DOCUMENT RESUME

ED 226 171

CE 035 015

AUTHOR

Wichowski, Chester; McMahon, Gordon

TITLE

Trends and Issues in Trade and Industrial

Education.

PUB DATE

Dec 80

NOTE

26p.; Presented at the American Vocational

Association Convention (New Orleans, LA, December

PUB TYPE

Reports - Research/Technical (143) --

Speeches/Conference Papers (150)

EDRS PRICE **DESCRIPTORS** MF01/PC02 Plus Postage.

Advisory Committees; Articulation (Education); Career

Education; Career Guidance; Curriculum; Curriculum

Development; Disabilities; Disadvantaged; *Educational Attitudes; Educational Finance;

Educational Research; *Educational Trends; Females; Financial Support; Followup Studies; Job Placement; Minority Groups; National Surveys; Nontraditional

Occupations; Postsecondary Education; Program

Development; Program Evaluation; Secondary Education;

Sex Fairness; Teacher Education; *Trade and

Industrial Education *Educational Issues

IDENTIFIERS

ABSTRACT

Findings are reported from a survey of state- and territorial-level supervisors of trade and industrial education to rate trends and issues in trade and industrial education. (A trend was defined as a course of events or action that is present and likely to continue in the future. An issue was defined as a difference of opinion, dispute, or professional controversy regarding a course of action.) Six tables identify (1) the top 10 trend items, (2) the top 10 issue items, (3) the top trend items within each of the 11 categories of the opinionnaire, (4) the top issue items within each of the ll categories of the opinionnaire, (5) a listing of additional trend and issue items provided by respondents, and (6) a summary of all responses and their calculated means. The 11 categories of trend and issue items are advisory boards; articulation; curriculum; delivery; followup, placement, and evaluation; funding; guidance and counseling; handicapped and disadvantaged students -- special needs; program planning and access; sex-role equity; and teacher preparation and upgrading. The opinionnaire is appended. (YLB)

**************** Reproductions supplied by EDRS are the best that can be made from the original document. ****************

A Report On

TRENDS AND ISSUES IN TRADE AND INDUSTRIAL EDUCATION

Prepared by

Chester Wichowski, Director
Statewide Curriculum Development Project
N.J. Vocational-Technical Curriculum Laboratory
Rutgers University

and

Gordon McMahon, Director
National Occupational Competency Testing Institute
Albany, New York

Ad Hoc Research Team Members
of the
American Vocational Association
Trade and Industrial Education Research Council

December 1980

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

This document has been reproduced as received from the person or organization organization than the person of organization with the person of organization organization.

Minor changes have been made to improve reproduction quality.

Points of view or opinions stated in this document do not necessarily represent official NIE position or notice.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Cuchowshi

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

2

IMTRODUCTION

The following report is the result of activities pursued by an ad hoc research team of the American Vocational Association Trade and Industrial Education Research Council. Members of this team were Chaster Wichowski, Director of the Statewide Curriculum Development Project, N.J. Vocational-Technical Curriculum Laboratory, Rutgers University and Gordon McMahon, Director of the National Occupational Competency Testing Institute, Albany, N.Y. Dr. Wichowski served as team leader.

The topic of this investigation was identified during the December 3, 1979 meeting of the American Vocational Association Trade and Industrial Education Research Council meeting, Anaheim, California. The basic design used to conduct this research effort was also developed at this meeting.

PROCEDURE

The Population

The population used in this investigation consisted of the state level supervisors of trade and industrial education in the United States and the territorial level supervisors of trade and industrial education in the U.S. Virgin Islands and Puerto Rico. These individuals were identified through a review of the "Directory of Federal and State Officials" which appeared in the April 1980 edition of School Shop. It should be noted that several states in the directory did not have listings under the heading of trade and industrial education. In those instances industrial education, trade and technical education and vocational industrial education headings were used to identify members of the population. Only one individual in each state or territory was included as a member of the population.





