#### DOCUMENT RESUME

ED 330 311 IR 014 926

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TITLE Survey of Student's Attitudes toward the IHETS

Delivery System.

PUB DATE Jan 91 NOTE 24p.

PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.

DESCRIPTORS Correlation; \*Delivery Systems; \*Distance Education;

Educational Television; Higher Education; Sex Differences; Student Attitudes; Surveys; Teacher

Student Relationship; Technical Education;

\*Telecommunications

IDENTIFIERS \*Indiana Higher Education Telecommunications System;

Industrial Technology Education

#### ABSTRACT

Questionnaires were mailed to 64 students who had completed one or more regularly scheduled Industrial Technology Education courses via the Indiana Higher Education Telecommunications System (IHETS) to determine their attitudes toward IHETS (T.V.). The IHETS system provides an alternative for delivering distance education classes, providing interaction both between teachers and students and among students. Information was received from 58 (90.6%) respondents on the following topics: (1) perception of IHETS as a viable alternative to traveling to distant sites, small class enrollments, cancelled classes, and limited class offerings; (2) comparison of IHETS with other delivery systems; (3) teacher student relationships; (4) gender differences in perceptions of IHETS courses; (5) the influence of the number of IHETS courses taken on student attitudes; (6) the influence of travelling distance required to get to a traditional face-to-face class; and (7) influence of place of employment on perceptions of IHETS classes. Results indicate that students who have taken IHETS classes are supportive of the system and find it a viable alternative to traditional field based classes. Also, while the comparison between IHETS and other delivery systems is positive, students believe the teacher student relationship could improve. Finally, on many of the items, males and females perceived their IHETS class experiences differently. Of the students who responded to the survey, 96.5% believe that the IHETS delivered classes should be continued. (DB)

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# SURVEY OF STUDENT'S ATTITUDES TOWARD THE IHETS DELIVERY SYSTEM

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January, 1991

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# Survey of Attitudes Toward the Indiana Higher Education Telecommunication System (IHETS) Delivery System

#### Introduction

Vocational Education courses have traditionally been delivered to distance sites by instructors who travel to the sites and deliver face-to-face instructions. This method is not an effective expenditure of faculty time and departmental budgets. While it is necessary to maintain direct contact with students, the Indiana Higher Education Telecommunications System (IHETS) provides an alternative for delivering distance education classes. It is not the purpose of this paper to discuss the advantages and disadvantages of the IHETS delivery system. However, many of these will become apparent through reporting and discussing the data.

The classes meet on a weekly basis. However, because the time is limited on the IHETS Network, i. is necessary to provide other experiences to meet the forty-five contact hours required for a three semester hour course. Therefore, most IHETS classes meet one or more times on campus or at a centrally located site. The IHETS classes provide for interaction between students and the instructor and student and student; and the Saturday classes provide for face-to-face interaction.

#### Problem Statement

It was the purpose of this research to determine the attitudes of students, who have taken iHETS (T.V.) courses, toward that delivery system.

1. Did (T.V.) students perceive the IHETS (T.V.) delivered classes to be a viable alternative to traveling to distant sites, small class enrollments, cancelled classes, and limited class offerings?



- 2. Did participants compare their experiences in InZTS (T.V.) delivered classes favorably with other delivery systems?
- 3. Did participants perceive their relationship with the instructor/institution as being positive?
- 4. Did males perceive their experience(s) in IHETS courses different from females?
- 5. Did the number of IHETS courses the responder has taken, one vs. two or more, affect their perception toward taking IHETS classes?
- 6. Did the distance participants have to travel to get to a traditional (face-to-face class) 0-10 miles vs. 10 or more miles, affect their attitude toward the delivery system?
- 7. Does the place of employment significantly affect participants perception of IHETS (T.V.) taught classes e.g., Ivy Tech <u>vs</u>.

  Secondary, Industry, and others)?

