ATTITUDES OF VOCATIONAL EDUCATORS TOWARD CHANGE

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ABSTRACT

(Purpose) The purpose of this study was to determine whether there was a difference between the perceptions of district vocational directors and high school building administrators concerning the willingness of vocational educators to make changes in their programs. (Methodology) A mailed survey was sent to 67 district directors of vocational education and the 431 high school principals in the 67 Florida school districts. The survey instrument was designed in two parts. The first section required ratings of vocational educators' stages of planning, development, and implementation of innovative instructional strategies and innovative program initiatives. The items reflected the seven innovations that members of the Florida Department of Education agreed were those that were being promoted for adoption in Florida high schools. The items for the second part of the instrument were based on the dimensions of the Attitude toward Change conceptual framework. A return rate of 68.8 percent was obtained. Data analysis was accomplished using a t-test to determine whether there was a significant difference between the mean ratings given to the vocational educators by the vocational directors and the principals of the high schools where the programs were housed. (Results) The means for each item on the instrument as well as the means for each scale score was explored to determine the level of the adoption of the innovation or the extent to which the respondent groups reported that vocational educators had positive or negative attitudes toward change. (Conclusions) The data indicate that both administrative groups believe that the vocational educators have a positive attitude toward change and have made substantial progress in implementing changes that have been promoted by the Florida Department of Education. Both of these administrative groups see vocational educators as having a positive attitude toward planning, implementing, and maintaining programs after changes have been made with the Principal group being more positive than the Vocational Director group. This raises the question of whether vocational educators are more critical of other vocational educators than are non-vocational administrators. It follows then that the image that the general public has of vocational educators as being out of date and not wanting to change could be a result of this internal criticism. . (Recommendations) It is suggested that a study be done to answer the question as to whether vocational programs are up to date and whether appropriate research is being conducted to

determine what changes need to be made in the programs. (Additional Data) (Contains 6 tables, 1 figure, sixteen references, and instrument items.)

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Evidence has been provided by many researchers (e.g. Lynch, 2000, O'Reilly, Asche, and Rowland, 1995) that change in vocational education is needed. A contributor to this need for change is the potential for current educational reforms have for minimizing the role of vocational education if vocational educators fail to meet the challenges that these reforms provide. Failure to make needed changes may result in vocational education being reformed rather than being a participant in the change process (Asche, 1991). The evidence indicates that vocational educators are not involved in a majority of the reform efforts (Lynch, 1996). Lynch notes that vocational educators need to be "a partner in these reform efforts--not apart from them" (p.24).

Given the decline in the secondary school students' vocational course taking which is down 17 percent in the decade from 1982-1992 while the Academic course taking is up by 22 percent (U.S. DOE, 1992), the urgency seems apparent. However, despite research showing that innovations that have been adopted have achieved the desired increases in student performances, Miller (1997) indicates that educators are still reluctant to fully adopt proven innovations. A contributor to this reluctance to change may be the lack of support from school and vocational leaders. Benjamin and Gard (1993) note that "for change to occur,

school leaders must first believe that change is possible" (p.63). Murphy and Lick (1998) indicate that a change sponsor is a required role that must be played by a person who is in the position which "has the power to sanction or legitimize the change" (p.30) if change is to occur at reasonable pace. That is, without the support of a change sponsor, the change agent will have difficulty implementing desired changes. This observation was also made by Finch, Schmidt, and Moore (1996) who noted that educational administrators, counselors and business personnel were involved in establishing successful school to work activities.

Earlier research has indicated that Florida vocational educators responded favorably toward change and had positive attitudes toward innovation (Carr, 1984). Carr also found that vocational educators considered themselves to be flexible and able to adapt to change. In addition, Slaugh (1983) found that vocational business educators perceived few barriers to the implementation of an innovative curriculum approach. Research shows that vocational educators are able to change and develop innovative programs (e.g. Grummon, 1994) and have a positive attitude toward program improvement (Greenan, Wu, Mustapha, and Ncube, 1998).