All members of the population (N=52) were sent a copy of the survey instrument, a postage paid return addressed envelop and a transmittal letter. Copies of the survey instrument and transmittal letter are included in Appendix A. Thirty-eight members of the population (73.00%) responded to the survey. No follow-up mailing was conducted.

The Research Instrument

A four page opinionnaire was specifically designed to collect data in this study. The research instrument was initially developed through a review of the literature and consultation with faculty members of the Division of Vocational Education, Florida International University. A total of forty-four items equally distributed among eleven categories were identified. An open-ended item was also included in each of the eleven categories to solicitadditional input from members of the population.

Two sets of rating scales were provided with each item. A dichotomous yes or no scale was utilized for trend ratings. A five point Likert scale, with a low of one and a high of five, was utilized for issue ratings.

Revision of the instrument was completed following a review of suggestions provided by several members of Trade and Industrial Education Research Council. Definitions for a trend and an issue were developed for use as a part of the instrument as a result of this input. These terms were defined as follows:

TREND: A course of events or action which is present and is

ISSUE: A difference of opinion, dispute or professional controversy regarding a course of action.



A copy of the instrument as it was used in this study is included in Appendix A.

FINDINGS

dichotomous ratings were achieved through the assignment of numerical values to yes and no responses. A yes response was assigned a value of one, a no response was assigned a value of two. Descending rank ordering was identified through an inspection of calculated means.

The remainder of this report includes tables which identify.

- 1. The top ten trend items. Table 1
- 2. The top ten issue items. Table 2
- 3. The top trend items within each of the eleven categories of the opinionnaire. Table 3
- 4. The top issue items within each of the eleven categories of the opinionnaire. Table 4
- A listing of additional trend and issue items provided by respondents. - Table 5
- 6. A summary of all responses and their calculated means. Table 6



Page 3

TABLE 1 TREND ITEMS RECEIVING THE GREATEST FREQUENCY OF YES RESPONSES

OP IN I ONN AIRE REFERENCE	OP IN I ONNAL RE I TEM	ME AN*	RANK
I - 3	Expansion of the number of women and minorities in T&I programs.	1.00	1.5
J - 2	The reduction of barriers which affect entry of men and women in non-traditional sex role T&I occupational program areas.	1.00	1.5
J - 1	The encouragement of men and women to enter non-traditional sex role T&I occupational program areas.	1.03	3.5
H - 1	Increased availability and access of T&I programs for special needs students.	1.03	3.5
A - 1	The development of a more balanced member- ship composition to include representatives from labor organizations, employers and the general public.	1.05	
c - 3	Further development or expansion of energy technology programs.	1.08	. 6
A - 2	Increase the effectiveness of advisory boards in terms of impact on T&I education.	1.11	7.5
D - 2	Increased delivery of T&I programs for minority group members, women, or students who are handicapped or disadvantaged.	1.11	7.5
K - 1	The development of alternative methods for the delivery of teacher education programs for pre-service and in-service T&I education teachers.	1.16	10.5
J - 3	Greater use of in-service education for T&I instructors to aid in the achievement of sex role equity.	1.16	10.5
I - 1	Upgrading of obsolete facilities and/or equipment.	1.16	10.5
C - 4	Increased development or expansion of work- study and cooperative T&I education programs.	1.16	10.5

^{*}Based on the assignment of numerical values to yes and no responses: Yes = 1, No = 2.



TABLE 2
ISSUE ITEMS WITH THE HIGHEST CALCULATED MEANS

OP IN I ONN AI RE RE FERENCE	OPINIONNAIRE ITEM	MEAN*	rank
н - 3	Expanded linkages between T&I instructors, counselors and administrators in order to mainstream special needs students.	3.83	1
H - 1	Increased availability and access of T&I programs for special needs students.	3.65	2
C - 2	Elimination or reduction of programs with low enrollments or low job placement records.	3.61	3
J - 1	The encouragement of men and women to enter non-traditional sex role T&I occupational program areas.	3.60	4
н – 4	The use of class size limits and/or proportional limits of special needs students in T&I programs.	3.54	5
J - 2	The reduction of barriers which affect entry of men and women in non-traditional sex role T&I occupational program areas.	3.46	
K - 2	The development of recruitment strategies to attract journeymen into T&I teaching positions.	3.43	7
I - 3	Expansion of the number of women and minori- ties in T&I programs.	3.41	8
G - 3	The use of school counselors in career guid- ance for potential T&I students.	3.38	9
D - 2	Increased delivery of T&I programs for minor- ity group members, women, or students who are handicapped or disadvantaged.	3.38	• 10

^{*}Calculated on responses to a 5 point Likert scale with a low of 1 and a high of 5.