# Method

# <u>Subjects</u>

This is the second year in which the Industrial Technology Education

Department has regularly scheduled classes over IHETS (T.V.). A total of 64

students have completed one or more IHETS classes. The total population (64)

was mailed a questionnaire with a stamped, return addressed envelope. Fiftyeight, 90.62 percent of the questionnaires were returned. However, these
included a second, follow-up mailing. The last page on two of the follow-up
questionnaires was inadvertently omitted. (Table 1, P.3)



Table 1

Frequency Data on Demographic Variables

Variables		N Percent		N Percent
Sex:	Males,	44 (77.2%);	Females,	13 (22.8%)
Courses Taken:	One course,	33 (57.95);	Two or more,	24 (42.1%)
Distance Traveled: (To IHETS)	0-10 miles,	42 (73.6%);	10 or more miles,	15 (26.4%)
Distance Traveled: (To Face-to-Face classes)	0-10 miles,	20 (35.1%)	10 or more miles	35 (63.1%)*
Place of Employment:	Ivy Tech,	28 (49.1%)	Other,	29 (50.9%)

<sup>\*</sup> missing cases, N = 1

# The Ouestionnaire

The questionnaire was a closed form instrument. Respondents on Form I checked an item from a list of suggested responses; on Form II respondents circled a response from SA - strongly agree to SD - strongly disagree. The list of items was designed to answer the questions proposed for this study. The items were given to a group of professors who had experience in research and/or test and measurement. The group of experts answered the following question, "do these items sample a significant aspect of the questions proposed?" The items were refined or replaced and the questionnaire was assembled.

The instrument was given a "pilot test" with students who are on campus. However, these students were the on campus students in the IHETS courses. While they have access to the professor on campus, they have direct exposure to the technology. Then the results of the "pilot test" were discussed with some of the professors who had offered criticism on the items. The questionnaire was again refined. Believing that the expertise of the



professors and the pilot test provided a satisfactory estimate of content validity, the questionnaires were mailed to the 64 students who had taken IHETS courses.

When the data were reduced and analyzed a correlation coefficient was determined for stability over item samples, parallel form. The questionnaire had two Forms I and II. The correlation coefficient between the two forms was .8359. The estimate of internal consistency for Form I using Cronbach's Alpha was .9005, and the estimate of internal consistency using Cronbach's Alpha for Form II was .8410.

A split half method was also used to determine internal consistency for both Forms I and II. The scores on the odd numbered items were correlated with the scores on the even numbered items.

The total number of items for Form I was 16 (odd, N=8; even, N=8). The reliability coefficients between the groups was .9276 using the Spearman-Brown prophecy formula. This method yields lower correlation because of the reduction in size to two tests of half the number of items. The Cronbach Alpha for consistency within groups was .8011 for even items and .8212 for odd items.

The total number of items for Form II was 23 (odd - 11, even - 12). The correlation coefficient between forms was .7186. The Cronbach Alpha for consistency within groups was .7072 for even items and .7467 for odd items.

# **Procedures**

- 1. The questionnaire was prepared.
- 2. A list of names and addresses was assembled of all Industrial Technology Education (ITE) students who have taken IHETS (T.V.) courses.



- 3. A mailing was prepared. A numbering machine was used to number the questionnaire, return envelope, and mailing list. This system assisted us to determine when all responses had been returned. After three weeks, a second mailing was sent to the non-responders. They were also contacted by telephone and encouraged to respond.
- 4. When all questionnaires had been received, the questionnaixes were given to the testing center with instructions on what data will be needed and the way the data should be grouped. Also, the analysis techniques were discussed with a research consultant in the testing center.
- 5. The data printout was discussed with the research consultant in the testing center.
- 6. The data was analyzed and the report was prepared.



Results
Frequency data are grouped and presented in the following tables.

