# Effectiveness of Rural Iowa Middle and High School Programs for Students at Risk 

by


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# Examination of Effectiveness of Rural Iowa Middle/Junior High and High School Programs for Students at Risk 

## FINAL REPORT

## TABLE OF CONTENTS

page
Summary ..... i
Introduction ..... 1
Study 1: Assessment of the current status and effectiveness ..... 2 of secondary school programs in rural Iowa for students at risk
Objectives ..... 2
Procedures ..... 2
Results ..... 3
Conclusions ..... 12
Study 2: Assessment of secondary school principals' and ..... 15 teachers' readiness for meeting the needs of students at risk
Objectives ..... 15
Procedures ..... 16
Results ..... 17
Conclusion ..... 29
Study 3: Case study analysis of selected rural Iowa secondary ..... 31 school programs for students at risk
Objectives ..... 31
Progress ..... 31
Future Efforts ..... 31
Continued Research ..... 31
Revised Questionnaire ..... 32
Collaboration ..... 31
Dissemination ..... 32
Acknowledgements ..... 33

## Summary

## Part II - Summary of Completed Research Study (FOR PUBLIC USE)

The overarching purpose of this research project is to improve the effectiveness and cost efficiency of secondary school efforts in rural Iowa for students at risk of school failure or at risk of limiting their life options due to undereducation. The three studies of the first year of the project have distinct but interrelated purposes: (1) to determine the current status of rural Iowa programs for students at risk; (2) to assess the readiness of educators for meeting the needs of all students; and (3) to examine four selected programs to determine which components of those programs are most productive, appropriate and cost effective.

Study 1 resulted in a data base that describes the current status of rural Iowa programs for secondary school students at risk including district definitions of at-risk, number of students at risk, local district implementation of the nine components of the lowa standard for programs for at-risk students, support, problems and effectiveness of programs. Study 2 revealed the readiness of rural Iowa educators for meeting the needs of students at risk including the extent of awareness of problems associated with failure to educate all children, individuals' personal senses of obligation and responsibility to educate all children, and educators' knowledge of how to assist students at risk. The outcome of Study 3 (to be completed in year two) will be detailed descriptions of four effective secondary school programs for students at risk.

The results of Study 1, from data provided by officials from 285 of the 502 rural secondary schools selected to participate, reveal that 10.4 percent of rural students have been identified at risk of school failure or at risk of limited life options due to undereducation; as many as twenty-five percent more students in some districts may be at risk but have not been formerly identified. It appears local school districts, in general, are making progress toward meeting the state standard for offering services to students at risk of school failure, but they need assistance. Most services are very traditional. There is little evidence that creative, innovative interventions or strategies are in widespread use. In fact, after the barrier of limited financial resources, the major barrier to success in meting the needs of students at risk is lack of knowledge of how to met the needs of at-risk students.

Data from 292 of 502 principals and 702 of 1263 teachers selected to participate in Study 2 indicate that educator readiness is not as high as may be necessary to meet with success with all students. There is strong evidence that educators feel inadequately prepared to use effective strategies and approaches with students at risk. They do, however, indicate a willingness to learn more about students at risk, to learn to use strategies and approaches to enhance their effectiveness with students at risk, and to change personal, professional practices to better meet the needs of students at risk. It appears that there is a pressing need to develop and test interventions that will help local educators effectively work with students at risk.

The results of Study 1 will be used by the Department of Education and AEA's to determine what needs to be done in local schools to help officials meet the state standard for offering services to students at risk. The questionnaire from Study 2 has been revised and will be available to local schools to use to assess the readiness of all their staff to meet the needs of students at risk. This research project provided the direction for future study that resulted in the award of a FINE grant to continue the efforts during the 1992-93 school year. The continued project will have two foci: (1) completion of Study 3 (case studies of effective programs) and (2) assessment of effectiveness of interventions designed to increase the readiness of educators to meet the needs of students at risk. After effective staff development has been determined and components of effective programs for students at risk have been outlined, the focus of the 1993-94 year of this research program will be to (1) train teachers and principals to deliver the staff development to teachers in their districts and (2) provide local districts with assistance they need to develop and implement school programs and practices that will meet the needs of all students.

# Examination of Effectiveness of Rural Iowa Middle/Junior High and High School Programs for Students At Risk <br> FINAL REPORT 

## Introduction

The overarching purpose of this project was to conduct research to improve the effectiveness and cost efficiency of secondary school programs in rural Iowa for students at risk of school failure or at risk of limiting their life options due to undereducation. Rural middle/junior high and high school programs were chosen for this study for two reasons: (1) resources prevented the study of all schools in the state; and (2) most research conducted about schooling for students at risk focuses on urban schools or early elementary schooling. The three studies in the first year of the project have distinct but interrelated purposes: (1) to determine the current status of rural Iowa programs for students at risk including what is being done and the effectiveness of current efforts; (2) to assess the readiness of principals and teachers for meeting the needs of students who exhibit at-risk behaviors or who live in circumstances that increase their risks of school failure; and (3) to examine four selected programs, in detail, to determine which components of those programs are most productive, appropriate and cost effective. There are four important objectives for the overall research project: (1) to develop profiles of students in at-risk programs in rural Iowa, profiles of the staff involved with the programs, and profiles of the programs; (2) to report the findings to Iowa educators, the Iowa public, and other policymakers, practitioners, and researchers; (3) to recommend productive, appropriate and cost effective practices for officials in local districts to consider adopting, developing, and implementing; and (4) to develop hypotheses and make recommendations for further research on programs for rural Iowa students at risk of school failure.

Survey research design utilizing questionnaires was employed in Studies 1 and 2. Observational research design, utilizing the case study method, guides Study 3. Study 1 resulted in a data base that describes the current status of rural Iowa programs for secondary school students at risk including district definitions of at-risk, number of students at risk, local district implementation of the nine components of the Iowa standard for programs for at-risk students, support, problems and effectiveness of programs. Study 2 revealed the readiness of rural Iowa educators for meeting the needs of students at risk including the extent of awareness of problems associated with failure to educate all children, educators' personal sense of obligation and responsibility to educate all children, and educators'
knowledge of how to assist students at risk. The outcome of Study 3, to be completed in year two of the research project, will be detailed descriptions of four effective secondary school programs for students at risk. These case studies will result not only in identification of effective components of programs but also determination of why those components promote effectiveness.

The final report which follows describes each of the three studies separately. Results of Studies 1 and 2 are presented followed by a progress report for Study 3. Future directions for research in year two of the project as well as future activities resulting from Studies 1 and 2 are discussed in an additional section. The final budget report is presented in the last section of this report.

## Study 1: Assessment of the current status and effectiveness of secondary school programs in rural Iowa for students at risk

## Objectives

(a) identify local school district definitions of "at-risk" students;
(b) evaluate the extent of the problem by determining the numbers of dropouts, potential dropouts, and/or at-risk students in secondary schools in rural Iowa;
(c) assess the extent of local school implementation of the nine components required by the Iowa standards for programs for at-risk students: identification, school-based support services, counseling, instructional support, community support, parent involvement, all staff involvement/staff inservice, integrated/open access/nondiscrimination, and monitoring systems;
(d) determine degree of community support for the local school program for students at risk;
(e) determine degree of parental support for the local school program for students at risk;
(f) determine the degree of school staff support for the program for students at risk;
(g) determine the sources and extent of financial support for the local school programs for students at risk;
(h) record perceived concerns/problems associated with programs for students at risk;
(i) assess the degree of success of the local district program; and
(j) develop a taxonomic classification of rural Iowa programs for students at risk.

## Procedures

## 1. Method

A survey was developed, in cooperation with Ray Morley, Department of Education At-Risk Consultant, designed to meet the above objectives (survey available on request). Principals and/or at-risk coordinators from each
school were asked to complete the survey describing the local school program. Data from the surveys were analyzed as frequencies and percentages for the schools, as a group, for whom completed surveys were received.

## 2. Sample

The advisory panel for the research program (comprised of teachers, administrators, AEA consultants and DE consultant) assisted with determination of which schools in the state could be considered rural. The schools from all Iowa districts with fewer than 2500 students K-12, except for two districts that were determined by the advisory panel to be suburban rather than rural, were included in the population to be studied. Surveys were sent to the principals of the 506 schools in that population. Responses were received from officials of 285 schools. Although not complete at this time, data analysis will include disaggregation of data by school district size, economic resources of the community, adult education level in the community, socioeconomic status of the student population, and years of experience of the teachers in the school.

## Results

A total of 81,740 students attend the schools from which data were received. Officials in those schools have formally identified 3,496 students as being at risk of dropping out of school and 5,009 as being at risk of limited life options due to undereducation, a total of 10.4 percent of their student populations. When asked to estimate the numbers of students who may be at risk but have not been formally identified, school officials responded that an additional 10 to 25 percent may be at risk.

Table 1 presents information about the definition and identification of students at risk. Although schools use any of nineteen definitions of students at risk, the most common definitions include high rate of absenteeism, poor grades, behavior problems, low achievement, and special home circumstances such as foster care or homelessness. All respondents indicated their at-risk plans/programs included methods for identification of students. The most common method of identification is referral by teachers, family, counselors, or self. The next most frequently used methods of identification of students included testing and analysis of data such as achievement, income level, attendance, suspensions, grades, homelessness, or extracurricular activity participation.