TABLE 3 TREND ITEMS WITHIN OPINIONNAIRE CATEGORIES RECEIVING THE GREATEST FREQUENCY OF YES RESPONSES

OPINIONNAIRE		Rati	_
CATEGORIES AND ITEMS	Mean*	Yes	<u>.</u>
SECTION A: ADVISORY BOARDS The development of a more balanced membership composition to include representatives from labor organizations, employers and the general public.	1.05	36	2
SECTION B: ARTICULATION Increase articulation between T&I programs with other educational institutions at other levels.	1.28	. 26	10
SECTION C: CURRICULUM Further development or expansion of energy technology programs.	1.08	32	6
SECTION D: DELIVERY Increased delivery of T&I programs for minority group members, women, or students who are handicapped or disadvantaged.	1.11	34	4
SECTION E: FOLLOW-UP, PLACEMENT AND EVALUATION The use of advisory boards and T&I instructors in placing program graduates.	1.14	30	5
SECTION F: FUNDING Increased availability of grants to support new or exemplary T&I programs.	1.45	18	15
SECTION G: GUIDANCE AND COUNSELING Increased effort to place T&I students in the program area of their choice.	1.08	33	3
SECTION H: HANDICAPPED AND DISADVANTAGED STUDENTS -			
SPECIAL NEEDS Increased availability and access of T&I programs for special needs students.	1.03	` 36	.]
SECTION I: PROGRAM PLANNING AND ACCESS Expansion of the number of women and minorities in T&I programs.	1.00	37	(
SECTION J: SEX ROLE EQUALITY The reduction of barriers which affect entry of men and women in non-traditional sex role T&I occupational program areas.	1.00	35	(
SECTION K: TEACHER PREPARATION AND UPGRADING The development of alternative methods for the delivery of teacher education programs for pre-service and in-service T&I education teachers.	1.16	31	(

^{*}Based on the assignment of numerical values to yes and no responses: Yes = 1, No = 2.



TABLE 4 ISSUE ITEMS WITHIN OPINIONNAIRE CATEGORIES WITH THE HIGHEST CALCULATED MEANS

		Rating							
OPINIONNAIRE	Mean≠ •		w) 2		(H1 _{	3h) 5			
CATEGORIES AND ITEMS	Me an -		<u> </u>						
SECTION A: ADVISORY BOARDS Increase the effectiveness of advisory boards in terms of impact on T&I education.	3.04	3	6	4	7	3			
SECTION B: ARTICULATION Increase articulation between T&I programs with other educational institutions at other levels.	3.27	4	2	8	7	5			
SECTION C: CURRICULUM Elimination or reduction of programs with low enrollments or low job placement records.	3.61	5	1	7	9	11			
SECTION D: DELIVERY Increased delivery of T&I programs for minority group members, women, or students who are handicapped or disadvantaged.	3.38	3	2	10	6	5			
SECTION E: FOLLOW-UP, PLACEMENT AND EVALUATION The use of job placement as a sole method of program evaluation.	3.21	6	6	5	7	7			
SECTION F: FUNDING The use of weighted F.T.E funding for T&I programs.	3.32	5	. 2	5 -	6	7			
SECTION G: GUIDANCE AND COUNSELING The use of school counselors in career guidance for potential T&I students.	3.38	3	3	6	9	5			
SECTION H: HANDICAPPED AND DISADVANTAGED STUDENTS SPECIAL NEEDS Expanded linkages between T&I instructors, counselors and administrators in order to mainstream special needs students.	3.83	3	3	3	11	6			
SECTION I: PROGRAM PLANNING AND ACCESS Expansion of the number of women and minorities in T&I programs.	3.41	2	4	7	9	5			
SECTION J: SEX ROLE EQUALITY The reduction of barriers which affect entry of men and women in non-traditional sex role T&I occupational program areas.	3.46	3	4	10	6				
The development of recruitment strategies to attract journeymen into T&I teaching positions.	3.43	5	6	2	4	ł			

^{*}Calculated on responses to a 5 point Likert side with a low of 1 and a high of 5.