Table 2A\*

Frequency Data on Perception of IHETS as a Viable Alternative

Statement	Agree	Disagree	Undecided	Total N
Enrollment in IHETS courses will increase in the future	44(78.6%)	5(8.8%)	(Stabilize) 7(12.3%)	56**
If you were choosing a pro- gram now, would you choose a program which uses an IHETS delivery system	(A good choice) 45(79.0%)	(A _oor choice) 6(10.5%)	(Average choice) 6(10.5%)	57
Few courses which I took were more successful than the IHETS course(s)	24(42.1%)	19(32.4%)	14(24.6%)	57
I would use the IHETS delivery system to sell the ITE programs	50(87.8%)	3(5.3%)	4(7.0%)	57
To someone interested in a college program I would recommend the ISU/ITE program	(strongly) 41(71.9%) (with rese vation) 12(21.1%)	•	2(3.5%)	57
On the whole students taking IHETS classes are satisfied	50(87.8%)	5(8.8%)	2(3.5%)	57
I feel that the IHETS classes should be continued	55(96,5%)	2(3.6%)	0(0.0%)	57
Generally speaking I believe that IHE'L courses are a good alternative to "traditional field based" courses	50(87.%)	4(7.0%)	3(5.3%)	57

<sup>\*</sup> Form 1 data



<sup>\*\*</sup> Missing Cases 1

Table 2B\*

Frequency Data on Perception of IHETS as a Viable Alternative

Statement	Agree	Disagree	Undecided	Total N
The outcome of my educational goal(s) depends on IHETS courses.	38(70.4%)	11(19.3%)	5(8.8%)	54**
I would encourage everybody to take IHETS courses.	39(69.6%)	6(10.5%)	11(19.3%)	56**
IHETS delivery of classes is one of the most promising instructional technologies in education today.	45(80.4%)	4(7.28)	7(12.3%)	56 <b>**</b>
The advantages of IHETS courses far outweigh the disadvantages.	48(85.7%)	2(3.6%)	6(10.5%)	56**
IHETS courses force me to be efficient in my school work.	36(64.3%)	11(19.3%)	9(15.8%)	56**
IHETS classes serve the needs of a large number of students.	48(85.7%)	2(3.6%)	6(10.5%)	56**
My likes and dislikes for IHETS courses balance one another.	37(66.1%)	11(19.3%)	8(14.0%)	56**
Generally the IHETS delivery system worked well.	44(80.0%)	6(10.5%)	5(8,8%)	56**
IHETS delivery did/does save me time and money.	52(94.5%)	3(5.2%)	0(0.0)	55**

<sup>\*</sup> Form 2 data

<sup>\*\*</sup> Missing cases (N-57)

Table 3A\*

Frequency Data Comparing IHETS Courses with Other Courses

Statemen	Equal ^	Not Equal	Do Not Know	Total N
I feel that IHETS courses provide learning experiences equal to other courses.	44(77.2%)	10(17.5%)	3(5.3%)	57
Evaluation and feedback tech- niques used in IHETS courses are equivalent to other course	41(71.9%)	13(22.8%)	3(5.3%)	57
Interaction between students and IHETS instructors is equal to the interactions in other classes.	28(49.1%)	27(47.3%)	2(3.5%)	57
Interaction(s) between/among student(s) and student(s) in IHETS courses is/are equal to interaction(s) in other courses.	(adequate) 27(47.4%)	(need to improve) 28(50.0%)	1(1.8%)	56**

<sup>\*</sup> Form 1 data

Table 3B

Frequency Data Comparing IHETS Courses with Other Courses

Statement	Agree	Disagree	Undecided	Total N
Methods used in IHETS courses are as effective as those used in other courses.	41(73.2%)	11(19.3%)	4(7.0%)	56**
I "felt" the personal inter- actions of the participants.	28(50.0%)	17(29.8%)	11(19.3%)	56**
IHETS courses motivates students to do excellent work.	39(68.4%)	9(15.8%)	7(12.3%)	55**

<sup>\*</sup> Form 2 data



<sup>\*\*</sup> Missing cases 1

<sup>\*\*</sup> Missing cases (N - 55)