In contrast, however, is the implication that vocational educators are resistant to change and start every response to questions about change with the statement "in 1917...." (Asche, 1991). Even vocational educators who purport to have positive attitudes toward program improvement, report that a major barrier to change is "negative teacher attitudes" (Greenan et.al., 1998). This indication of a negative attitude on the part of vocational educators and the reported negative image held by leaders of the new school reform movement have of secondary vocational education (Carti, 1998) lead this researcher to question what the perception of the administrators who are potential change sponsors was of

the vocational educators on their district and school building regarding the willingness of vocational educators to plan, implement, and maintain innovative programs.

Objectives/Purpose

The purpose of this study was to determine whether there was a difference between the perceptions of district vocational directors and high school building administrators concerning the willingness of vocational educators to make changes in their programs. Specifically, the differences were sought between the ratings of these two administrative groups on (1) the extent to which selected innovations had been adopted, (2) planning strategies used by vocational educators, (3) implementation practices used when adopting innovations, (4) strategies employed to maintain innovative programs, and (5) general attitudes toward making programmatic changes. The level of the attitude toward change that these vocational educators were perceived to have by the identified administrative groups was also noted.

Conceptual Framework

The conceptual framework for this study is based on the theories/models of change. Change, it is hypothesized, is a process (Murphy & Lick, 1997) that occurs in stages (Hall et al, 1991) which individuals may resist (Conner, 1993). Murphy and Lick (1997) contend that change cannot occur without education. However, it seems logical to assume that learning does not occur without the predisposition or

appropriate attitude toward learning. Thus the model developed for change that guided this research is shown in Figure 1.

The stage of change indicated as being "Attitude toward Change" is envisioned as one's attitude in regard to making changes in what one does. While it is assumed that individuals have varying resistance to different changes, it is also evident that individuals have a general attitude toward making changes. This stage is most closely related to

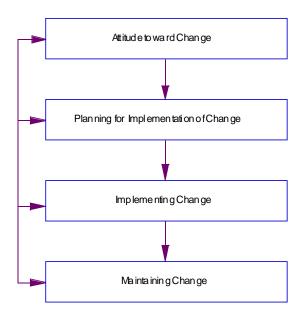


Figure 1. Model of the Change Process

Conner's (1992) "Present State" phase of change. The second stage in the model that guided this study, "Planning for Change", is an aspect of Conner's "Transition State" in that a transition is not likely to occur if a plan is not developed. In

addition, this stage implies that those who are making the change are also the ones who are making the plans to change. Murphy and Lick (1998) indicate that participation in planning for change provides the knowledge about the change needed to facilitate making the change.

Following the planning stage is the "Implementation of Change" which is the balance of Conner's (1992) "Transition State" and includes those activities necessary to implement the plans for the change. In order for change to occur, the activities included in the plan developed for the implementation of the change must be conducted. The final stage in the current model is the "Maintaining Change" stage. As reflected in the label for this stage, it is not assumed that a change will, once implemented, remain in place without effort on the part of those involved. It is assumed that a definite "change back" pressure will exist. Thus the terminology of "Desired State" employed by Conner for his final stage was rejected for a more active dimension which reflects the level of effort required to keep a change in place until it is institutionalized or is replaced by a better process. It should also be noted that the model includes a feedback loop that implies that the process can revert back to an earlier stage if the there is a problem in the smooth transition from one stage to another. For example it may be necessary to revert to a discussion of attitudes toward change if the strategies designed for implementing the change is in disagreement with the thoughts of the participants in the change process.

Methods

The method chosen for this study was a mailed survey to the identified administrative groups. This design was consider to be the optimal method to obtain

responses from a large number of respondents at a minimum cost. A discussion of the subjects, instruments, data collection strategies, and analysis are presented in the following paragraphs.

Subjects

The subjects identified to participate in the study were the 67 district directors of vocational education and the 431 high school principals in the 67 Florida school districts. Of this population, 336 responded which included 60 of the 67 district vocational directors and 276 high school principals. Ten building principals indicated that the survey was inappropriate for their school because of the specific nature of the school including not starting classes in a new school designated to open in the fall of the next year. Thus a return rate of 68.8 percent was obtained. This return rate was considered exceptional given that the data were collected near the end of the school year.