TABLE 5 LISTING OF ADDITIONAL TREND AND ISSUE ITEMS PROVIDED BY RESPONDENTS

OPINIONNAIRE ATEGORIES AND ADDITIONAL ITEMS	Trend	Degree of Issue
ECTION A: ADVISORY BOARDS		
1. Increased frequency of meetings.	Yes	
2. Formulation of more effective advisory groups		
to assist with delivery systems of T&I teacher	Yes	
education.	162	
 The development, evaluation and discontinuance of T&I programs. 	Yes	4
4. Increased interaction with community councils.		
ECTION B: ARTICULATION 1. A means of identifying and defining "turf."		
ECTION C: CURRICULUM		
1. Industrially determined curriculum requirements.	Yes	5
 Expansion of existing T&I programs to meet needs. Increased resistance by unions to work-study 	1 43	
programs.	Yes	5
· · · ·	•	•
ECTION D: DELIVERY		
1. More effective training programs for the incarcerated.	Yes	
2. Correctional institutions.	Yes	
		•
ECTION E: FOLLOW-UP, PLACEMENT AND EVALUATION 1. Evaluation of educators by educators only.	No	5
1. Evaluation of educators by educators only.		
SECTION F: FUNDING		,
None	,	
SECTION G: GUIDANCE AND COUNSELING		
1. More emphasis on programs for non-traditional	¥	
career opportunities.	Yes	
2. Early preparation and non-tracking for technical	Yes	
students.		
SECTION H: HANDICAPPED AND DISADVANTAGED STUDENTS -		
SPECIAL NEEDS		
None		
SECTION I: PROGRAM PLANNING AND ACCESS		
1. Planners vs. societal reality.		
SECTION J: SEX ROLE EQUITY		
None		
SECTION K: TEACHER PREPARATION AND UPGRADING		
1. Facilitating mechanisms for professional and		
personal growth.	Yes	4
2. Lets not use industrial arts teacher education		
programs to train T&I teachers.	Мо	5
AroBrams co grant rat page.		

TABLE 6
SUMMARY OF THE RESPONSES OF STATE SUPERVISORS
TO THE TRENES AND ISSUES IN TRADE AND INDUSTRIAL EDUCATION SURVEY

	•	TREND				1saus						
O	PINIONNAIRE	(1)	(2)		ام1)	(1274)		(11.1	gh)			
CATEO	ORIES AND ITEMS	Yen	Мо	Hean*	1 1	?	3	4	5	Hean		
SECTI	ON A: ADVISORY BOARDS											
1.	The development of a more balanced membership composition to include representatives from labor organizations, employers and the general public.	16		1.05	1	10	б	1	2	2.61		
2.	Increase the effectiveness of advisory boards in terms of impact on T&I education.	14	4	1.11	1	6	4	7	1	1.04		
3.	Increase the relationship of local advisory hoards to regional and state level advisory boards.	21	. 17	1.45	?	1	1	<i>i</i> 4	1	2.74		
4.	Formalize the operation and governance of advinory boards.	21	15	1.41	3	4	10	3	}	2 86		
SECTI	ON B: ARTICULATION											
1.	increase atticulation between T&I programs with other educational institutions at the name level.	25	13	1,34	5	1	6	9)	3,17		
2.	Increase articulation between T&l programs with other educational institutions at other levels.	26	10	1.28	4	2	8	1	5	3,27		
3.	The upe of articulation as an aid for student recruitment.	24	12	1.33	6	5	. 8	5	2	2,69		
4,	The use of articulation as an aid for student selection and placement.	20	16	1.44	6	6	4	4	1	2.43		

^{*}Based on the assignment of numerical values to yes and no responses: Yes = 1, No = 2.