School-based support services, presented in Table 2, include where students receive assistance, who provides assistance, how instruction is delivered, and what programs, policies or procedures

TABLE 1. Definition and Identification of Students at Risk

|  |  |  |
| :--- | ---: | ---: |
| CRITERIA USED TO DEFINE | $n$ | $\%^{*}$ |
| Poor grades | 279 | 98 |
| High rate of absenteeism | 273 | 96 |
| Behavior problems | 264 | 93 |
| Special home circumstances (foster, homeless) | 232 | 81 |
| Low achievers | 208 | 73 |
| Retention | 182 | 64 |
| Parent is substance abuser | 179 | 63 |
| Low family socioeconomic status | 182 | 64 |
| Lack of identification with school | 175 | 58 |
| Parent is child or spouse abuser | 172 | 60 |
| Functioning below chronological age | 164 | 58 |
| Limited or no extracurricular participation | 132 | 46 |
| Parent is chronically mentally ill | 117 | 41 |
| Parent is incarcerated | 115 | 40 |
| parent is illiterate | 85 | 30 |
| Born with birth defect | 79 | 28 |
| Parents not completed high school | 78 | 27 |
| Parent under age at child's birth | 73 | 26 |
| Other | 42 | 15 |
|  |  |  |
| METHODS/PROCEDURES USED TO DEFINE |  |  |
| Referrals by: |  |  |
| teachers | 283 | 99 |
| counselors | 274 | 96 |
| family | 238 | 84 |
| self | 217 | 76 |
| support staff | 188 | 66 |
| peers | 160 | 56 |
| outside agencies | 141 | 49 |
| employer | 48 | 17 |
| Testing | 202 | 71 |
| Centralized data analysis | 189 | 66 |
| Student assistant team | 779 | 63 |
| Career assessment | 27 |  |
| Student response checklist | 27 | 25 |
| Student learning styles | 17 | 17 |
| Other |  | 9 |
|  |  | 6 |
|  |  |  |

$\mathrm{n}=$ number of schools checking this response

* \% of 285 schools from whom questionnaires were received checking this response
have been altered to meet the needs of students at risk. Students at risk primarily receive assistance in regular classrooms at the school site, in segregated classrooms or in a combination of both. A small percentage of the schools offer services to students in alternative settings. Regular education teachers, counselors, special education teachers and AEA personnel are the primary assistance providers for students at risk followed by peers, building support staff, and service agency personnel. Only $10 \%$ of the schools involved in the study have full time teachers
or coordinators who work primarily with students at risk. Most instruction is delivered in regular classes or in regular classes with tutorial support. Only 21 percent of the schools offer self-paced, individual programs of study. Thirty-five percent of the schools ( 99 schools) have made no alterations in their policies, programs, or procedures to meet the needs of students at risk. Fifty-six schools have altered attendance policies, thirteen have changed length of terms, seventy-five have altered the length or time of the school day, sixty-five have changed how they determine credit, and twenty-four have altered graduation requirements.

Table 2. School-based Support Services for Students at Risk

| LOCATION OF SERVICES | n | \%* |
| :---: | :---: | :---: |
| In both regular and segregated classroom | 219 | 77 |
| In regular classroom | 206 | 72 |
| In segregated special class | 153 | 54 |
| Outside agency | 111 | 39 |
| Outside this building | 60 | 21 |
| In another school district | 45 | 16 |
| At local community college | 38 | 13 |
| Other | 28 | 10 |
| SERVICE PROVIDERS |  |  |
| Counselors | 271 | 95 |
| Regular classroom teachers | 264 | 93 |
| Special education teachers | 251 | 88 |
| AEA personnel | 241 | 85 |
| All teachers | 224 | 79 |
| Peers | 124 | 44 |
| Building support staff | 120 | 42 |
| Service agency personnel | 102 | 36 |
| Volunteers | 40 | 14 |
| Full time district coordinator | 31 | 11 |
| Full time at risk teachers | 28 | 9 |
| Full time building coordinator | 26 | 9 |
| Other | 32 | 11 |
| METHOD OF INSTRUCTION DELIVERY |  |  |
| Regular classes with tutor | 180 | 63 |
| Regular classes | 172 | 61 |
| Self-paced individual program of study | 61 | 21 |
| Other | 28 | 10 |
| ALTERED POLICIES AND PROCEDURES |  |  |
| None | 99 | 35 |
| length of school day | 75 | 26 |
| determination of credit | 65 | 23 |
| attendance | 56 | 20 |
| graduation requirement | 24 | 8 |
| length of terms | 13 | 5 |
| other | 62 | 22 |

$\mathrm{n}=$ number of schools checking this response

* \% of 285 schools from whom responses were received checking this response

As presented in Table 3, eighty-six percent of the 285 schools offer counseling programs for their students at risk. 154 schools offer career education, 118 work skills training, and 135 assistance with personal/social development. Only 181 schools provide special academic or instructional support programs for students at risk.

TABLE 3. Educational Programs

| PROGRAMS PROVIDED | n | $\%^{*}$ |
| :--- | ---: | ---: |
| Counseling | 244 | 86 |
| Academic | 181 | 64 |
| Career education | 154 | 54 |
| Personal/social | 135 | 48 |
| Work skills | 118 | 42 |
| Other | 21 | 7 |

$\mathrm{n}=$ number of schools checking this response

* \% of 285 schools from whom questionnaires were received checking this response

Table 4 presents data about parent involvement in programs for students at risk. Schools use several strategies to involve parents with the most frequently used strategies being parent-teacher conferences, telephone calls, letters sent home, and staffings to place students in the program. About half of the schools use individual parent meetings with staff of at-risk programs and counseling sessions along with the student. Staff in one third of the schools conduct home visitations. Only 28 schools offer parents special instructional sessions about how to help students at home, and only 21 schools offer parent support groups. Parents are contacted weekly in 72 schools, bi-weekly in 61 , monthly in 93 , and every nine weeks in 97 schools. Parents are contacted once a semester only in 13 schools and at the end of the year only in 4 schools. Only about 25 percent of the parents in most schools take advantage of the opportunities provided them for involvement in their children's education.

TABLE 4. Parent Involvement

|  |  |  |
| :--- | ---: | ---: |
| PARENT INVOLVEMENT | n | $\%$ |
| Parent/teacher conferences about programs | 266 | 93 |
| Telephone calls | 249 | 87 |
| Letters sent home | 250 | 88 |
| Staffings to place students in program | 201 | 71 |
| Counseling sessions along with the student | 155 | 54 |
| Individual parent meetings | 152 | 53 |
| Home visitations by staff | 99 | 35 |
| Attending sessions about helping students at home | 28 | 10 |
| Parent support groups | 21 | 7 |
| Other | 13 | 5 |

NUMBER OF PARENTS WHO ARE INVOLVED

| None | 14 | 5 |
| :--- | ---: | ---: |
| $25 \%$ | 117 | 41 |
| $50 \%$ | 74 | 26 |
| $75 \%$ | 46 | 16 |
| All | 8 | 3 |
|  |  |  |
| FREQUENCY OF PARENT CONTACT |  |  |
| Every nine weeks | 97 | 34 |
| Monthly | 93 | 33 |
| Weekly | 72 | 25 |
| Bi-weekly | 61 | 21 |
| Once a semester only | 13 | 5 |
| End of year only | 4 | 1 |
| Other | 112 | 37 |

$\mathrm{n}=$ number of schools checking this response

* \% of 285 schools from whom responses were received checking this response

Table 5 presents information about support for programs for students at risk. 227 schools have offered inservice education about students at risk to their staffs. The inservice is delivered primarily by the local school district or the AEA. The inservice was rated effective by only 66 percent of the schools. Support for programs for students at risk appears to be relatively strong from the district, the administrators and the regular classroom teachers. This support is provided in numerous ways. Teachers, responding to open -ended questions, state they would feel even stronger support if their classes were smaller and they had more time to devote individual attention to students at risk.

TABLE 5. Support for Programs

|  |  |  |
| :--- | ---: | ---: |
| DISTRICT ASSISTANCE FOR TEACHERS | n | $\%^{*}$ |
| Staff development | 227 | 80 |
| Active encouragement from administrators | 186 | 65 |
| Student assistance team | 181 | 64 |
| Release time to attend conferences | 165 | 58 |
| Classroom resources | 89 | 31 |
| Time to plan and interact with other teachers | 75 | 26 |
| Time to conduct parent involvement activities | 54 | 19 |
| Time to interact with staff from other agencies | 44 | 15 |
| Other | 9 | 3 |
|  |  |  |
| ADMINISTRATIVE SUPPORT FOR PROFESSIONAL | STAFF |  |
| Assistance with problem situation | 231 | 81 |
| Encouragement to try new strategies | 212 | 74 |
| Communication with other program staff | 156 | 55 |
| Frequent communication | 153 | 54 |
| Personal involvement with services to students | 149 | 52 |

Clerical support ..... 93 ..... 33
Protection of programs in lean times ..... 27
Other ..... 11 ..... 4
COLLEAGUE SUPPORT FOR TEACHERS OF STUDENTS AT RISK
Willingness to adjust assignments and courses ..... 200 ..... 70
Verbal support ..... 193 ..... 68
Involving at-risk students in other school programs ..... 180 ..... 63
Student assistance team ..... 59
Group planning/problem solving ..... 124 ..... 44
Support for programs in lean times ..... 29
Teem teaching ..... 24
Other ..... 15 ..... 5
AREA EDUCATION AGENCY SUPPORT
Inservice training ..... 75
Materials ..... 73
Non-school support services ..... 66
List of resource people to contact ..... 64
Research about students at risk ..... 49
Information/assistance with program planning ..... 47
Initiation of collaborative efforts of area agencies ..... 35
Work with /assist local advisory committees ..... 34
Gather local program descriptions/disseminate ..... 23
Development of monitoring systems ..... 19
Conduct research about programs ..... 14
Other ..... 11 ..... 4
AGENCIES OFFERING INSERVICE ..... 191 ..... 67
Local school district ..... 63
Governmental and/or community agencies ..... 10
Colleges and universities ..... 11
Department of Education ..... 10
Other ..... 197
No in-service has been offered ..... 2
AGENCIES ASSISTING SCHOOL PROGRAMS
Substance abuse centers ..... 182 ..... 64
Iowa Department of Human Service ..... 61
JTPA ..... 61
Law enforcement ..... 52
Mental health agencies ..... 42
Service clubs ..... 29
Churches ..... 26
Rehabilitation agencies ..... 25
Iowa Department of Job Service ..... 23
Family planning agencies ..... 20
Iowa Department of Health ..... 16
Business partnerships ..... 12
YMCA/YWCA ..... 3
Other ..... 5
None of the above ..... 5
HELPING STUDENTS GAIN ACCESS TO OUTSIDE AGENCIES
School counseling services ..... 238
Utilizing services to train educators ..... 159 ..... 5684

| Modification of schedule | 117 | 41 |
| :--- | ---: | ---: |
| Development of community service directory | 115 | 40 |
| Joint meetings and training | 71 | 25 |
| Field trips to agencies | 53 | 18 |
| Incorporate community services knowledge into ed. programs | 49 | 17 |
| Formal written plans | 45 | 16 |
| Housing community service personnel | 13 | 5 |
| Student assistance teams | 10 | 4 |
| Other | 11 | 4 |
|  |  |  |
| SUPPORT SERVICES |  |  |
| School psychologist | 246 | 86 |
| Speech-language | 215 | 75 |
| School social worker | 242 | 85 |
| School nurse | 212 | 74 |
| Guidance consultants | 205 | 72 |
| Consultant | 155 | 54 |
| Work experience coordinator | 156 | 55 |
| Substance abuse counselors | 119 | 42 |
| Breakfast programs | 113 | 40 |
| Mentors | 78 | 27 |
| Occupational therapist | 61 | 21 |
| Other |  |  |

$\mathrm{n}=$ number of schools checking this response

* \% of 285 schools from whom questionnaires were received checking this response

As shown in Table 6, programs for students at risk are monitored primarily by the building principal and the staff responsible for the program. The most frequently used monitoring devices are report cards, attendance records, grades and discipline records. Drop out rates and standardized achievement tests are also used by about half the schools, and one-third of the schools use advisory committees. Surveys of stakeholder groups are used by only about 20 percent of the schools. Sixty-nine percent of the schools monitor their programs continuously. About 10 percent reported monitoring programs in each of these ways: beginning/end, end of year only, every nine weeks, every semester, weekly, or monthly.