Instrumentation

The instrument was designed in two parts. First the listing of innovative instructional strategies and innovative program initiatives were listed. Items written to reflect each of the dimensions in the model described in the conceptual framework were included in the second part. The instructional strategies were the seven innovations that members of the Florida Department of Education (FDOE) agreed were those that were being promoted for adoption in Florida high schools. Similarly, the six items included in the innovative program initiatives were those

programs that the selected FDOE staff members agreed were the programs that they were suggesting that Florida high school vocational educators should consider adopting. The four point response scale for the first part of the instrument was a rating of the extent to which the respondents considered the vocational educators in their school or district had adopted the instructional or program strategy which ranged from no action (1)to fully implemented (4). Validity of these items is based on the agreement that these were the strategies that were being promulgated to the vocational educators in Florida high schools. It was felt to be important to get the terminology of these strategies exactly as that used by the promulgators of these strategies. Thus the program specialists who were in charge in the FDOE were the ones contacted to provide this information. A reliability estimate was not calculated for these items because no summative score was anticipated. Rather, if the two groups of administrators were in close agreement as to the programs/strategies that were implemented in their districts then it would be considered that the items were a reasonable estimate of the extent to which innovation or instructional strategy had been implemented. As will be noted in the results section, there was high agreement between these two administrative groups. A test-retest reliability would be appropriate for future development of the instrument.

The items for the second part of the instrument were based on the dimensions of the Attitude toward Change (ATC) construct described in the conceptual framework. The general attitude toward change scale or the predisposition toward change contains 10 items while the attitude toward planning strategies, the attitude

toward implementation strategies, and the attitude toward strategies for maintaining innovations include 10, 5, and 5 items respectively. Validity of the scales designed to measure these dimensions was established by first defining the dimensions in the conceptual framework based on the literature and then writing items to reflect the dimensions. A factor analysis of the data collected in this study gave partial support for construct validity of the scales. The factor analysis produced four factors with eigen values equal to or greater than one, which was the number of dimensions anticipated. However, the planning and implementation scales factored out in one factor and two negative items from the planning dimension formed a separate factor. For the purposes of this study, the items were scored as per the original dimensions. This decision was based on the opinion of the researcher that the planning and implementation items were likely to be seen on the same continuum by the respondents but that it would be useful to look at two aspects of this dimension.

Reliability estimates of the scales was considered to be high ranging from .89 to .91 with the estimates being .91 for predisposition toward change, .91 for planning attitudes, .91 for implementation, and .89 for attitudes toward maintaining innovations.

Data Collection and Analysis

A mailed survey was employed to collect the data from the vocational directors and principals included in the population. A cover letter explaining the purpose of the research, asking for the cooperation of the identified administrators, and assuring the respondents of anonymity was mailed with a pre-addressed return envelope. A follow-up mailing which included a follow-up letter and all of the material included with the first mailing was mailed to the non-respondents two weeks after the original mailing. The goal of receiving a 70 percent response rate was nearly obtained on the second mailing.

The data were prepared for analysis by calculating a mean for the principal groups for each district for which a response was received from the vocational director. This was done to preclude the excessive weighting of large districts in comparison to small districts with the awareness that the reliability of the principal group would be increased for the counties where there were a higher number of these administrators. This technique reduced the number of districts that had complete data to the number of responding vocational directors. Thus the data for the analysis was from the 60 responding directors and the means of the responses from the principals from each of the 60 districts represented by the responding directors. The absence of data from principals from three of the districts represented by vocational directors reduced the number of districts represented to 57.

Data analysis was accomplished using a t-test to determine whether there was a significant difference between the mean ratings given to the vocational educators by the vocational directors and the principals of the high schools where the programs were housed. The means for each item on the instrument as well as the means for each scale score was explored to determine the level of the adoption of the innovation or the extent to which the respondent groups reported that vocational educators had positive or negative attitudes toward change.