12

	•	TRENI)	,		ISSU			
OPINIONNAIRE	(1)	(2)		(Lo	1)		(H1	_	
CATEGORIES AND ITEMS	Yes	No	Mean*	1	2	. 3	4,3	5	Mean
SECTION C: CURRICULUM						• •	,	,	2.02
 Greater effort in the development and evaluation of new and emerging T&I program areas. 	27	9	1.25	6	. 2	10	4 4	4	2.92
 Elimination or reduction of programs with low enrollments or low job placement records. 	27	14	1.21	5	ì	. 7	9	11	3.61
 Further development or expansion of energy technology programs. 	32	6.	1.08	4	. 5	10	5	3	2.93
 Increased development or expansion of work- study and cooperative T&I education programs. 	31	6	1.16	4	7	8	5	3	2.85
SECTION D: DELIVERY						*			
1. Increased delivery of T&I programs to urban areas.	24	14	1.37	4	5	.9	5 .	0	2.65
 Increased delivery of T&I programs for minority group members, women, or students who are handicapped or disadvantaged. 	34	4	1.11	. ***3	2	10	6	5	3.38
 Greater use of private industry based training programs by contract with local education agencies. 	17	20	1.58	8	3	5	.	5	2.85
 Expanded delivery schedules to include evenings, weekends, summers and/or multiple exit programs. 	21	14	1.40	2	5	7	6	4	3.21
SECTION E: FOLLOW-UP, PLACEMENT AND EVALUATION									
1. The use of job placement as a sole method of program evaluation.	7	29	1.81	6	6	5	. 7	7	3.21
 Placement of T&I graduates by school counselors or outside agencies. 	17	19	1.53	4	5	8	, 5	6	3.14
3. The use of advisory boards and T&I instructors in placing program graduates.	30	5	1.14	.5	5	10	4	3	2.81

^{*}Based on the assignment of numerical values to yes and no responses: Yes = 1, No = 2.



		TRE	4D	ISSUE						
OPINIONNAIRE	$\overline{(1)}$	(2)	1	· (Lo	w)	_	(H1;	gh)		
CATEGORIES AND ITEMS	Yes	No	Mean*	1	2	_ 3	4	5	Mean	
SECTION E: FOLLOW-UP, PLACEMENT AND EVALUATION - CONTINUED					,				`	
4. Program review using T&I program graduates as a major source of data.	22	13	1.37	6	3	10	6	1	2.73	
SECTION F: FUNDING						•				
1. The use of weighted F.T.E. funding for T&I	17	32	1.48	5	2	ა :	6	7	3.32	
programs.2. Increased availability of grants to support	18	15	1.45	. 6	4	3	9	5	3.11	
new or exemplary T&I programs. 3. Increased availability of local funds to	17	18	1.51	6	6	5	6	3	2.77	
provide continued support for new or ex- emplary T&I programs.	٠			,			. .	•		
 The development of a funding balance between T&I and other educational programs. 	17	17	1.50	7	2	. 6	. 7	4	2.96	
SECTION G: GUIDANCE AND COUNSELING							٠			
1. The use of the Armed Services Vocational Aptitude Battery (ASVAB) testing program.	11	25	1.69	6	5	8	1	1	2.33	
 Increased emphasis on T&I teachers to provide career guidance. 	23	12	1.34	7	0	8	. 11	1	2.96	
 The use of school counselors in career guid- ance for potential T&I students. 	28	7	1.20	3	3	6	9	.5	3.38	
4. Increased effort to place T&I students in the program area of their choice.	33	3	1.08	7	1)	7	4	2	2.67	
SECTION H: HANDICAPPED AND DISADVANTAGED STUDENTS - SPECIAL NEEDS	·									
1. Increased availability and access of T&I programs for special needs students.	36	1	1.03	1	5	4	.8	. 8	3.65	

^{*}Based on the assignment of numerical values to yes and no responses: Yes = 1, No = 2.