Table 4A

Frequency Data Comparing Instructor/Institutional Student Relations

Statement	Excellent/ Good	Average	Poor	Total N
Compared to other state universities, ISU/ITE department has made a greater effort to deliver quality programs.	43(75.5%)	12(21.1%)	1(1.8%)	56**
In my opinion, relations between the instructors of the IHETS courses and students is	41(71.9%)	13(22.8%)	3(5.3%)	57
Compared to other classes students taking IHETS are	(Better) 12(21.1%)	(Same) 41(71.9%)	(Worse) 4(7.0%)	57
In receiving instructional materials, IHETS student's needs are given consideration.	21(36.8%)	22(38.6%)	9(14.0%)	52 <del>***</del>

<sup>\*</sup> Form 1 data

Table 4B\*

Frequency Data Comparing Instructor/Institutional Student Relations					
Statement	Agree	Disagree	Undecided	Total N	
Participants in IHETS classes were entouraged to participate in discussions.	45(81.8%)	4(7.1%)	6(10.5%)	55**	
The pace of the instructions fit well within the time allocated.	43(78.2%)	3(5.3%)	9(15.8%)	55**	
IHETS instructors did a good job as facilitator as well as an instructor.	42(76.4%)	8(14.1%)	5(8.8%)	55**	

<sup>\*</sup> Form 2 data



<sup>\*\*</sup> Missing cases 1

<sup>\*\*\*</sup> Undecided Cases 5

<sup>\*\*</sup> Missing cases 2 (N - 57)

# Educational Goals

Participants who agreed (N = 38) with the statement "my educational goal(s) depends upon IHETS (T.V.) taught courses" were compared with those participants', who disagreed with the statement (N = 16) in their perception of the following statement "generally speaking, what do you think of the IHETS courses as an alternative delivery system to traditional field-based classes." Participants whose educational goal(s) depends on IHETS courses perceived IHETS as a good alternative (p<.01). A comparison was made of the same two groups perception of the following statement, "If you were now considering a graduate or undergraduate program, would you consider a program which delivers many of the courses by IHETS?". Responders who reported that their educational goals depends on IHETS courses reported that they perceive IHETS courses to be a very good choice (p<.05). The two groups were also compared over all items on the questionnaire and their perceptions were significantly different (p<.01).

#### Females Vs. Males

Females (N = 13) perception of Indiana State University/Industrial

Technology Education Department's commitment to delivery quality programs was significantly different from males (N = 44; p<.05). Also, females attitudes toward encouraging others to take IHETS courses was significantly different from males (p<.01). Females perceived that the IHETS courses forced them to be more efficient in their school work than did the male students (p<.05).

Also, females perception that methods used in IHETS courses are as effective as those used in other classes was significantly different from male's perception (p<.05). Females belief that the IHEIS delivery system is based on tried theories differs significantly from males (p<.05). Overall items on the



questionnaire females attitudes were significantly different from meles (p<.01).

# Number of courses taken

Students who reported that they had taken only one IHETS course (N = 33)were significantly different (p<.01) from students who reported that they had taken two or more IHETS courses (N = 24) in their attitudes toward the statement, "If you were now considering a graduate or undergraduate program, would you consider a program which delivers many of the courses by T.V. (IHETS)?". Also, the two groups varied significantly (p<.05) in their perceptions of whether or not IHETS student's needs were considered in getting instructional materials. Students who have taken two or more courses reported a significant difference (p<.05) in their perception that the outcomes of their educational goals depends upon IHETS courses. The same group perceived the IHETS delivery system as being one of the most promising instructional technologies in education today; they varied from the group who had taken only one course (p<.05). The group which had taken two or more courses also perceived that the advantages of T.V. courses far outweigh the disadvantages; their perception was different from the group which had taken one IHETS course (p<.01). The two groups varied in their perception as to whether or not the delivery system "worked well" (p<.05); the group which had taken two or more courses was more positive. The group which had taken two or more courses belief varied significantly from the group which had taken only one course as to whether or not people were encouraged to participate in class discussions (p<.05). They also perceived that the pace of the session fit within the time allocated signiticantly different from people who had taken only one class (p<.01). Also, the group which had taken two or more classes view of whether



or not the IHETS delivery system saved them time and money was significantly different from the group who had taken only one class (p<.01). The two groups varied in their attitudes as to the effectiveness of the instructor as a facilitator as well as an instructor; the group which had two or more classes was more positive (p<.05). Participants who had taken two or more classes reported that they are more comfortable with the T.V. delivery system (p<.05). Overall items on the questionnaire the two groups varied significantly in their opinions (p<.01).