Results

The administrative groups were in close agreement on the extent to which the instructional strategies had been implemented. A significant difference was obtained between the means for only one of the seven strategies listed. As shown in Table 1, the vocational directors rated the strategy of Creative Scheduling (block scheduling) higher (t=2.46, p = .02) than did the principal group. This indicates the vocational directors considered this strategy as being between implementation and fully implemented (3.30) while the principals mean rating was at the implementation stage (2.97). The means for both groups was at the implementation stage for Integration of Academic and Vocational Coursework, Strategies for Using Student Career and Education Planning Systems, and Expansion of Vocational Programs for Grades 9-12. The administrative groups were in agreement that the vocational educators were between the planning stage and implementation for Alternative Assessment (X = 2.45 for vocational directors and 2.42 for principals).

The mean ratings for the strategies of Creative Scheduling and Applied Academics were between the implementation stage and the fully implemented for each administrative group. It is apparent that these administrative groups are equally aware of the stage of implementation in which vocational educators are and that the vocational educators in Florida were making substantial progress toward the implementation of the strategies for instruction that the FDOE were suggesting.

Table 1
Stage of development of innovative instructional strategies by vocational educators

	Instructional strategy	Vocational D	irectors	Princ	cipal	t	p
		Mean	SD	Mean	SD		
1.	Integration of academic and vocational course work	2.98	.59	2.92	.56	.58	.56
	vocational course work						
2.	Applied Academics	3.25	.61	3.12	.71	1.06	.29
3.	Alternative assessment	2.45	.81	2.42	.79	.17	.87
4.	Block scheduling	3.35	.81	2.97	.84	2.46	.02
7.	block scrieduling	J.JJ	.01	2.71	.04	2.40	.02
5.	Innovative teaching styles directed toward learning styles	2.82	.76	2.82	.76	0.00	1.00
6.	Strategies for using student career and educational planning systems	3.05	.74	2.99	.61	.48	.63
7.	Expansion of vocational programs for grades 9-12	3.07	1.03	2.98	.79	.52	.60

As shown in Table 2, significant differences (p <. 01) were observed between the two administrative groups for two of the six State Initiatives. The two were Blueprint for Career Preparation and Gold Seal Endorsement and Scholarship Program which are

programs that have been in place the longest period of time. The Vocational Directors mean ratings were higher than the Principals for both of these variables were. The Vocational directors' mean rating for these two programs was 3.64 and 4.00 respectively while the Principals' mean ratings were 3.26 and 3.83. Thus the Vocational Directors considered these programs to be nearer to the fully implemented stage than did the Principals. The likely reason for the difference in the perception of the implementation stage for these two programs is that most of the Vocational Directors could point to at least one program in their district that was fully implemented while the individual building Principal was more likely to have a program that was not fully implemented.

Table 2
Stage of development of the state suggested program initiatives

	Program/Initiative		l Directors	Principals		t	p
		Mean	SD	Mean	SD		
1.	Blueprint for Career Preparation	3.64	.62	3.26	.64	3.23	.002
2.	Gold Seal Endorsement and Scholarship	4.00	.00	3.83	.37	3.43	.001
3.	Tech Prep	3.68	.51	3.52	.50	1.67	.097
4.	Centers of Emphasis	2.18	1.32	1.86	.68	1.60	.112
5.	Apprenticeships	2.19	1.12	2.35	.90	.82	.415
6.	Workplace Education programs	2.85	.83	2.72	.72	.95	.345

The Vocational Directors (3.68) and Principals (3.52) agreed that the Tech Prep programs in their district/school were between the implementation stage and being fully implemented and that the Work Place Programs were at the implementation stage with the means for the latter being 2.85 for Vocational Directors and 2.72 for Principals. These administrative groups also agreed the Centers of Emphasis and Apprenticeship programs were in the planning stage of implementation.