		TRE	4D	ISSUE							
OP INI ONNATRE	(1)	(2)		(Lo	۸)		(11.1	gh)			
CATEGORIES AND ITEMS	Yes	No	Mean*	11	2	3_	4	5	Mean		
SECTION H: HANDICAPPED AND DISADVANTAGED STUDENTS - SPECIAL NEEDS - CONTINUED					•	٨					
2. Availability of comprehensive student records to T&I instructors.	20	15	1.43	6	3	7	, 7	3	2.77		
 Expanded linkages between T&I instructors, counselors and administrators in order to mainstream special needs students. 	29	6	1.17	3	3	3	11	6	3.83		
 The use of class size limits and/or proportional limits of special needs students in T&I programs. 	27	9	1.25	6	0	4	9	9	3.54		
SECTION I: PROGRAM PLANNING AND ACCESS							*		•		
 Upgrading of obsolete facilities and/or equipment. 	31	6 .	1.16	5	5	6	5	5	3.00		
 Use of OSHA standards to upgrade and/or modify facilities and equipment. 	24	12	1.33	3	7	9	6	3	2.96		
 Expansion of the number of women and minorities in T&I programs. 	37	0	1.00	2	4	7.	9	.5	3.41		
 Reduction or the elimination of minimal age or physical ability requirements necessary to enter some T&I program areas. 	18	1,7	1.49	4	5	6	4	7	3.19		
SECTION J: SEX ROLE EQUALITY '	•		4						-		
 The encouragement of men and women to enter non-traditional sex role T&I occupational program areas. 	35	1	1.03	, 2		8	6	10	3.60		
 The reduction of barriers which affect entry of men and women in non-traditional sex role T&I occupational program areas. 	35	0	1.00	3	4	10	6	5	3.46		
•											

^{*}Based on the assignment of numerical values to yes and no responses: Yes = 1, No = 2.



			TRE	ND						
ΔD	INIONNAIRE	$\overline{(1)}$	(2)		(Lo	w)	(High)			
	ORIES AND ITEMS	Yes	No	Mean*	1.	2	<u>3</u>	4		Mean
SECTION J: SEX ROLE EQUALITY - CONTINUED						_	٠ -	,	5	2.89
3.	Greater use of in-service education for T&I instructors to aid in the achievement of sex role equity.	31	6	1.16	5	,	,	4	-	
4.	Increased use of trade unions, special interest groups and advisory boards to provide assistance in this area.	21	15	1.42	4	8	6	4	3	2.76
SECTI	ON K: TEACHER PREPARATION AND UPGRADING				_				•	2.06
1.	The development of alternative methods for the delivery of teacher education programs for pre-service and in-service T&I education teachers.	31	6	1.16	5	7	4	6	5	2.96
2.	The development of recruitment strategies to attract journeymen into T&I teaching positions.	21	15	1.42	5	6	2	4	8	3.43
3.	Greater use of pre-service teacher education programs for potential T&I instructors.	25	11	1.31	7	7	3	4	6	2.81
4.	The development of exchange programs for the skill updating needs of T&I teachers.	18	19	1.51	5	6	6	2	6	2.92

^{*}Based on the assignment of numerical values to yes and no responses: Yes = 1, No = 2.



APPENDIX A

TRANSMITTAL LETTER AND

OPINIONNAIRE



GRADUATE SCHOOL OF EDUCATION • DEPARTMENT OF VOCATIONAL-TECHNICAL EDUCATION
CURRICULUM LABORATORY • BUILDING 4103 • KILMER CAMPUS • NEW BRUNSWICK • NEW JERSEY 08903 (201) 932 –3845/46/47

September 10, 1980

Dear State T & I Supervisor:

As a member of the Trade and Industrial Education Research Committee for the American Vocational Association, I am conducting a survey to identify current and/or projected trends and issues in the area of Trade and Industrial Education. Knowledge of this type is vital to the educational researcher and practitioner.