TABLE 6. Monitoring and Evaluation of At-Risk Program

|  |  |  |
| :--- | ---: | ---: |
| PERSONNEL MONITORING AND EVALUATING PROGRAMS | $\%^{*}$ |  |
|  | n | 81 |
| Building principal | 231 | 76 |
| Teachers/counselors responsible for program | 216 | 83 |
| Superintendent | 77 | 29 |
| All teachers | 47 | 27 |
| Parents | 28 | 16 |
| District office personnel | 34 | 10 |
| Other |  | 12 |
|  |  |  |
| METHOD OF MONITORING AND EVALUATING | 238 | 84 |
| attendance records | 223 | 78 |
| report cards |  |  |


| grades | 212 | 74 |
| :--- | ---: | ---: |
| discipline records | 204 | 72 |
| drop out rates | 172 | 60 |
| standardized achievement test | 156 | 55 |
| advisory committees | 111 | 39 |
| surveys of students | 65 | 23 |
| surveys of all teachers | 62 | 22 |
| surveys of parents | 46 | 16 |
| surveys of community members | 20 | 7 |
| cost effectiveness | 14 | 5 |
| surveys of government and community agencies | 9 | 3 |
| other | 21 | 7 |
|  |  |  |
| MONITORING SCHEDULE | 200 |  |
| Continuously | 32 | 70 |
| Beginning/end (pre-post) | 31 | 11 |
| End of year only | 28 | 11 |
| Every nine weeks | 21 | 10 |
| Every semester | 15 | 7 |
| Weekly | 10 | 5 |
| Monthly | 25 | 4 |
| Other |  | 8 |

$\mathrm{n}=$ number of schools checking this response

* \% of 285 schools from whom questionnaires were received checking this response

Table 7 shows how schools define success for their programs for students at risk and what are considered to be major barriers to success. While most schools use improved behavior as a measure of success, nearly threefourths of the schools also use improved grades, staying in school, improved achievement, and increased attendance. The major barriers, each reported by about half of the schools, to success of at-risk programs in rural schools are lack of financial resources, lack of knowledge of how to meet the needs of at-risk students, lack of support from parents and lack of qualified staff to teach and work with students at risk. Fifty-five schools report lack of support from teachers for programs for students at risk as a barrier, and 42 report apathy among educators in this district as a problem. Less than 10 percent report each of the following to be barriers: lack of support from district administrators, school board, community, Department of Education, and AEA's. Most schools report achievement for students at risk to be somewhat lower than that of students in their regular school programs, although $17 \%$ of the schools report that achievement of students at risk is very similar to students in the regular program.

TABLE 7. Definition of Success and Major Barriers to Success

| CRITERIA DEFINING SUCCESS | n | $\%^{*}$ |
| :--- | :---: | :---: |
| Improved behavior | 245 | 86 |
| Improved grades | 226 | 79 |


| Staying in school | 223 | 78 |
| :--- | ---: | ---: |
| Improved achievement | 216 | 76 |
| Increased attendance | 209 | 73 |
| Other | 37 | 13 |
|  |  |  |
| MAJOR BARRIERS TO SUCCESS | 184 | 65 |
| Lack of financial resources | 139 | 49 |
| Lack of support from parents assistance | 138 | 48 |
| Lack of knowledge | 120 | 42 |
| Lack of qualified staff | 55 | 19 |
| Lack of support from teachers | 42 | 15 |
| Apathy among educators | 27 | 9 |
| Lack of support from department of education | 24 | 8 |
| Lack of support from community | 19 | 7 |
| Lack of support from school board | 17 | 6 |
| Lack of support from district administrators | 15 | 6 |
| Lack of assistance from AEA | 50 | 18 |
| Other |  | 5 |

$\mathrm{n}=$ number of schools checking this response

* \% of 285 schools from whom questionnaires were received checking this response

As shown in Table 8, in general, communities are only "somewhat informed" about the efforts of the district to meet the needs of students at risk and are "somewhat supportive.' It does not appear that communities actively resist any programs, but it does appear that schools could be doing much more to garner community support.

TABLE 8. Community Knowledge and Support

|  |  |  |
| :--- | ---: | ---: |
| DEGREE TO WHICH COMMUNITY IS INFORMED | n | $\%^{*}$ |
| Uninformed | 57 | 20 |
| Somewhat informed | 209 | 73 |
| Highly informed | 14 | 5 |
| COMMUNITY SUPPORT |  |  |
| Nonsupportive | 23 | 8 |
| Somewhat supportive | 194 | 68 |
| Highly supportive | 57 | 20 |
|  |  |  |
| METHOD OF INCREASING COMMUNITY KNOWLEDGE |  |  |
| Newspaper/newsletter/radio | 217 | 73 |
| Parents | 201 | 67 |
| Other | 52 | 17 |

$\mathrm{n}=$ number of schools checking this response

* \% of 285 schools from whom questionnaires were received checking this response

As shown in Table 9, seventy-four percent of the schools use district general fund money to support their programs for students at risk. Ninety-five have special grants, 73 use increased allowable growth, 20 have money from private sources, and 46 use an instructional support levy.

TABLE 9. Resources to support at-risk students

|  |  |  |
| :--- | ---: | ---: |
| RESOURCES | n | $\%^{*}$ |
| District general fund | 209 | 74 |
| Special grant | 95 | 33 |
| Increased allowable growth | 73 | 26 |
| Money from private sources | 20 | 7 |
| Instructional support levy | 4 | 16 |
| Other | 18 | 6 |

$\mathrm{n}=$ number of schools checking this response

* \% of 285 schools from whom questionnaires were received checking this response


## Conclusions

It appears that local schools districts, in general, are making progress toward meeting the state standard for offering services to students at risk of school failure. It also appears they need assistance. Most services are very traditional. There is little evidence that creative, innovative interventions or strategies are in widespread use.

Schools are using multiple indicators to identify students at-risk. The most frequently used indicators -poor grades, high rate of absenteeism, behavior problems -- are easily spotted and are sources of discomfort and stress for school personnel. A second category -- special home circumstances and low achievers -- are also easily spotted, but cause less discomfort. The remaining indicators fall into two categories: 1) ranging from retention to functioning below chronological age and 2) limited or no extra curricular participation to parent underage at student's birth. The first of these two categories includes situations less easily identified which may or may not manifest themselves in academic or behavior problems. The second category contains situations which often require serious detective work to uncover, and their relationship to school problems may appear to be remote. Because their effects are frequently more subtle, these last two categories may not be receiving the attention that they need.

In order to be effective, it is important that services be offered in the regular classroom as often as possible, and in the child's home school whenever this is feasible. If a significant impact is to be made on the lives of these children, all school personnel should be involved in some way with creating the type of school that meets their
needs. There is little indication that all school personnel are involved with meeting the needs of students at risk. Schools surveyed indicate some variety of instruction delivery options and some willingness to alter programs and procedures when appropriate.

Educational services include counseling at most schools, but attention to academic programs, career education and personal/social skills are receiving less attention at this time. Programs in these categories have a long-term payoff for the students as they become part of the work force, and also for schools, as these students begin families of their own. Most schools are employing multiple indicators at this time to define success of their programs; most schools report achievement for students at risk to be somewhat lower than that of students in their regular school programs. Barriers to success of programs include lack of: resources, parental support, knowledge of effective strategies to use with students at risk and qualified staff. Lack of support from the Department of Education, the community, the school board, district administrators, and the AEA were seldom seen as barriers. This may indicate that these groups are seen as having little potential impact on at-risk programs.

Parent involvement indicates heavy reliance on standard practices, such as parent/teacher conferences and staffings to place students in programs. Telephone calls and letters home are used, but contact is not as frequent as needed for many students at risk. Less attention is given to individual meetings, counseling sessions including the student, home visits, and parent support groups. Time may be a factor in not including these labor intensive activities, but, according to existing research about parent involvement and student achievement, the long-term payoff for students and for schools certainly would justify the expense in time.

Given the urgency of the problem of dealing with a rapidly increasing at-risk population, the number of schools offering support through staff development should be 100 percent. Time to plan and interact with other teachers, to promote parent involvement, and to interact with other agencies are the cornerstones of effective at-risk programs. Time to carry out these key activities is available in only $16-26$ percent of the schools surveyed. Active encouragement from administrators was found in only 65 percent of these schools.

Support from Area Education Agencies includes some inservice training and materials. AEA's may need to provide more support to gather and disseminate lists of resource people, research about students at risk, and local program descriptions. More help is needed in program planning, collaboration with area human services agencies, development of monitoring systems, and local advisory committees. Local educators perceive that, in these areas,
little assistance is provided by government or community agencies, colleges and universities, and the Department of Education. Some support is given through substance abuse centers, Iowa Department of Human Services, JTPA, law enforcement agencies and mental health agencies. Less use is made of other state and community resources such as service clubs, churches, Job Service, family planning agencies, Department of Health, business partnerships or YMCA/YWCA.

School counseling services are the primary source of assistance in helping students to gain access to outside agencies. Schedule modification and development of a community service directory have been used by only $40-50 \%$ of the schools to help students gain access to other agencies. These should be considered as front line strategies to help at-risk students access the support they need. Very little movement is shown toward tapping into training and knowledge of outside agencies by joint meetings and training, field trips to agencies, incorporating community services knowledge into educational programs, or housing community service personnel. School-based support is available primarily through school psychologists, speech-language teachers, school social workers, the school nurse, and guidance counselors. The survey did not investigate the amount of coordination between support offered by these professionals and other school personnel.

Programs for students at risk are primarily monitored by principals and teachers responsible for the program with little input from other teachers, parents, or district office personnel. Use of standard measures of academic success such as attendance, report cards, grades, discipline records, drop out rates and standardized achievement tests are the primary methods of monitoring and evaluating the programs. Little use is made of advisory committees or surveys of students, teachers, parents, community members or community agencies.