Mean differences were observed for seven of the ten items on the general attitude toward change scale as well as for the total scale score. It is important to note that the rating scale for the negative items has been reversed and that the score of one is the highest score. In addition, the data for the total score was an average of the item scores. In general, the Principal group rated the vocational educators in their district as having a more positive attitude toward change than did the Vocational Director group for each of the mean differences that were found to be significant. It may be observed in Table 2 that the differences between the means for these items ranged from one-fourth to two-thirds of a scale point. The largest mean difference was observed for the item "Resist changes in their programs" with the means being 2.79 for Vocational Directors and 2.12 for the Principal group. In words, the Principals mean rating was near the "disagree" point on the scale whereas the mean for the Vocational Directors was near the "neutral" point on the scale. A similar pattern was observed for item 5, "Make changes only when they think it is necessary for survival" where a one-half scale point mean difference was obtained. The Principal group rated this item as being near the agree point (2.23) on the response scale while the Vocational Directors rated them as being nearer to neutral (2.72). A positive item which was the reverse of item 1, i.e. item 8 "Have a positive attitude toward making needed changes",

was also rated in a similar manner giving credence to the ratings given by these groups. The means for this item, which were significantly different (p<.01), were 2.01 (agree) for the Principal group and 2.46 (near the midpoint between agree and neutral) for the Vocational Director group.

Table 3
Comparison of general attitude toward change means for Vocational Directors and Principals

Item	Vocational		Princ	ipals	t	p
	Direc		N.C.	αD		
1 D '	Mean	SD	Mean	SD	4 47	000
1. Resist needed changes in their programs	2.79	.98	2.12	.57	4.47	.000
2. Keep current on the latest innovation in their program areas	2.42	.78	2.14	.54	2.25	.026
3. Want their programs to be up-to-date	1.82	.54	1.68	.48	1.49	.138
4. Seek input from business and industry representatives to determine needed changes in their programs	2.32	.85	2.19	.72	.84	.405
5. Make changes only when they think it necessary for survival	2.72	.99	2.23	.62	3.16	.002
6. Only make changes that are mandated by the Department of Education	2.40	.96	2.22	.71	1.19	.237
7. Rely on administrators to suggest needed changes	3.02	.99	2.58	.77	2.64	.009
8. Have a positive attitude toward making needed changes	2.46	.71	2.01	.43	4.09	.000
9. Have a system in place for continual improvement of their	2.75	.87	2.16	.55	4.37	.000

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10. Are more comfortable with slow, gradual change	3.81	.83	3.47	.64	2.43	.017
Total Scale	2.65	.59	2.28	.44	3.78	.000

The mean ratings given by the Vocational Directors and Principals for the total scale score for the general attitude toward change was observed to be significantly (p <. 01) different. The means for these groups were 2.65 and 2.28 respectively. In general, the Principals in the buildings in which the vocational educators were employed rated the vocational educators more positively on the general attitude toward change than did the Vocational Directors from his/her position in the district office. However, it should be noted that the means for the general attitude scale were on the positive end of the scale for both groups.

As shown in Table 4, significant differences between the means for the Vocational Director and Principal groups were observed for eight of the ten items in the planning for implementation dimension as well as for the total scale score. These mean differences range from two-thirds of a scale point to one-forth of a scale point with the Principal group giving the more positive response for each of the items for which differences were observed. The two items for which there was a mean difference of approximately two-thirds of a scale point were "identify new groups of clients for their programs" (p < 0.01) and "implement new programs without sufficient planning" (p < 0.01). Items for which a mean difference of approximately one-third of a scale point difference was observed included "assume responsibility for the development of plans for changing their programs" (p < 0.01), "rarely

plan ahead for needed changes"(p<. 01), "collect information to determine needs for new programs" (p <. 05), set timetable for implementing new programs or strategies"(p<. 05) and the "total scale score for planning for implementation". The remaining two significant items, "assume responsibility for specific tasks required to implement change"(p <. 05) and "develop plans for implementing new programs or strategies"(p <. 05) had a mean difference for the two administrative groups of approximately one-forth of a scale point.