Please take approximately twenty minutes out of your busy schedule to assist in these research efforts by completing the enclosed opinionnaire. Do not hesitate to add other catagories or comments which you feel appropriate in the space provided.

The data collected through this research effort will be reported as part of the T & I Research Committee's Program at the 1980 AVA Convention in New Orleans.

Return completed opinionnaires by September 30, 1980. A preaddressed postage paid return envelope has been included for your convenience.

Your cooperation and assistance in this matter is greatly appreciated.

Sincerely yours,

Chester Wichowski

Vocational-Technical Curriculum Laboratory

Rutgers University-Kilmer Campus

New Burnswick, N.J. 08903

/ma Encl.



TRENDS AND ISSUES IN

TRADE AND INDUSTRIAL EDUCATION

OPINIONNAIRE

DIRECTIONS: Read each of the statements listed below. If you perceive a statement to be a current trend in T&I education, circle the Y response in the TREND column. If it is not, circle the N response.

If you feel there is any degree of controversy associated with the development or implementation of the statements listed, rate the degree to which you perceive this as an issue by placing a circle around the appropriate numerical value in the ISSUE column.

Use the following definitions as an aid in completing this opinionnaire:

TREND: A course of events or action which is present and is likely to continue in the future.

ISSUE: A difference of opinion, dispute or professional controversy regarding a course of action.

_			<u> DND</u>	ISSUE					
		YES	МО	LC	W	H	IGH		
<u> </u>	ADVISORY BOARDS		-					_	
1.	The development of a more balanced membership composition to include representatives from labor organizations, employers and the general public.	Y	N	1	2	3	4	5	
2.	Increase the effectiveness of advisory boards in terms of impact on T&I education.	Y	·N	1	2		4		
3.	Increase the relationship of local advisory boards to regional and state level advisory boards.	* Y	N	-	2	3	4	5	
4.	Formalize the operation and governance of advisory boards.	Y	Ŋ		2			5	
5.	OTHER:	Y	N	1	2	. 3	4	5	
В.	ARTICULATION	•							
1.		Y	N		2		4		
2.	Increase articulation between TSI programs with other educational institutions at other levels.	Υ .	,	1	2	_		5	
3.	The use of articulation as an aid for student recruitment.	, У	N	1		3			
4.	The use of articulation as an aid for student selection and placement.	Y	N	1	2	3	4	5	
5	OTHER:	Y	N	1	2	3	4	. 5	



			110	LND		13	30E		
<u>c.</u>	CUR	RICULUM	YES	NO	L	OW	Н	IGH	
	1.	Greater effort in the development and evaluation of new and emerging T&I program areas.	Y	N	1	2	3	4	5
	2.	Elimination or reduction of programs with low enrollments or low job placement records.	Y	N	1	2	3	4	5
	3.	Further development or expansion of energy technology programs.	Y	N	1	2	3	4	5
	4.	Increased development or expansion of work-study and cooperative T&I education programs.	Y	N	1	2	3	4	5
	5.	OTHER:	Y	N	1	2	3	4	5
<u>D.</u>	DEL	IVERY	•						
•	1.	Increased delivery of Tal programs to urban areas.	Y	N	1	2	3		5
*	2.	Increased delivery of T&I programs for minority group members, women, or students who are handicapped or disadvantaged.	Y	N	1	2	3	4	5
	3.	Greater use of private industry based training programs by contract with local education agencies.	Y	N	_			4	5
	4.	Expanded delivery schedules to include evenings, weekends, summers and/or multiple exit programs.	Y	N	. 1	2	3	4	5
	۶.	OTHER:	Y	N	1	2	3	4	5
£.	FOI	LLOW-UP, PLACEMENT AND EVALUATION					_		
	1.	The use of job placement as a sole method of program evaluation.	. Y	N	1	2	3	4	5
	2.	Placement of T&I graduates by school counselors or outside agencies.	Y _	N	1	2	3	4	5
	3.	The use of advisory boards and T&I instructors in placing program graduates.	Y	N	1	2	3	4	5
	4.	Program review using T&I program graduates as a major source of data.	Y	N				4	5
	5.	OTHER:	Y	N	1	2	3	4	5
			٠						