Many schools in rural Iowa have made a start toward meeting the needs of students at risk. In order to be effective in stemming the tide of school failure and undereducation, schools will need to shift their attention from crisis reaction to long-term and systemic planning. This will require that priority be given to the following:

1) Attention must be given to the identification of students who are at risk of undereducation, but are not displaying behavior that calls attention to this fact.
2) More attention must be given to school-wide systems of participation, communication and planning. All school personnel must have an awareness of the needs of students at risk and the commitment and strategies to meet these needs.
3) Time must by allowed for conferencing and planning among teachers, the professional staff, parents, and staff of outside agencies. The effectiveness of in-school programs is severely handicapped when programs and services are not coordinated.
4) Parent contact and participation must be increased drastically if school efforts are to be effective. The increased contact will effect not only the child who has been identified, but other siblings in the family (who are or will be students in this school).
5) Schools need to understand the importance of building district and community commitment to ongoing school programs. Without this broad base of support and participation, in-school programs will have a limited effect on the quality of the work force and type of student the school will be serving in the future.
6) Resources must be built into the operating budget and must be protected when cuts are made.
7) After the barrier of limited financial resources, the major barrier to success with students at risk is lack of knowledge of how to meet the needs of at-risk students. There is a need to offer opportunities for educators to enhance their knowledge about and skills in using effective strategies to help students at risk meet success.

## Study 2: Assessment of secondary principals' and teachers' readiness for meeting the needs of students at risk

## Objectives

(a) determine the extent of local educators' awareness of the local, state and national statistics regarding undereducation of youth;
(b) determine the extent of local educators' awareness of the current and potential problems associated with failure to educate all children;
(c) assess the degree of educators' personal felt need to act to address the problem;
(d) assess the degree of educators' felt need for the district to act;
(e) assess the degree of educators' felt personal obligation to address the problem;
(f) assess the degree to which educators feel the district should act;
(g) assess the degree of educators' willingness to support changing school practices to address the problem;
(h) assess the degree of educators' willingness to change personal, professional practices to address the problem; and
(i) assess the degree of educators' support for commitment of district resources to address the problem.

## Procedures

1. Methods

A questionnaire was developed, in cooperation with the advisory panel, designed to meet the above objectives. The entire questionnaire was used to assess educators' readiness for meeting the needs of students at risk. Teachers and principals from all the schools asked to participate in Study One were invited to complete the questionnaire. Items on the questionnaire were divided into ten sets categorized as follows:
(a) awareness of the problems associated with students at risk;
(b) support for action by district leadership to deal with the problems of students at risk;
(c) knowledge of strategies and approaches to use to effectively teach students at risk;
(d) feelings about the abilities of all students to meet success;
(e) feelings about personal obligation to act to address the issue of students at risk;
(f) support for allocating district resources to address the issue of students at risk;
(g) support for changing district and school practices to better meet the needs of students;
(h) willingness to change personal, professional practices to better meet the needs of students;
(i) personal teaching efficacy with students at risk; and
(j) effectiveness in handling specific situations that arise with students at risk.

Respondents indicated their agreement with statements in the first nine categories by use of a 5 point Likert scale with 1 indicating strongly disagree, 2 disagree, 3 neutral, 4 agree, and 5 strongly agree. A 5-point Likert scale was also used in the situations with 1 indicating the respondent would be very ineffective in handling the situation, 2 ineffective, 3 neutral, 4 moderately effective, and 5 very effective.

Data were initially analyzed as group means on individual items, groups means on each of the ten sets of items, and overall group mean for readiness. Principals and teachers responses were analyzed separately. The data will be disaggregated to determine if there are differences between groups based on subjects taught, grade levels taught, age, years of teaching or principalship experience, education and gender.

## 2. Sample

All principals of schools invited to participate in Study One were invited to complete a questionnaire. Two hundred ninety-two of the 506 principals invited to participate returned completed questionnaires. One teacher for every 100 students in each school was invited to participate. Teachers were selected at random from the staff roster excluding counselors and special education teachers. Questionnaires were sent to 1263 teachers and were completed and returned by 702 teachers. Preliminary data analysis indicates the sample was representative of rural secondary school teachers in Iowa.

## Results

Preliminary data analysis has been completed. Groups means, listed by teachers and principals on each set of questions, are as follows:

## TEACHERS <br> PRINCIPALS

| (a) | awareness of the problems associated with students at risk | 4.05 | 4.20 |
| :--- | :--- | :---: | :---: |
| (b) | support for action by district leadership | 4.14 | 4.44 |
| (c)knowledge of strategies and approaches to use to <br> effectively teach students at risk | 3.42 | 3.64 |  |
| (d) feelings about the ability of all students to meet success | 3.11 | 3.24 |  |
| (e)feelings about personal obligation to act to address the issue <br> of students at risk | 3.79 | 4.28 |  |
| (f)support for allocating district resources to address the issue <br> of students at risk | 3.56 | 3.81 |  |
| (g)support for changing district and school practices to better <br> meet the needs of students | 3.63 | 3.73 |  |
| (h) | willingness to change personal, professional practices <br> to better meet the needs of students at risk | 4.19 | 4.28 |
| (i) | personal teaching efficacy with students at risk | 3.93 | 4.09 |
| (j) | effectiveness in handling situations | 3.02 | 3.25 |
| (k) | overall readiness score | 3.67 | 3.90 |

Teachers' responses to each question are shown in Tables 10 through 20. At this time, the principals' responses to each question have not been analyzed. It was determined that teacher responses may be most important to consider because teachers are the front line interveners in students' lives.

As shown in Table 10, teachers appear to be generally well aware of the nature of students at risk and the problems associated with school failure and undereducation. Over 67 percent of the teachers who responded agree that "students at risk of school failure or limited life options due to undereducation are a problem in our district."

TABLE 10. Awareness of the Nature of Students at Risk and the Problems Associated with School Failure and Undereducation

| Question | Mean | S.D. | Percent <br> Disagree | Percent <br> Neutral | Percent Agree |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1a. The number of students with characteristics that impede learning has increased over the past five or ten years. | 4.20 | . 94 | 7.8 | 8.4 | 83.8 |
| 1b. Students at risk of school failure or limited life opportunities due to undereducation are a major national problem | 4.26 | . 79 | 4.0 | 8.9 | 87.0 |
| 1c. The long-term cost of students dropping out of school far exceeds the cost of meeting the students' current needs so that they can continue their educations. | 4.35 | . 80 | 3.8 | 8.2 | 87.9 |
| 1d. Students at risk of school failure or limited life opportunities due to undereducation are a problem in our district. | 3.72 | . 96 | 13.7 | 18.6 | 67.5 |
| 1e. I know the life circumstances that put students at risk. | 3.94 | . 75 | 4.9 | 15.7 | 79.5 |
| 1f. I can recognize the life circumstances that put students at risk. | 3.87 | . 76 | 6.2 | 16.8 | 77.0 |
| 1g. I know behaviors students choose that put them at risk. | 4.04 | . 72 | 3.7 | 11.8 | 84.5 |
| 1h. I can recognize student behaviors that put them at risk. | 4.02 | . 69 | 3.6 | 11.5 | 84.9 |
| Summary for the set: | 4.05 | .46 |  |  |  |
| $\mathrm{N}=699$ Rating Scale: $\quad 1=$ Strongly Disagree $2=$ Disagree $3=$ Neutral | $4=\mathrm{Ag}$ | 5 = Str | ly Agree | $\mathrm{A}=\mathrm{Not}$ | licable |

Table 11 reveals that, overall, teachers expect district leaders to address the issue of students at risk.
A strong majority of the teachers agree that educating all students should be a primary focus of the district and that district administrators should lead efforts to educate all students, should lead the development of programs for
students at risk, and should provide teachers with the resources they need to help all students succeed. Most also believe district inservice offerings should be a useful source for learning strategies and approaches for working effectively with students at risk. An area of concern, or at least worthy of further investigation, in this set of items is that only 61.3 percent of the teachers agreed that district administrators should expect all teachers to accept responsibility for educating all students.

TABLE 11. Expectations for District Leadership in Addressing the Issue of Students at Risk

| Question | Mean | S.D. | Percent Disagree | Percent Neutral | Percent Agree |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2a. Educating all students should be a primary focus of the district. | 4.28 | . 95 | 8.8 | 6.6 | 85.7 |
| 2b. District administrators should lead efforts to educate all students. | 4.24 | . 93 | 8.7 | 9.6 | 83.8 |
| 2c. District administrators should lead in the development of programs for students at risk. | 4.05 | . 91 | 6.9 | 15.8 | 77.3 |
| 2d. District administrators should expect all teachers to accept responsibility for educating all students. | 3.60 | 1.23 | 23.2 | 15.5 | 61.3 |
| 2e. District administrators should provide teachers with the resources they need to help all students meet success. | 4.37 | . 79 | 3.8 | 5.9 | 90.4 |
| 2f. District inservice offerings should be a useful source for me to learn strategies and approaches for working effectively with students at risk. | 4.26 | . 79 | 4.0 | 7.2 | 88.9 |
| Summary for the set: | 4.14 | . 69 |  |  |  |

$\mathrm{N}=700$
Rating Scale: $1=$ Strongly Disagree $2=$ Disagree $3=$ Neutral $4=$ Agree $5=$ Strongly Agree NA $=$ Not Applicable

The mean score (3.42) of teachers' responses to items designed to assess their knowledge and skills for working effectively with students at risk, as shown in Table 11, indicates that teachers may not possess the knowledge and skills they need to be successful with all students. Mean responses to individual items reveal areas of concern. Only 25.2 percent agreed that they know how to effectively teach at-risk students, and only 19.2 precent responded that training and preparation prepared them to deal with students who have low motivation or history of behavior problems in school. Few teachers, only 16.2 percent, agree that they know how to help students overcome the life/home circumstances that put them at risk, and only 43.3 percent agreed they were effective in helping students with their problems outside of class or school. Only 54.2 percent agree that they know how to design and
use activities to match the individual interests and abilities of students in their classes, and only about half agree that heterogeneously grouped classes provide the best environment for learning. Most are, however, aware of the effects that parent expectations and parent involvement can have on students school achievement.