Table 4
Comparison of means of the perceptions of the behaviors concerning the planning for the implementation of change given to vocational educators by Vocational Directors and Principals

Item		tional ctors	Princi	Principals		p
	Mean	SD	Mean	SD		
1. Collect information to determine needs for new programs	2.18	.81	1.85	.64	2.38	.190
2. Assume responsibility for specific task required to implement change	2.02	.65	1.78	.49	2.17	.033
3. Seek feedback to determine progress	2.18	.83	1.88	.67	2.11	.141
4. Assume responsibility for the development of plans for changing their programs	2.32	.88	1.88	.48	3.30	.001
5. Rarely plan ahead for needed changes	2.25	.92	1.87	.45	2.79	.006
6. Implement new programs	2.48	.89	1.86	.58	4.36	.000

without sufficient planning 7. Identify new groups of clients for their programs	2.55	.78	2.15	.52	3.21	.002
8. Network with colleagues at other schools to learn about new programs	2.11	.68	2.13	.66	21	.835
9. Develop plans for implementing new programs or strategies	2.18	.69	1.95	.54	1.98	.050
10. Set timetable for implementing new programs or strategies	2.45	.83	2.13	.58	2.36	.020
Total planning scale score	2.25	.58	1.93	.44	3.32	.001

The item for which both groups were the most positive was "assume responsibility for specific tasks required to implement change" with the means for the Vocational Director and Principal groups being 2.02 and 1.78 respectively. The Principal group gave positive responses for all items in this scale with the means ranging from 1.78 (just below agree for positive items) to 2.15 (just above agree for positive items). The Vocational Directors rated the items of "identify new groups of clients for their programs" (m=2.55), implement new programs without sufficient Planning" (m=2.48), and "set timetables for implementing new programs or strategies" (m=2.45) near the midpoint between agree and neutral on the response scale thus presenting less than a totally positive perception of vocational educators for these three items.

Both groups expressed a positive perception of the vocational educator's behavior for the two non-significant items, "seek feedback to determine progress" and "network with colleagues at other schools to learn about new programs." The means for these two items for Vocational Directors were 2.18 and 2.11 respectively while the means for the Principal group were 1.88 and 2.13 respectively.

Both the Vocational Directors and the Principals reported that the vocational educators exhibited behaviors that indicate their willingness to implement changes in their programs. The item means, shown Table 5, for the Principal group ranged from 1.84 to 2.19 for the five items representing this scale. These means represent scores that are near the agree (2.00) point on the scale. The Vocational Director group means for these items ranged from 2.16 to 2.52 or just above the agree point on the scale up to the midpoint between agree and neutral. Similar to other scales, the means for the two administrative groups were significantly different for four of the five items at the .01 level of significance. Three of these items, "systematically take action to implement change", "seek information to determine progress in implementing changes", and "assume responsibility for specific tasks required to implement the change" had a mean difference between the two administrative groups of approximately one-third of a scale point. The fourth significant item had a difference between the means of these groups of one-fifth of a scale point. It follows then that the total score mean fell between these two with the mean difference being approximately one-forth of a scale point. The significance level of the difference between the administrative groups for the total score for implementation was .05.

Table 5
Comparison of attitude toward implementing new program or instructional strategies means for `Vocational Directors and Principals

Item	Vocational Directors		Princ	ipals	t	р
	Mean	SD	Mean	SD	·	Р
1. Systematically take action to implement the change	2.32	.72	1.98	.53	2.86	.005
2. Assume responsibility for specific tasks required to implement the change	2.16	.71	1.84	.42	2.96	.004
3. Seek feedback to determine progress	2.52	.83	2.19	.57	2.61	.010
4. Demonstrate acceptance of changes being made	2.39	.76	2.09	.39	2.72	.007
5. Make midcourse corrections in the implementation of the change	2.32	.79	2.14	.51	1.44	.152
Total score for implementation	2.31	.72	2.05	.38	2.39	.019

It is evident from these data that both administrative groups perceive that vocational educators exhibit behaviors that indicate that they do in fact systematically go about making changes in their programs. They accept the necessary task willingly and seek feedback as well as make changes needed to successfully make the desired changes.

It is obvious from the means and standard deviations that some of the ratings given by individual respondents were not positive. However, taken as a group, the vocational educators were perceived to exhibit positive behaviors toward making changes in their

programs. The next section presents the perceptions of these two administrative groups concerning the willingness of vocational educators to maintain changes that are made.