# Distance travelled to traditional off-campus classes

Attitudes of participants who traveled 0-10 miles to get to traditional off campus classes were compared over all items to attitudes of participants who reported that they had to travel 10 or more miles; no significant difference was found between the two groups.

# Self rating scale

Subjects were asked to rate themselves on a rating scale. The scale was five inches long. The scale was labeled at one end "Not Supportive (I feel strongly unfavorable toward IHETS Classes)" at the other end "Supportive (I feel strongly favorable toward IHETS classes)". Responders were asked to place an "X" on the line at a position between Not Supportive and Supportive of IHETS classes, "where you feel you are at this time". This was the last item on the questionnaire. A five inch scale was used to score the "Self-Rating Scale." If the "X" was in the two inch segment of the scale toward supportive, the response was labeled supportive. If the "X" was in the two inch segment near non-supportive, the response was labeled non-supportive. If the "X" was in the one inch segment in the center, the response was labeled



undecided or neutral. To quantify the results the scale was labeled from non-supportive 1-5 supportive. Seven subjects (12.3 percent) fell into the "non-supportive segment of the scale; forty-six (80.7 percent) fell into the "supportive" segment of the scale, and two subjects (3.5 percent) fell into the "undecided" segment of the scale. There were two (3.5 percent) missing cases.

# Place of employments

Ivy Tech stidents' (N = 28) attitudes were significantly different from all others (N = 29) when asked, "If you were now considering a graduate or undergraduate program, would you consider a program which delivers many of the courses by T.V."? (p<.05). They considered programs delivered by IHETS a good choice. Ivy Tech students also varied significantly from others in their perception that the IHETS delivery of classes is one of the most promising technologies in education today (p<.05). Ivy Tech participants perceived that the IHETS delivery of instruction worked well; their attitudes varied significantly from all other participant's attitudes (p<.05). Over all items on the questionnaire, Ivy Tech responders varied significantly in their opinions from all other responders (p<.01).

#### Discussion

It was the purpose of this research to determine the attitudes of students, who have taken Indiana Higher Education Telecommunication System (IHETS) courses, toward that delivery system. The purpose was accomplished through a search for answers to a group of propsed questions. A discussion of the results of the study as it relates to each question follows.



#### Ouestion Number 1

Did IHETS students perceive the IHETS (T.V.) delivered classes to be a viable alternative to traveling to distant sites, small class enrollments, cancelled classes, and limited offerings?

The responses indicate that IHETS' students (N - 50, 87.8%) perceived the IHETS courses to be a viable alternative to "traditional field based" courses (Table 2A, p.6). Thirty-six (63.2%) of the students choose a "very good" alternative; fourteen (24.6%) choose a "good" alternative; three (5.3%) choose "average", and four (7.0%) believed that IHETS courses are a poor alternative to "traditional field based" courses. Thirty-eight (70.4%) reported that accomplishing their educational goals depends on the IHETS delivery system. Fifty-five (96.5%) of the students believe that the IHETS classes should be continued. Participants were also asked to rate themselves either toward supportive or non-supportive on a Self Rating Scale. Forty-six (80.7%) fell into the supportive segment of the scale; seven subjects (12.3%) fell into the non-supportive segment of the scale, and two subjects (3.5%) were undecided. The total frequency data presented in Tables 2A and 2B (p. 6 and p. 7) are generally supportive.

# Conclusion Number 1:

The data supports a conclusion that generally students who have taken IHETS (T.V.) delivered courses are supportive of the delivery system, and they view the IHETS delivered classes to be a viable alternative to traveling to distant sites (traditional field based courses), small class enrollments, cancelled classes, and limited class offerings.



#### Ouestion Number 2:

Did participants compare their experience in IHETS (T.V.) delivered classes favorably with other delivery systems?