TABLE 12. Knowledge and Skills for Working Effectively with Students at Risk

| Question | Mean | S.D. | Percent <br> Disagree | Percent <br> Neutral | Percent Agree |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 3a. I know how effectively to teach at-risk students. | 2.88 | . 87 | 35.3 | 39.6 | 25.2 |
| $3 b$. The training and preparation I received prepared me to deal with students who have low motivation or history of behavior problems in school. | 2.45 | 1.03 | 60.6 | 20.1 | 19.2 |
| 3c. My skills are best suited for students who are academically motivated and generally well-behaved. | 3.86 | . 97 | 14.2 | 20.7 | 65.1 |
| 3d. I hold consistently high standards for all students. | 4.00 | . 85 | 7.8 | 12.5 | 79.7 |
| 3e. I recognize students' strengths and weaknesses, both academic and social. | 4.00 | . 68 | 3.3 | 11.9 | 84.8 |
| 3f. I know how to help students overcome the life/home situations that put them at risk. | 2.60 | . 87 | 50.0 | 33.9 | 16.2 |
| 3 g . I effectively design and use activities to match the individual interests and abilities of the students in my class. | 3.45 | . 89 | 15.4 | 31.5 | 54.2 |
| 3 h . Heterogeneously grouped classes provide the best environment for learning. | 3.38 | 1.06 | 21.1 | 29.4 | 49.9 |
| 3i. I am effective in helping students with their problems outside of class or school. | 3.24 | . 95 | 22.8 | 33.8 | 43.3 |
| 3j. I am aware of the effects that parent expectations and parental involvement can have on students' school achievement. | 4.48 | . 60 | . 8 | 2.6 | 96.6 |
| Summary for the set: | 3.42 | . 42 |  |  |  |
| N = 699 Rating Scale: $\quad 1=$ Strongly Disagree $\quad 2=$ Disagree $\quad 3=$ Neutra | $4=A g$ | $5=S$ | ly Agree | $A=\operatorname{Not} A$ | icable |

Table 13 shows teachers' responses to items designed to reveal beliefs about the ability of all students to achieve, the set of items with scores second lowest of the categories examined. Only 53.6 percent of the teachers responding agree that every student is reachable, 38.5 percent responded that they assume all students are capable of learning at high levels given appropriate conditions, and only 28.2 percent agree that students who are not interested in education and who continually misbehave should be kept in school so that trained teachers can help them
improve. While 90.5 percent of the respondents agree they feel positive about the students they teach, 66.7 percent indicate there are students in their classes they feel should not be in school. The mean score of 3.11 is lower than would be expected for teachers to be most successful.

TABLE 13. Beliefs about Abilities of All Students to Achieve

| Question | Mean | S.D. | Percent <br> Disagree | Percent <br> Neutral | Percent <br> Agree |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 4a. Every student is reachable. | 3.32 | 1.21 | 32.5 | 13.9 | 53.6 |
| 4b. I assume all students are capable of learning at high levels <br> given appropriate conditions. | 3.02 | 1.11 | 40.6 | 21.0 | 38.5 |
| 4c. Students who are not interested in education and who <br> continually misbehave should be kept in school so that <br> trained teachers can help them improve. | 2.86 | 1.02 | 38.6 | 33.2 | 28.2 |
| 4d. I feel positive about the students I am assigned to teach. | 4.27 | .71 | 2.3 | 7.2 | 90.5 |
| 4e. When it comes right down to it, a teacher can't do much <br> because a student's motivation and performance depends <br> primarily on his/her home situation. | 3.69 | .91 | 12.1 | 18.4 | 69.6 |
| 4f.Teachers can help most students overcome the home life <br> circumstances that put them at risk. | 2.93 | .92 | 34.1 | 36.2 | 29.7 |
| 4g. I am able to control and even change my false beliefs, <br> assumptions and stereotypes about students. | 3.86 | .68 | 3.7 | 19.6 | 76.6 |
| 4h. There are students in my classes whom I feel should not be |  |  |  |  |  |
| in school. | 3.67 | 1.19 | 21.2 | 12.1 | 66.7 |
| Summary for the set: |  |  |  |  |  |

$\mathrm{N}=698$
Rating Scale: $1=$ Strongly Disagree $2=$ Disagree $3=$ Neutral $4=$ Agree $5=$ Strongly Agree NA $=$ Not Applicable

The responses to items about personal obligation to act to address the needs of all students, shown in
Table 14, reveal some concerns. While 85.5 percent of the respondents indicated they can be counted on to help students achieve, even if it inconveniences them, only 75 percent agree they need to do more to address the needs of students at risk, 73.7 percent agree it is their obligation to make sure every one of their students achieves, and only 78.1 percent agree that it is part of their responsibility to keep students from dropping out of school. Fortunately, only 6 to 14 percent of the teachers who responded disagree with those statements. That significant numbers of teachers feel neutral about these issues may be cause for investigation of reasons; additional investigation may also be warranted to determine why only 46.1 percent of respondents agree that they feel they have let students down
when students fail to achieve at high levels in their classes. The mean score for this set of items (3.79) may also be lower than desired for teachers to meet with the most success.

TABLE 14. Personal Obligation to Act to Address the Needs of All Students

| Question | Mean | S.D. | Percent <br> Disagree | Percent Neutral | Percent Agree |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 5a. It is my obligation to make sure every one of my students achieves. | 3.85 | . 99 | 13.1 | 13.2 | 73.7 |
| 5b. I need to do more to address the needs of students at risk. | 3.83 | . 83 | 8.4 | 16.5 | 75.0 |
| 5c. It is part of my responsibility to keep students from dropping out of school. | 3.90 | . 83 | 7.2 | 14.6 | 78.1 |
| 5d. When my students fail to achieve at high levels in my class, I feel that I have let them down. | 3.23 | 1.05 | 29.5 | 24.5 | 46.1 |
| 5e. I need to encourage the development of effective alternatives to traditional school for students who are not interested in education or who often misbehave. | 3.90 | . 86 | 6.5 | 19.9 | 73.5 |
| 5f. I can be counted on to help students achieve, even though it may not be part of my official assignment, increases my workload, or causes me inconvenience. | 4.06 | . 68 | 2.5 | 11.9 | 85.5 |
| Summary for the set: | 3.79 | . 54 |  |  |  |
| $\mathrm{N}=701$ Rating Scale: $\quad 1=$ Strongly Disagree $2=$ Disagree $3=$ Neutral | $4=\mathrm{Ag}$ | 5 = Str | ly Agree | A $=$ Not | licable |

Teachers' support for allocation of district resources to meet the needs of all students, as shown in
Table 15, is not strong. While 82.4 percent of respondents agree the district should support training and development to help all staff work more effectively with students at risk and 65.7 percent agree the district should allocate more resources to ensure that all students make academic progress, only 44.6 percent agree meeting the needs of students at risk should be a district priority during time of scarce financial resources. Support becomes even weaker ( 33.4 percent agree) for the district funding of alternative and experimental programs for students at risk if it reduces resources for the individual teachers' classes.

TABLE 15. Support for Allocation of District Resources to Meet the Needs of All Students

| Question | Mean | S.D. | Percent <br> Disagree | Percent <br> Neutral | Percent <br> Agree |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 6a. The district should allocate more resources to ensure that <br> all students make academic progress. | 3.78 | .87 | 7.1 | 27.3 | 65.7 |
| 6b. The district should fund alternative and experimental <br> programs for students at risk, even if it reduces resources <br> for my classes. | 3.04 | 1.01 | 31.8 | 34.7 | 33.4 |
| 6c. The district should support additional training and <br> development to help all staff work more effectively with <br> students at risk. | 4.07 | .77 | 3.7 | 13.9 | 82.4 |
| 6d. In times of scarce financial resources, meeting the needs <br> of students at risk should be a high district priority. | 3.35 | .89 | 16.1 | 39.3 | 44.6 |
| Summary for the set: | 3.56 | .66 |  |  |  |
| N $=700$ <br> Rating Scale: $\quad 1=$ Strongly Disagree $2=$ Disagree 3 = Neutral | $4=$ Agree | $5=$ Strongly Agree | NA = Not Applicable |  |  |

Support appears to be stronger for changing some district policies and school practices to meet the needs of all students, as shown in Table 16. The vast majority of respondents agree that practices and procedures should be constantly examined to determine if they need to be changed and that more promotion of parent and community involvement needs to be done. Over seventy percent of the respondents agree that scheduling and teaching methods should be examined and changed where needed to help meet the needs of students. There is some support for examining and considering changing grading practices, grouping practices, educational programs/requirements, and course offerings/content to help meet the needs of students. The least support, 28.4 percent of the respondents, is indicated for examining and changing attendance policies to meet the needs of students.

| Question | Mean | S.D. | Percent <br> Disagree | Percent Neutral | Percent Agree |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 7a. In our district, we should constantly examine practices and procedures to determine if they need to be changed to meet the needs of students. | 4.26 | . 69 | 2.3 | 6.3 | 91.4 |
| 7b. In this school, we should consider more flexible scheduling if it will help meet the educational needs of more students. | 3.91 | . 95 | 9.6 | 17.8 | 72.6 |
| 7c. In this school, we need to examine and consider changing our attendance policies to help meet the educational needs of students. | 2.95 | 1.17 | 39 | 28.9 | 28.4 |
| 7d. In this school, we need to examine and consider changing teaching methods to help meet the educational needs of students. | 3.79 | . 91 | 9.6 | 20.0 | 70.4 |
| 7e. In this school, we need to examine and consider changing grading practices to help meet the educational needs of students. | 3.23 | 1.07 | 27.4 | 29.4 | 43.2 |
| 7f. In this school, we need to examine and promote more parent and community involvement to help meet the educational needs of students. | 4.13 | . 83 | 4.7 | 14.1 | 81.2 |
| 7 g . In this school, we need to examine and consider changing grouping practices to help meet the educational needs of students. | 3.48 | . 95 | 14.8 | 35.9 | 49.3 |
| 7h. In this school, we need to examine and consider changing educational program /requirements to help meet the educational needs of students. | 3.44 | . 98 | 18.2 | 30.0 | 41.8 |
| 7i. In this school, we need to examine and consider changing course offerings/content to help meet the educational needs of students. | 3.53 | 1.01 | 18.7 | 22.4 | 58.9 |
| Summary for the set: | 3.63 | . 60 |  |  |  |
| $\mathrm{N}=700$ Rating Scale: $\quad 1=$ Strongly Disagree $2=$ Disagree $3=$ Neutra | $4=A g$ | 5 = Stro | ly Agree | $\mathrm{A}=\mathrm{Not}$ | licable |

Teachers' willingness to change personal/professional practices to meet the needs of all students is shown in Table 17. Eighty percent of the teacher who responded agree they need to change their professional practices as the needs of their students change. To better meet the needs of students, over ninety percent of the teachers agree they are willing to collaborate with administrators and colleagues, to learn more about what puts students at risk, to learn more about effective strategies and approaches to teaching, to examine and change teaching methods, to examine and change course content, and to examine and change assignments. Nearly as many are
willing to learn more about parental and community involvement to help meet the educational needs of students. Fewer (70.6 percent), but still an encouraging number, are willing to individualize instruction to better meet the needs of students. The mean score to this set of items (4.19) is encouraging; it indicates teachers are ready to learn more and do more to help all students succeed.