As may be observed in Table 6, there were more similarities than differences between the two administrative group's ratings of the vocational educators' attitude toward the maintenance of changes made in their programs. Significant differences (p<. 05) were observed between the means of the administrative groups for the items "Demonstrates the willingness to sustain the change" and "Promotes the program as changed to potential students." The means of these items were approximately one-fourth of a scale point different. In addition, the means for the groups on the total score was significantly different for the two groups (p<. 01) with the means being approximately one-fourth of a scale point different. In each of the observed differences, the building principals rated the vocational educators in their districts as being more willing to maintain the changes that had been made than did the vocational directors. It is interesting to note that the means of the items for both groups are near the agree point on the scale which would indicate a perception that the vocational educators were interested in maintaining changes that had been made whereas the means for the one negative item, "Demonstrate an interest in returning the program back to its previous structure," is about midway on the scale between agree and neutral. Thus it appears that these vocational educators are perceived to working to maintain changes made while entertaining the idea of changing back to the former structure.

Table 6
Comparison of attitude toward maintenance of change means for Vocational Directors and Principals

Item	Vocational Directors		Princ	ipals	t	р
	Mean	SD	Mean	SD		
1. Demonstrate the willingness to sustain the change	2.13	.57	1.86	.45	2.73	.007
2. Make changes in their behavior to accommodate the change in program	2.12	.59	2.01	.48	2.05	.101
3. Demonstrate an interest in returning the program back to its previous structure	2.39	.71	2.35	.67	.30	.766
4. Work to keep and improve the program in its new form	2.16	.65	1.97	.48	1.74	.085
5. Promote the program as changed to potential students	2.09	.58	1.87	.47	2.20	.030
Total score for maintenance of change	2.25	.55	1.97	.40	3.11	.002

Conclusions

The data indicate that both administrative groups that would be the ones to provide the sponsorship of changes in vocational education programs believe that the vocational educators have a positive attitude toward change and have made substantial progress in implementing changes that have been promoted by the Florida Department of Education. Thus, in contrast to the common wisdom that vocational educators begin every sentence about change in programs with "in 1917" indicating their unwillingness to change, it appears that those in positions of authority in close proximity to these educators believe that they are making changes in their programs in a attempt to keep their programs current and have a positive

attitude toward making and maintaining changes in their programs. More specifically, the closer to the administrator is to the vocational educator in their day to day work, the more positive perception they have. While it would seem that a Director of Vocational Education would work more closely with the vocational educators than would the Principals, this is not the case. The day to day supervision of the instruction delivered by the vocational educators is the responsibility of the Principal while the Vocational Director is a district level position who does not have direct supervisory responsibility.

A close look at the data reveals that, while the Vocational Directors and Principals agree on the extent to which various programs and strategies for instruction have been implemented in their schools, they disagree on many of the items regarding the willingness of vocational educators to plan, implement, and maintain changes in their programs. While the mean scores indicate a positive perception of the vocational educators attitude in these areas, the Principal group consistently rates the vocational educators as having a more positive attitude than does the Vocational Director group. Both of these administrative groups see vocational educators as having a positive attitude toward planning for change implementing change and maintaining programs after changes have been made with the Principal group being more positive than the Vocational Director group. This raises the question of whether vocational educators are more critical of other vocational educators than are non-vocational administrators. It follows then that the

image that the general public has of vocational educators as being out of date and not wanting to change could be a result of this internal criticism.

Given the earlier evidence that vocational educators indicate a willingness to change their programs (Carr, 1984) and the perceptions of administrators that vocational educators have a positive attitude toward planning for change, implementing change and maintaining changes once they have been implemented, the question that seems most apparent is what is the source of the "image problem" (Catri, 1998) that vocational education appears to have. It also raises the issue of what changes vocational educators should be making and who should be determining what these changes should be. If vocational educators are making the changes that are suggested by the state DOE then one should be assured that the programs are keeping up to date. It is suggested that a study be done to answer the question as to whether vocational programs are up to date and whether appropriate research is being conducted to determine what changes need to be made in the programs.

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