	•		TREND						
			YES	МО	L	OW	Н	ISH	
<u>F.</u>	FUNI	DING			•				
	1.	The use of weighted F.T.E. funding for T&I programs.	Y	N	1	2	3	4	5
	2.	Increased availability of grants to support new of exemplary T&I programs.	Y	N	1	2	3	4	5
•	3.	Increased availability of local funds to provide continued support for new or exemplary T&I programs.	Y	N	1	2	3	4	5
	4.	The development of a funding balance between T&I and other educational programs.	Y .	N	1	2	3	4	5
	5.	OTHER:	, Y	N		2	3	4	5
_	CUT	DANCE AND COUNSELING							
<u>G.</u>		The use of the Armed Services Vocational Aptitude Battery (ASVAB) testing program.	Y	N	1	2	3	4	5
	2.	Increased emphasis on T&I teachers to provide career guidance.	Y	N	1	2	3	4	5
	3 .**	The use of school counselors in career guidanca for potential TSI students.	Y	N	1	2	3	4	5
	4.	Increased effort to place T&I students in the program area of their choice.	Y	N	1	2	3	4	5
	5.	OTHER:	Y	N	1	2	3	4	5
				•					
н.	HAN	DICAPPED AND DISADVANTAGED STUDENTS (Special	Meeds	<u>'</u>					
	1. ^j	Increased availability and access of T&I programs for special needs students.	Y	N	1	2	3	4	5
	, 2.	Availability of comprehensive student records to Tal instructors.	Y,	N	1	2	3	4	5
	3.	Expanded linkages between T&I instructors, counselors and administrators in order to mainstream special needs students.	Y	N	1	2	3	4	5
	4.	The use of class size limits and/or proportional limits of special needs students in T&I programs.	Y	N	1	2	3	4	5
	5.	OTHER:	Y .	N	1	2	3	4	5
						ř			*

			LIENO						
			723	Or		M	813		•
I .	PROG	RAM PLANNING AND ACCESS							
<u></u>	1.	Upgrading of obsolete facilities and, or equipment.	Y	ч	ì	3	3	4	3
	2.	Use of OSHA standards to upgrade and/or modify facilities and equipment.	4	14	ì	2)	4	5
i A	١.	Expansion of the number of women and minorities in T&I programs.	Y	ч	1	2)	4	\$
A STATE OF THE STA	4:	Reduction or the elimination of minimal age or physical ability requirements necessary to enter some T&I program areas.	Υ	Ħ	1	3	3	•	\$
	5.	OTHER.	۲	4	:	:	3	4	\$
			í						
J .	SEX	POLE EQUALITY							
		The encouragement of men and women to enter non-traditional sax role T41 occupational program areas.	Y	4	•}	3		4	\$
	2.	The reduction of barriers which affect entry of men and women in non-traditional sex role T&T occupational program areas.	۲	14	1	3)	4	\$
,	;) .	Greatur use of in-scrivice education for Tal instructors to aid in the achievement of sex role equity.	Y	И	ì	2)	4	5
	4.	Increased use of trade unions, special interest groups and advisory boards to provide assistance in this area.	7	71	ì	3)	4	\$
	5 .	OTHER	Y	u	:	3	1	4	\$
ĸ.	TEA	CHER PRIPARATION AND UPGRADING							•
	1.	The development of alternative mathods for the delivery of teacher education programs for pre-service and in-service TEI education teachers.	۲	ч	ì	3)	4	\$
	2.	The development of recruitment strategies to attract journeymen into TSI teaching positions.	Y	đ	1	3)	4	3
	3 .	Greater use of pre-service teacher education programs for potential Talinstructors.	Y	¥	1	3	3	4	3
	4.	The dovelopment of exchange programs for the $sk\Omega 1$ updating needs of T&I teachers.	۲	74	1	3)	4	\$
	5,	OTHER:	Y	Ą	ì	2	3	4	\$