TABLE 17. Willingness to Change Personal/Professional Practices to Meet the Needs of All Students

| Question | Mean | S.D. | Percent <br> Disagree | Percent <br> Neutral | Percent Agree |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 8a. I need to change my professional practices as the needs of students in my school change. | 3.92 | . 82 | 8.1 | 11.0 | 80.2 |
| 8b. I am willing to collaborate with administrators and other teachers to make changes where necessary to better meet the educational needs of students. | 4.34 | . 58 | . 7 | 3.0 | 96.2 |
| 8c. I am willing to learn more about what puts students at risk of school failure or undereducation. | 4.25 | . 64 | 1.8 | 4.9 | 93.3 |
| 8d. I am willing to learn more about teaching strategies and approaches make changes where necessary to better meet the educational needs of students. | 4.33 | . 62 | 1.1 | 4.3 | 94.6 |
| 8e. I am willing to examine my teaching methods and make changes where necessary to better meet the educational needs of students. | 4.35 | . 58 | . 8 | 2.3 | 96.8 |
| 8f. I am willing to examine course content and make changes where necessary to better meet the educational needs of students. | 4.27 | . 63 | 1.6 | 4.2 | 93.3 |
| 8 g . I am willing to individualize instruction to better meet the educational needs of students. | 3.87 | . 89 | 6.9 | 22.4 | 70.6 |
| 8 h . I am willing to examine assignments I give and make changes where necessary to better meet the educational needs of students. | 4.23 | . 62 | 1.3 | 5.9 | 92.8 |
| 8i. I am willing to learn more about parental and community involvement and make changes to help meet the educational needs of students. | 4.11 | . 65 | 1.3 | 12.1 | 86.6 |
| Summary for the set: | 4.19 | . 48 |  |  |  |
| $\mathrm{N}=700$ Rating Scale: $\quad 1=$ Strongly Disagree $\quad 2=$ Disagree $3=$ Neutral | 4 = Agre | = Stro | Agree | $=\operatorname{Not} A$ | icable |

The responses to the set of items designed to gather information about teachers' sense of personal teaching efficacy are shown in Table 18. While most responses are encouraging, it is disquieting to consider that only 65.1 percent of the respondents know their students will make sufficient academic progress for them to be
successful at the next level of education or on the job, only 47.5 percent agree they can get through to even the most difficult or unmotivated students if they make a sincere effort, only 63.3 percent have confidence in themselves as teachers when students have low motivation or exhibit behavior problems, only 59.2 percent have tangible evidence that they are effective in increasing the academic achievement of all students in their classes, and only 67.7 percent agree they are effective in persuading student they can be successful in school. It is encouraging that small percentages of respondents disagreed with most of these statements but disturbing that 20 to 30 percent of the teachers were neutral about these issues. That only 70.8 percent of the respondents agreed that if they had it to do over again they would still choose to become a teacher may be cause for concern.

TABLE 18. Sense of Personal Teaching Efficacy

| Question | Mean | S.D. | Percent <br> Disagree | Percent <br> Neutral | Percent Agree |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 9a. If I had it to do over again, I would still choose to become a teacher. | 3.97 | 1.12 | 11.1 | 18.1 | 70.8 |
| 9 b . There is room for me to improve as a teacher. | 4.49 | . 61 | 1.0 | . 3 | 98.7 |
| 9c. I expect all students in my classes, including those with low ability and/or poor motivation, to complete high school. | 4.17 | . 91 | 7.9 | 7.6 | 84.5 |
| 9d. I am certain that I can make a difference in the lives of my students. | 4.22 | . 73 | 1.9 | 11.6 | 86.6 |
| 9e. I know my students will make sufficient academic progress for them to be successful at the next level of education or on the job. | 3.69 | . 79 | 7.7 | 27.2 | 65.1 |
| 9f. If I make a sincere effort, I can get through to even the most difficult or unmotivated students. | 3.29 | 1.01 | 25.8 | 26.7 | 47.5 |
| 9 g . I have confidence in myself as a teacher when my students are academically motivated and generally well-behaved. | 4.49 | . 60 | 1.0 | 1.6 | 97.4 |
| 9 h . I have confidence in myself as a teacher when my students have low motivation or have a history of behavior problems. | 3.59 | . 93 | 15.3 | 21.3 | 63.3 |
| 9i. I have tangible evidence that I am effective in increasing the academic achievement of all students in my classes. | 3.62 | . 84 | 8.8 | 32.0 | 59.2 |
| 9j. I am effective in persuading students that they can be successful in school. | 3.75 | . 68 | 2.8 | 29.4 | 67.7 |
| Summary for the set: | 3.93 | . 47 |  |  |  |
| N = 699 Rating Scale: $\quad 1=$ Strongly Disagree $2=$ Disagree $3=$ Neutra | $4=A g$ | $5=$ Str | ly Agree | $\mathrm{A}=\mathrm{Not}$ | plicable |

Teachers' ratings of their effectiveness in intervening in typical classroom situations involving students at risk, presented in Table 19, resulted in the lowest mean score of any set of items. Overall, teachers perceive themselves to be only moderately effective in handling these situations. They feel least confident in their ability to help a student with reading problems, designing activities to match the interests and abilities of students, dealing with chronic absenteeism, helping students with drug problems and convincing a student that school achievement is more important than an evening job.

TABLE 19. Effectiveness in Intervening in Typical Classroom Situations Involving Students at Risk.

| Question | Mean | S.D. | extr <br> inef |  | \% moderately effective |  | mely tive |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. One of your students misbehaves frequently in your class and often is hostile. You have discovered his father is an alcoholic and quite likely abuses him and his mother. The family has little money. Today in class he began roughhousing with a friend. You tell both boys to take their seats and quiet down. He turns from you, says something under his breath, and swaggers to his seat. How effective would you be in responding to this student in a way that would win his respect so you could begin to help him with his problems at home? | 3.15 | . 75 | 1.9 | 13.8 | 53.2 | 29.2 | 1.9 |
| 2. Several low-achieving girls appear to be getting very little from your class. They have begun to disrupt your lessons and occasionally "talk back." When you attempt to involve them in class work, they either make jokes or sit sullenly. How effective would you be in eliminating the disruptive behavior? | 3.43 | . 83 | 1.6 | 9.5 | 41.2 | 39.9 | 7.8 |
| 3. You have a student who never hands in assignments on time, seldom gets to class on time, and nearly always forgets to bring his materials to class. Although he is very bright, perhaps even gifted, he is barely passing in most classes. You have discussed this with his parents, but they don't seem to understand the importance of school achievement. How effective would you be in motivating this student to take his achievement seriously? | 3.14 | . 74 | 1.7 | 14.3 | 54.4 | 27.6 | 2.0 |
| 4. A new student has been assigned to your class. Her records indicate that she seldom does her homework and does not seem to care about her education. Her IQ score is 97, her achievement scores have been below the 30th percentile, and her reading ability is four years below grade level. How effective would you be in helping her increase her achievement scores? | 2.94 | . 8 | 4.0 | 21.8 | 51.7 | 20.5 | 1.9 |



Table 20 presents the overall readiness scores. The mean score of the teachers on the nine sets of statements was 3.76. The lowest overall mean score was in dealing effectively with situations that arise with students at risk (3.02). When responses to all nine sets of items are averaged with the responses to the situations, the mean is 3.68 . Item sets $1,3,4,5,8$, and 9 ask teachers to respond to statements that revolve around the teacher as an individual. The mean rating for those items was 3.74. Item sets 2,6 , and 7 ask teachers to respond to components of readiness that focus on the district or school rather than the individual. The mean rating for those items was 3.77. The researcher proposes that a mean readiness score of at least 4.00 may be necessary to meet with success with students at risk.

TABLE 20. Readiness for Meeting the Needs of Students at Risk

| Mean: <br> all sets except <br> situations | S.D. | Mean: <br> all sets including <br> situations | S.D. | Mean: <br> personal <br> (sets $1,3,4,5,8,9)$ | S.D. | Mean: <br> school <br> (sets 2,6,7) | S.D. | Mean: <br> situations | S.D. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3.76 | .34 | 3.68 | .33 | 3.74 | .33 | 3.77 | .52 | 3.02 | .55 |

$\mathrm{N}=701$
Rating Scale: $1=$ Strongly Disagree $2=$ Disagree $3=$ Neutral $4=$ Agree $5=$ Strongly Agree NA $=$ Not Applicable

## Conclusion

The 700 teachers who responded to the questionnaire rated their agreement with sets of items lowest on "beliefs about abilities of all students to achieve" ( 3.11 on a 5.00 scale) and on "knowledge and skills for working effectively with students at risk" (3.42). Teachers rated themselves even lower (3.02), on the average, on their ability to effectively intervene in specific situations that arise with at-risk students. The overall readiness score, including 10 categories of readiness and responses to the specific situations was 3.68. An average score of 4.00 is expected for readiness for educators to meet with success with students at risk.

Individual items revealed specific areas of concern for teachers. Only twenty-five percent of the teachers responding to the questionnaire agreed with the statement "I know how effectively to teach at-risk students." Only nineteen percent reported they had adequate training and preparation to work effectively with students at risk, only fourteen percent agreed their skills are best suited for working with students at risk, and only sixteen percent agreed they had the ability to help a student overcome the life home circumstances that put him/her at risk. Only fifty-four percent of the respondents indicated they believe every student is reachable.

Responses to other items are encouraging. Eighty-nine percent of the teachers who responded agree that district inservice should be a source of support for them in learning to work successfully with students at risk, and eighty-two percent indicated the district should support training and development to help all staff work more effectively with these students. Seventy-five percent agreed with the statement "I need to do more to meet the needs of students at risk." Ninety-three per cent indicated a willingness to learn more about what puts students at risk, and ninety-five percent said they need to learn and apply strategies to meet the needs of students at risk.

In general, readiness of educators to meet the needs of students at risk is not as high as may be necessary to meet with high success. (Although the specific tables are not included in this report, principals, in general, rated themselves higher in all areas than teachers rated themselves; principal readiness appears to be higher than teacher readiness.) Both group means and responses to individual questions indicate that educators feel inadequately prepared to use effective strategies and approaches with students at risk. They do, however, indicate a willingness to learn more about students at risk, to learn to use strategies and approaches to enhance their effectiveness with students at risk, and to change personal, professional practices to better meet the needs of students at risk. It appears that there is a pressing need to develop and test interventions that will help local educators know how to work with students at risk.