Generally the comparison between the IHETS delivery and other delivery systems was positive (Tables 3A, p. 8 and 3B, p. 8). A majority of students (N = 44, 77.2%) feel that IHETS courses provide learning experiences, and feedback (N = 41, 71.9%) equal to other courses. Also, participants reported that the methods used in IHETS courses are as effective as those used in other courses. Eighty-one percent (N = 45, 81.8%) reported that participants in IHETS classes were encouraged to participate in discussions. However, only twenty-eight responders (49.1%) perceived interaction between students and instructors to be equal to other classes; twenty-seven (47.3%) believe that interaction are not equal. The perceptions toward student-student interactions was similar, twenty-seven (47.4%) believed interaction are adequate, and twenty-eight (50.0%) believe interaction needs to improve. Items designed to answer this question elicited several undecided responses. Conclusion Number 2:

The comparison between the IHETS delivery system and other delivery systems is generally positive. However, many students believe that the opportunity for interactions between instructor-student and student-student needs to improve. A large majority (81.8%) reported that they are encouraged to participate in class discussion. However, a much lower number of the participants (approximately 50.0%) believe that viable interactions are taking place.



# Recommendation Number 1:

The faculty responsible for designing IHETS courses should discuss, determine, and implement strategies to improve interactions in the IHETS classes. Also, a model should be designed to evaluate whether or not a functional relationship exists between the strategy selected and the accomplishment of the course objectives.

#### <u>Ouestions Number 3:</u>

Did participants perceive their relationship with the instructor/ institution as being positive?

Generally, the data supports that a healthy relationship exists between the students and the instructor/institution. A majority of the responders (N = 43; 75.5%) believe that Indiana State University/Industrial Technology Education Department (ISU/ITE) has made a greater effort to deliver quality programs than have other State Universities and twelve (21.1%) believe ISU/ITE has made an average effort. Forty-one students (71.9%) reported that relations between the instructors of IHETS courses and students are excellent; thirteen (22.8%) reported that relations are average, and three (5.3%) were undecided. Participants believe that IHETS instructors did a good job as a facilitator of instructions (N = 42; 76.4%); eight (14.1%) perceived that they were average facilitators, and nine (14.0%) were undecided. Twelve responders (21.1%) believe that compared to other classes IHETS students are treated better; forty-one (71.9%) believe that they are treated the same, and four (7.0%) were undecided. Forty-three (75.4%) responders believe that when they need instructional materials their needs are given consideration equal to or better than other students; nine (14.0%) believe that they get "poor" consideration. Tables 4A and 4B, p. 9).



# Conclusion Number 3:

Students perceve their relationship with the instructor/institution as being positive. The majority of the responders believe that they get average or above consideration when they have interaction or request materials from the instructor/institution.

# **Question Number 4:**

Did males perceive their experience in IHETS courses different from females?

# Null Hypothesis Number 1:

There exists no significant difference between males and females in their perception of their experiences in IHETS classes.

# Conclusions Number 4:

Over all items on the questionnaire, males and females varied significantly (p<.01). Also, the two groups varied significantly in their perceptions of ISU/ITE departments commitment to deliver quality programs (p<.05); attitudes toward encouraging others to take IHETS courses (p<.01); IHETS courses forced them to be more efficient in their school work; methods used in IHETS courses are as effective as those used in other courses (p<.05), and a belief that the IHETS delivery system is based on tried theories (p<.01).

Therefore, the null hypothesis is rejected. The alternate hypothesis that males and females perceive their experiences in IHETS classes different is accepted.



# Ouestion Number 5

Did the number of IHETS courses the responder has taken, one <u>vs</u>. two or more, affect their attitudes toward taking IHETS classes?

# Null Hypothesis Number 2:

There exists no significant difference between attitudes toward taking IHETS courses of students who have taken one IHETS course and students who have taken two or more IHETS courses.

