. The cost usually is determined on a cost-recovery basis.

Computer Spreadsheet

Districts could process their own survey data with computer spreadsheet software packages, such as Lotus 1-2-3 or VISICALC. The spread-

Figure 12

		Male responses			Female responses		
		3 Agree	2 Unsure	1 Disagree	3 Agree	2 Unsure	1 Disagree
Item: 1. <i>Math is one of my favorite subjects.</i>							
Subtotal =		6	3	2	4	2	3
Percent =							
		Total male responses = <u>11</u>			Total female responses = <u>9</u>		

sheets could be designed to calculate necessary data, such as male/female responses by number and percent, mean, median, and standard deviation. The information provided depends on the design of the particular spreadsheet. The text of each survey item would be entered, followed by entering survey responses. Then, the responses would be tabulated.

Optical Scanning

This system uses special answer sheets that are scored by an optical scanning machine. If your school district or cooperative education service agency has the equipment, this may be an option for scoring the surveys.

For assistance with choosing scoring alternatives, contact the Center for Vocational, Technical and Adult Education at the University of Wisconsin-Stout, 218 Applied Arts Building, Menomonie, WI 54751; (715) 232-1382.

Entering Processed Data onto Work Sheets

Appendixes F and G include data tabulation work sheets for the student career surveys and staff surveys, respectively. By putting the data in this form, you can see more clearly what they indicate. The tables highlight such things as male/female response patterns and trends for each grade about school, work, family, and self-awareness. Overall, the work sheets provide a concrete method for examining response patterns.

The equity planning team should consider who will transfer the data. They may wish to divide the task among themselves or get assistance from students or administrative support staff.

Analyzing the Data

Student Surveys

The analysis guide sheets in Appendix H were developed to assist in analyzing the student career survey data. The guide sheets

- explain why the questions were asked,
- help identify what criteria should draw attention to an item,
- help draw conclusions and determine need statements, and
- suggest student competencies and school actions/standards that need to be addressed.

Staff Surveys

Use the staff analysis guide sheets, also in Appendix H, to highlight important information. Follow directions on the guide sheets.

Drawing Conclusions and Determining Local Needs

Now, begin to draw conclusions and determine local needs by following directions on the analysis guide sheet. Look for discrepancies between “what is” (needs assessment conclusions) and “what should be” (student competencies and school actions/standards). Cross-check student needs with staff actions. This will identify where program change, expansion, or development should be carried out. At the conclusion of this step, a list of local needs will have been identified and needs statements will have been developed.

Concluding the Assessment

At this point, there are three lists of needs statements—one from the statistical information collected, one from student surveys, and one from staff surveys. Begin with the list of needs determined from the student surveys. Compare the needs from the staff surveys and the statistical information. Combine into one list. Then, prioritize the needs.

This completes the assessment phase.