The numbers of students at risk of school failure or undereducation is increasing nationwide. The time for action has arrived. "There must be better assurance that all children receive an excellent and appropriate education without leaving significant segments of our student population behind. Schools (and all school staff) need to recognize the magnitude of the situation and their roles in some areas once assumed solely by the parents. The concentration of efforts presently on excellence must include greater attention to those students who need a safety net" (FINE , 1991).

Districts and schools can afford to lose no time in moving ahead with plans to increase parent involvement. coordinate community services, and adjust school programs. At the same time, it is important to realize that the impact will be limited by the readiness of principals and teachers to deal with beliefs concerning the ability of all children to succeed and strategies that make this success possible for children at risk. "Traditionally most of our country's efforts in this regard have been short-term and primarily remedial in approach. We need to focus much more on prevention and long-term approaches" (Davis, 1991). Such long-term approaches require comprehensive plans for teachers and principals to increase understanding of the problems of students at risk and to master teaching and learning strategies that are successful with students at risk. All students will benefit.

It appears that the timing for intervening with teachers at risk of failure with students is right in Iowa-educators seem ready and willing to enhance their readiness and increase their effectiveness with students at risk.

## Study 3: Case study analysis of selected rural Iowa secondary school programs for students at risk

## Objectives

(a) select four effective school district programs to study;
(b) examine and describe the context within which each program operates including, but not limited to the history of the program development, culture of the community and school, and teacher, student, parent, administrator, and community support for the program;
(c) examine and describe components of each program including, but not limited to, philosophy, grades/ages served, identification and placement of students, staffing, inservice, educational support and delivery of instruction, counseling, parent involvement, and involvement with community and community helping agencies;
(d) examine and describe the processes used to develop a school and community culture supportive of students at risk;
(e) identify any factors that appear to be key for effective program implementation;
(f) determine effects of the program on the regular school program;
(g) describe the resources that ;support the program;
(h) determine the extent of effectiveness of the program and/or components of the program;
(i) determine the influence of each program component on the overall effectiveness of the program.

## Progress

This study was to be initiated during the first year of this research program and completed in the second year. Information from Studies 1 and 2 was used to select four programs representative of the various approaches used in rural Iowa for assisting students at risk. Schools chosen included those at Estherville Middle School, Pella High School, Iowa Falls Middle and Senior High Schools, and Boone Junior High and Senior High Schools.

Structured interviews were developed to be used with parents, students, community members, teachers, and administrators at each school. Initial interviews have been conducted at each school. Additional interviews will be conducted in the fall of 1992, and data will be analyzed during the 92-93 grant year.

## Future Efforts

## Continued Research

Studies 1 and 2 revealed a need to provide local educators with skills and knowledge to use to achieve success with students at risk. With the support of a FINE grant for the $92-93$ school year, staff development
programs are being developed that will help local educators gain the skills and knowledge they need to work effectively with students at risk. In addition, several other agencies conducting staff development to help teachers meet the needs of students at risk will collaborate with this researcher to use the revised questionnaire, originally developed for Study 2, to assess the effectiveness of various staff development efforts. The longer term intent of this research project is to determine which staff development programs are most effective and then to train local educators to deliver the inservice in their own districts.

## Revised Questionnaire

The questionnaire to determine educator readiness has been revised and pilot tested. It will be used not only in the current research efforts to assess the effectiveness of staff development, but is also being made available to local schools. The researcher has received requests to use the instrument so that local school districts can assess the readiness of their own staffs and develop plans accordingly.

## Collaboration

As a result of efforts to date, the researcher is working collaboratively with others interested in meeting the needs of all students. The researcher is working with other university researchers who are administering a Drug-Free Schools Grant in rural Iowa middle schools. Those researchers will utilize the revised questionnaire to assess their effectiveness. This writer and those researchers have plans for collaboration to develop a proposal for a major DrugFree Schools grant that will build on the results of the individual efforts of each of their respective projects. In addition, this writer is working with Ray Morley of the Department of Education to determine the best ways to utilize the results of the work to date on this FINE grant to help local educators and AEA's. Continued collaboration among the university, local schools, DE, and AEA's will be necessary as the new research develops and the project advisory committee meets.

## Dissemination

The primary investigator for this project has a series of articles planned as a result of the first year of the project. She will present the data a at least two statewide conference for educators of students at risk and has submitted proposals to present at three national conferences. Dr. Ray Morley has plans to place this final report in the hands of all superintendents in the state of Iowa. In addition, he will work with this researcher to disaggregate
the data by AEA and prepare reports for each AEA. He and this researcher will present this information to officials from each AEA in October, 1992.

## Acknowledgements

Sincere thanks are extended to the members of the Advisory Committee who so graciously gave of their time and expertise to guide this research and who have agreed to continue their services throughout the research project:

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| :--- | :--- |
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| Heartland AEA 11 | Cheri Nielsen, Teacher |
| Wilson Junior High, Council Bluffs |  |
| Lisa Koester, Teacher | Sue Bish, Assistant Principal |
| South Tama County High School | Estherville Middle School |
| Jim Quarnstrom, Principal | Jean Peterson, Assistant Principal |
| Gilbert Junior-Senior High School | Saydel High School |

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| :--- | :--- |
| Ralph Woodard | Karen Krogman |

## APPENDIX D

## ADMINISTRATIVE SUMMARY

# The Costs of Dropping Out of School 

## And <br> The Productivity Benefits of Returning and Graduating

Adapted From<br>November 1990 Executive Summary of<br>"The Costs of Dropping Out of School and The Productivity Benefits of Returning and Graduating: A Survey of Iowa's Alternative School Graduates"<br>Written by James R. Veale, Ph.D. Statistical/Research Consultant \& Educator<br>Directed and Edited by Raymond E. Morley, Ed.D. Consultant, Department of Education<br>Supported by Department of Economic Development, JTPA 8\% State Education Coordination Grant Funds (Section 123)<br>Department of Education<br>Bureau of Federal School Improvement

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Administrative Summary
of
The Costs of Dropping Out of School
and
The Productivity Benefits of Returning and Graduating

During the 1990 school year the Department of Education, in cooperation with the Department of Economic Development and Dr. James Veale (a private consultant/researcher), conducted a study to: a) assess the costs of dropping out of school and (b) survey the productivity benefits of returning and completing a high school education in an alternative school. From 20 Iowa alternative schools, 206 students who graduated between 1987-89 were randomly selected and surveyed by telephone to study productivity benefits. In addition, employers of a small subsample (30) of these graduates were surveyed by questionnaire regarding the graduates' productivity. The costs of dropping out of school were computed utilizing information from the U.S. Bureau of Census, Iowa Department of Revenue and Finance, Iowa Department of Education, Iowa Department of Employment Services, Iowa Department of Human Services, Iowa Department of Corrections, National Center for Educational Statistics and the U.S. Department of Labor.

## IOWA ALTERNATIVE SCHOOLS SAMPLED



The reasons for the study included: a) a need to provide policy makers and area and local planners and practitioners with accurate up-to-date cost data involved in the issue of school dropouts; b) to identify the contribution of alternative schools in Iowa's system of public education; c) to probe the issue of the "productivity" of high school graduates on a broad-based scale believed to be most consistent with the broad-based goals of education; and, d) to provide a baseline of information on productivity that can be used in setting goals or outcomes for education.

The issue of productivity venefits has special significance because of the criticism of public education by business, industry and labor. For example, some company leaders claim that about half their applicants lack basic skills in math and English necessary to take advantage of their training programs. Private companies have started their own "schools" to remediate new employees in these basic skill areas. American business reportedly spends 30 billion annually on remedial and skills training programs. However, the concept of "productivity" by business, industry and labor is narrow in scope and doesn't totally coincide with the broad goals of education which prepare students for a broad role in society.

Productivity was defined in this study as a multi-dimensional construct consisting of "output" of an individual in various activities. This is an extension of the common economic definition - the state of being engaged in the creation of economic value, i.e. the production of goods and services to activities other than those purely economic.

The definition of productivity used in this study included eight components which are:

1. income generated by employment
2. post-secondary education
3. volunteer activity
4. participation in the political process
5. homemaking/child rearing
6. talents and skills not used in job/leisure
7. public assistance
8. penal system involvement

The first six components are positively associated with productivity; the last two are usually considered to be negatively related to productivity. For example, post-secondary education is likely to increase a person's marketability and her/his ability to perform in the work place (positive), while involvement in public assistance generates no* output, per se, and requires input in the form of government expenditure (negative).

The above eight components include economic factors ( 1 and 2, 7 and 8), as well as social (3), political (4), family (5), and personal growth (2 and 6) factors of productivity. It is seen to provide a more informative and complete picture of a person's productivity than the usual government index (GNP divided by cost to produce it).

The following behaviors were determined to be critical in assessing the productive propensity of individuals:

```
1. punctuality
2. work attendance
3. responsibility
4. quantity of work
5. quality of work
6. customer orientation
7. initiative
8. flexibility
9. cooperation
10. ability to learn
11. potential for advancement
12. verbal communication skill
13. written communication skill
14. nonverbal communication skill
```

Although these behaviors were developed with the work place in mind, they are also appropriate for assessing productive propensity with respect to the positive, non-employment components of productivity (components 2 through 6). For example, with regard to participation in the political process, e.g., voting in elections, punctuality is important in order to get to the polling place before it closes, responsibility is important in making the decision to vote, initiative is required to register to vote, ability to learn is important for educating oneself about candidates and issues, and verbal communication skill is required for discussing these issues with others, as well as communicating with the person in charge at the polling place.

The above 14 behaviors should be useful in assessing the development of productivity in all students. Presently, these behaviors are believed to be assessed in schools but perhaps without the consistency, the magnitude, or the openness needed to communicate the message to parents and students, which is necessary for behavioral development. Of course, the key issue here is defining goals and outcomes that are important and that can be assessed. Productivity in eight separate areas including 14 specific behaviors are reviewed for consideration in planning for excellence in education.

## Results:

The costs of dropping out of school in Iowa include:

1) A loss of personal income averaging about $\$ 340,000$ over a lifetime ( 45 years) of work or approximately one-third of potential earnings.
2) A loss to the state treasury of over 2 million dollars per year in tax revenues and over 91 million dollars over a lifetime of reduced earnings for any group of dropouts for a given year.
3) Increased welfare burdens up to 2.4 million dollars per year due to unemployment, the need for Aid to Dependent Children, health care, and food stamps.
4) Increased risk of incarceration, three to nine times that of graduates resulting in care costs of at least six times that of education ( $\$ 18,506$ incarceration costs per year vs. $\$ 2,978$ education costs).
5) Deceleration in human growth resulting in continued lowering of cognitive skills, reduced options to economic progress and restricted social networking.
6) Reduced sense of control over one's life resulting in few initiatives taken to enter work or volunteering for community services.