# Conclusion Number 5:

Overall items on the questionnaire, students who had taken one course and students who had taken two or more courses attitudes varied significantly (p<.01). The two groups also varied significantly in their attitudes toward whether or not they would now consider a program which delivers many of the courses over IHETS (p<.01); whether or not IHETS students' needs were considered in getting instructional materials (p<.05); that the outcomes of their educational goals depends upon the IHETS delivery system (p<.05); the IHETS delivery system is one of the most promising instructional technologies in education today (p<.05); the advantages of IHETS courses far outweigh the disadvantages (p<.01); whether or not the IHETS delivery system "worked well" (p<.05); whether or not people were encouraged to participate in class discussion (p<.05); the pace of the sessions fit within the time allocated (p<.01); whether or not the IHETS delivery system saved them time and money (p<.01); the effectiveness of the instructor as a facilitator of instruction (p<.05), and whether or not they felt comfortable in IHETS classes (p<.05).

Therefore, the null hypothesis is rejected. The alternate hypothesis that the number of IHETS courses taken, one  $\underline{vs}$  two or more, does affect student's attitudes toward taking IHETS classes.



# Ouestion Number 6:

Did the distance, 0-10 miles vs. 10 or more miles, participants had to travel to get to traditional (face-to-face) classes affect their attitudes toward the IHETS delivery system?

#### Null Hypothesis Number 3:

There exists no significant difference between the attitudes of students, toward the IHETS delivery system, who travel 0-10 miles to get a traditional off-campus class (face-to-face) and students who travel 10 or more miles.

Conclusion Number 6:

Attitudes of participants who traveled 0-10 miles to get to traditional off campus classes were compared over all items on the questionnaire to the attitudes of participants who reported that they traveled 10 or more miles. No significant difference was found between the two groups.

Therefore, the null hypothesis is accepted.

# Question Number 7:

Does the student's place of employment, Ivy Tech vs. all others, affect participants perception of IHETS classes?

# Null Hypothesis Number 4:

There exists no significant difference between Ivy Tech students' perception of IHETS classes and other student's perception of IHETS classes.

Conclusion Number 7:

Overall items on the questionnaire Ivy Tech students varied significantly in their opinions from other responders (p<.01). The two groups also varied significantly on whether or not they would now choose a program which delivers many of the courses on IHETS (p<.05); the IHETS delivery of classes is one of



of the most promising technologies in education today (p<.05), and the IHETS system works well (p<.05).

The null hypothesis is rejected. The alternate hypothesis that Ivy Tech students perceive the IHETS delivery system significantly different from other students is accepted.

# Summary

At the time this research began, 64 students had completed one or more IHETS courses. Forty-eight (90.62%) responded to a questionnaire which was designed to determine their attitude toward the IHETS delivery system.

The students generally perceive the IHETS classes as a positive alternative delivery system. A large majority of the students reported that IHETS classes are a viable alternative to traditional field-based classes. Ninety-six percent of the students surveyed believe that IHETS classes should be continued. Many reported that accomplishing their educational goals depends on the IHETS delivery system.

Participants compared their experiences in IHETS classes very favorably with other classes. Most reported that the IHETS delivery system provides learning experiences and feedback equal to other classes. Eighty-two percent of the responders reported that they were encouraged to participate in class discussion; however, nearly one-half of the students believe that interaction between the instructor and student and between student and student is not equal to other classes and need to be improved.

Generally the students report that a positive relationship exists between IHETS students and instructors/institution. They believe that Indiana State University/Industrial Technology Education Department makes an extra effort to



provide students quality programs over the IHETS Systems. Students also reported that they received excellent instruction and that the IHETS instructors did a good job as a facilitator of instructors as well as an instructor. Responders believe that they are treated as well or better by IHETS instructors as they are in any other classes.

On many of the items, males and females perceived their IHETS class experiences significantly different. Also, participants who had taken one course perceived their IHETS classes significantly different from participants who had taken two or more courses and lvy Tech students perceived their IHETS experiences significantly different from secondary education, industry and other participants. The data does not support a conclusion that the distance, 0-10 miles vs. 10 or more miles, participants had to travel to a field based class made a significant difference.

Of those students who responded to the survey, 96.5 percent believe that the IHETS delivered classes should be continued.