The productivity of our alternative school graduates indicates:
a) Employment
a-1) About two-thirds are employed either full time or part-time, $17 \%$ are homemakers, $3-4 \%$ are college students and $3-4 \%$ are in the military. Approximately 8.3\% are unemployed. The unemployment rate of alternative school graduates is not significantly different from that of the same age group projected for the state of Iowa including all high school graduates.
a-2) Graduates who participated in JTPA work experience programs were more likely to be employed for longer periods of time than those who did not participate in such programs.
a-3) Over $85 \%$ of the graduates perceive that they have obtained jobs that provide opportunity for advancement in wages, higher level positions, or education. Nearly 75\% are satisfied with their wages and over $80 \%$ are satisfied with their working conditions.
b) Post-Secondary Education
b-1) Forty-five percent of the graduates complete some part of $a$ post-secondary education, and over $78 \%$ have plans for some type of post-secondary education.
c) Volunteer Work - Services provided freely without financial
renumeration
c-1) Twenty-three to $24 \%$ of alternative school graduates are involved in volunteer organizations or voluntary service activities. More females (28.1\%) than males (16.9\%) are involved.
c-2) Graduates who are involved in volunteer work are in church related activities ( $21.7 \%$ ), school related activities ( $8.7 \%$ ), and in various other activities (69.6\%) including Red Cross, Big Brother/Sister, fixing up buildings for the poor, etc.
d) Participation in the Political Process
d-1) Thirty-two percent of those alternative school graduates who are old enough do vote. This is comparable to $34 \%$ of the peer group of $18-24$ year olds in Iowa. Of those not voting, the most frequent reason is "not registered."
e) Homemaking and Child Rearing
e-1) Seventeen percent of alternative school graduates are homemakers. All are females.
e-2) The average number of children living with nearly $83 \%$ of the homemakers is 1.3 .
e-3) Seventy-five percent are content with homemaking while $25 \%$ have sought employment outside of homemaking.
f) Talents and Skills Not Used in Job - Evidence of human development beyond that required by the market place, family, society or political process
f-1) Over $83 \%$ of alternative school graduates indicate that they have talents or skills not being used in their jobs such as mechanical ability, musical, writing, math, computer skills, cake decorating, sports, etc. Nearly $75 \%$ are continuing to develop these skills. Sixty percent feel that these skills may now be marketable.
g) Public Assistance Involvement
g-1) Twenty-three percent of alternative school graduates now receive public assistance, and $18 \%$ of their parents at some time received some type of public assistance. Among graduates whose parents were receiving some public assistance while the graduates were in school, over $72 \%$ "broke the cycle," i.e. were not themselves receiving public assistance at the time they were interviewed.
g-2) Among graduates whose parents were not receiving any public assistance while the graduates were in school, nearly $22 \%$ "entered the cycle," i.e. were receiving public assistance at the time they were interviewed. In particular, females are "entering the cycle" with much greater frequency (35.6\%) than males (4.3\%). The difference may, in part, be explained by the problems of teen pregnancy and out of wedlock births.
h) Penal System Involvement
$h-1)$ Dropouts who return to school and graduate are no worse off than other graduates relative to incarceration. About 1.4\% of alternative school graduates are incarcerated. This is very close to the percent of the U.S. population in 1987 either in prison, on parole, or on probation for criminal activity (1.4\%). Dropouts who do not return and graduate are 3 to 9 times more likely to be incarcerated.

In terms of the 14 behaviors in productivity, the graduates of alternative schools rate themselves fairly high and are rated by their employers respectably high but somewhat lower. Overall there is a general congruence between graduate self-assessments and employer assessments. Agreement is fairly high on some behaviors and low on others. For example, there is good agreement on punctuality and flexibility but some disagreement on responsibility, cooperation, and initiative.

Response distributions for graduates and employers on items assessing the graduates on the 14 behaviors of productivity. ("--" denotes not applicable for this group.)

| Behavior | Diagnostic Choices Gr | Graduates | Employers |
| :---: | :---: | :---: | :---: |
| Punctuality | often late | 0.7\% | 0.0\% |
|  | occasionally late | 25.9 | 34.5 |
|  | never late | 73.4 | 65.5 |
| Attendance | often miss | 0.0\% | 0.0\% |
|  | occasionally miss | 5.0 | 31.0 |
|  | never miss | 95.0 | 69.0 |
| Responsibility | often break rules | 0.0\% | 3.4\% |
|  | abide by rules; do job | 15.8 | 48.3 |
|  | can be depended upon | 84.2 | 48.3 |
| Work Quantity | below average | 1.5\% | 3.4\% |
|  | average | 34.3 | 51.7 |
|  | above average | 50.0 | 27.6 |
|  | well above average | 14.2 | 17.2 |
| Customer | don't know customers | 11.5\% | 3.7\% |
| Orientation | little or no concern | 1.5 | 3.7 |
|  | some concern; friendly | 16.9 | 55.6 |
|  | considerable concern | 70.0 | 37.0 |
| Work Quality | many defects, errors | 1.4\% | 0.0\% |
|  | some defects, errors | 10.8 | 10.3 |
|  | few defects, errors | 28.1 | 55.2 |
|  | very few defects, errors | 59.7 | 34.5 |
| Initiative | do as little as possible | 0.7\% | $11.1 \%$ |
|  | work fairly hard | 6.5 | 33.3 |
|  | work hard; look for moxe | 61.9 | 48.1 |
|  | will "go the extra mile" | 30.9 | 7.4 |
| Flexibility | can do only one type of job | 2.2\% | 3.4\% |
|  | some ability to do more than one job | ob 18.0 | 34.5 |
|  | can do many types of jobs | 79.9 | 62.1 |


| Behavior | Diagnostic Choices | Graduates | Employers |
| :---: | :---: | :---: | :---: |
| Cooperation | likes to work alone | 14.1\% | 0.0\% |
|  | cooperates when asked | 8.1 | 24.1 |
|  | cooperates even when not asked | 41.5 | 62.1 |
|  | helps to build cooperation | 36.3 | 13.8 |
| Ability to Learn | lacks basic skills | 1.4\% | 0.0\% |
|  | has basic skills | 28.1 | 67.9 |
|  | much skill, ability | 70.5 | 32.1 |
| Potential for <br> Advancement | will stay at same level | 17.0\% | 7.1\% |
|  | potential advancement in pay | 17.8 | 39.3 |
|  | potential advancement in and responsibility | 43.0 | 50.0 |
|  | excellent potential for advancement in company | 22.0 | 3.6 |
| Verbal skills | poor | 1.4\% | 6.9\% |
|  | good | 98.6 | 93.1 |
| Writing skills | poor | 11.7\% | 3.4\% |
|  | good | 88.3 | 55.2 |
|  | can't tell | -- | 41.4 |
| Nonverbal skills | poor | 2.9\% | 10.7\% |
|  | good | 97.1 | 53.6 |
|  | can't tell | -- | 35.7 |

[Note: The graduates' percentages were based on 130-140 graduates ( numbers vary somewhat due to irrelevance of options or nonresponse in some cases). The employers' percentages were based on, at most, 29 responses.]

How Graduates Feel About the Alternative School Experience
Graduates of alternative schools feel that alternative schools make a positive difference in their lives. Most graduates (92.4\%) have a very positive view of their alternative school experience. Some examples of comments are as follows:
"I was a mess when I started (at the alternative school)...they helped me to grow up and learn responsibility."
"They helped with everything from getting to know people to working with people."
"The teachers cared more about the students and took more time with you..."
"They just didn't shove me off as another number. The school made me more independent...I looked forward to going to school. I called teachers by their first names. They cared."

"They helped me to feel good about myself."<br>"The school helped me to work harder and to stick with it."<br>"They taught me not to give up - best school I ever attended."<br>"It turned my life around...gave me a reason to go on."<br>"They taught you that you have a future."<br>"It provided a place to explore things I was interested in...helped me to learn who I was."

## Discussion

Existing alternative education schools are indeed having a positive impact on our dropouts. They are succeeding in helping students become productive who otherwise may never have found success in the public school environment and in our communities. Alternative school graduates are in varying degrees productive in all aspects of life including competitive employment, post-secondary training, volunteer work, participation in the political process, homemaking and child rearing, and in developing talents and skills beyond the existing demands of their jobs. Moreover, graduates are breaking the cycle of poverty by not staying in public assistance programs and are not represented more than any other population with regard to incarceration and penal system involvement. The success is remarkable and indicates that having an alternative for students to complete a high school education is a reasonable and workable consideration for future planning. Alternative schools represent a factor in public education that necessarily has to be considered to achieve excellence in education for all students. As well, the methods and practices utilized in alternative schools need to be examined within the realm of benefiting our conventional schools. Our best information to date indicates that alternative schools are helping students to gain a sense of control over their lives which is increasing their potential for social and human development.

It appears that alternative schools need to be improved and supplemented by other alternatives in local education agencies. This is evidenced by the fact that not all students are successful graduates of alternative schools as well as the fact that not all graduates are reaching their true potential of productivity. Existing information indicates that more assistance may be necessary to: (a) improve participation in volunteer work and in our political process; and (b) to reduce public assistance involvement especially among female students who are parents or prospective parents. Productive behaviors which could be targeted for improvement include punctuality, responsibility, cooperation and initiative. Graduates of alternative schools recommend higher level courses such as math, science and high tech (e.g., computer programming), and teaching practical skills like filling out applications and interviewing for a job.

Further research regarding the productivity of all our graduates is needed to substantiate and to do comparative analysis of outcomes and goals for education. Moreover, a "multi-factor" measure of productivity is needed to be congruent with broad-based human development including no less
than personal/social, career/vocational, and academic development. As well, existing information indicates that data collection must be done on an individual basis to account for individual gains within our diverse systems and diverse populations. Data on individual successes is not being consistently determined through existing group measures. In many situations, case studies of individual graduates is the only way to grasp the impact of public schools. This is especially true when considering the dropout and the multitude of outside influences which contribute to a student's success or lack of success. Individual student comments indicate that public schools are positively influencing students far beyond what they are being given credit for in existing broad-based comparative assessments. Moreover, it appears public schools have the potential to do even more via implementing alternatives in the educational process.


