

EXECUTIVE SUMMARY

REDUCING THE DROPOUT RATE FOR ALL MAINE STUDENTS WITH A PARTICULAR EMPHASIS UPON STUDENTS WITH DISABILITIES WHO DROP OUT OF SCHOOL

July 1, 2002 – June 30, 2003 Project

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BACKGROUND AND RATIONALE FOR CURRENT STUDY

Reducing the number of Maine students who drop out of school each year has been a major goal of policymakers and educators for many years. Maine historically has compiled a very strong record with respect to the number and percentage of its students who complete high school with a standard diploma as compared with students in other states. However, despite Maine's widely recognized "good performance" with respect to its student high school completion and dropout rates, a legitimate concern persists that far too many of our youth fail to complete their high school requirements and leave school each year lacking the necessary skills to become self-fulfilled, productive members of society. This issue and concern currently is receiving unprecedented attention as a result of both national (*No Child Left Behind*) and state (*Learning Results*) educational reform policies which place major emphasis upon high student achievement standards, comprehensive student and school assessment measures, and stringent student high school graduation requirements.

Over the years, a great deal of effort and financial resources have been devoted to "identifying students who are likely to drop out of school" and providing them with a wide variety of instructional and support services that are designed to keep them in school so that they may graduate. A common practice among school personnel at both the national and state levels to identify future dropouts has been to utilize some sort of "dropout predictor scale" to determine which students are at greatest risk for dropping out of school and, then, to target those particular students with programming interventions.

Another approach to student dropout prevention has been to "target entire schools" with dropout prevention strategies and interventions rather than focusing upon "specific identified students." And, some schools employ *both* individual student and school-wide dropout prevention strategies.

Unfortunately, despite the long-term interest in reducing student dropouts, very little empirical data exist to provide policymakers and practitioners with solid information regarding (1) which students are at greatest risk for dropping out, and (2) which dropout prevention interventions and programs have been demonstrated as being the most effective. It only has been during the past two or three years that comprehensive national studies have been conducted to investigate the efficacy of student dropout prevention programs (e.g., the Mathematica Policy Research studies, 1998, 2000, 2001), and even the results of these studies yield very conflicting and tentative findings.

In brief, in 2003, despite decades of research on the topic, our knowledge base with respect to the overall issue of "student dropouts" is limited. We certainly have clues and hunches – along with some fairly solid student profile, school profile, and broad demographic data that appear to possess reasonably strong predictive value regarding "who is more likely to drop out." However, the "dropout issue" is extremely complex. Many factors and conditions interact, and they need to be considered when attempting to

determine which particular strategies and interventions schools should employ in their efforts to keep students in school.

Concerns involving the high school graduation and dropout rates for students with disabilities likewise has received a good deal of attention in recent years. Historically, the percentage of students with disabilities who drop out of school consistently has been higher than for their non-disabled peers. Similarly, the percentage of students with disabilities who graduate with a regular high school diploma consistently has been lower than for their non-disabled peers. However, there has been an improvement in both categories in recent years. For example, during the 1998-1999 school year, the national dropout rate for all students with disabilities age 14 and older was 28.9 percent. In 1993-1994, the dropout rate for this population was 34.5 percent. Similarly during this same period the national high school graduation rates for all students with disabilities age 14 and older demonstrated improvement – from 51.9 percent in 1993-1994 to 57.4 percent in 1998-1999 (*25th Annual Report to Congress*, 2001).

Precise comparisons between disabled and non-disabled students with respect to both high school completion and dropout rates are not possible due to the differences in which these rates are calculated for each group. Nevertheless, for the purpose of providing a general comparative view of the differences in high school completion and dropout rates between these two groups of students, both the national high school completion and dropout rates for *all* students has held fairly constant for several years – approximately 86 percent and approximately 5 percent respectively.

Graduation and dropout rates for students age 14 and older with disabilities generally have been shown to vary by individual disability category. For example, at the national level during the 1998-1999 school year [the most recent data available] approximately one-half (50.6%) of all students identified within the *Emotional Disturbance* category dropped out of school. Students within the *Specific Learning Disability* category dropped out at the next highest rate (27.5%), followed by students within the *Speech/Language Impairment* (25.0%) and *Mental Retardation* (24.9%) categories respectively (*25th Annual Report to Congress*, 2001).

Graduation rates at the national level for students age 14 and older with disabilities (those graduating with a standard high school diploma) during the 1998-1999 school year also varied significantly by disability category. Students with *Visual Impairments* graduated at the highest rate (75.1%), followed by students with *Traumatic Brain Injury* (70.3%) and students with *Hearing Impairment* (69.4%). Students within the *Mental Retardation* (41.7%) and *Emotional Disturbance* (41.9%) categories were least likely to graduate with a standard high school diploma (*25th Annual Report to Congress*, 2001).

OBJECTIVES OF STUDY

This study had ten major objectives:

- 1) To conduct a review of the national literature re: the “student dropout problem.” Among the major issues and concerns addressed as part of this review are the following: (a) differences in definitions of *dropout*; (b) different methods for calculating dropout and high school completion rates; and (c) a brief historical perspective of the dropout problem, including alternative routes to high school completion, e.g., completion of the G.E.D.;
- 2) To summarize and analyze the most recent *national database* re: student dropout and high school completion rates for all students (NCES, 2002);
- 3) To summarize and analyze the most recent *national database* re: student dropout and high school completion rates for students with disabilities (*25th Annual Report to Congress*, 2001);
- 4) To provide a comprehensive description and analysis of the strategies and mechanisms that are commonly used to identify students who are considered to be at high risk for dropping out of school (e.g., a discussion of “dropout predictors” and “dropout indicators”);
- 5) To provide an analysis of the efficacy of various “dropout prevention strategies” that have been employed nationally;
- 6) To summarize and analyze the most recent data available re: public school dropout and high school completion rates in Maine (2001-2002 school year) for *all students*, along with a description of the method used for determining “student dropouts” in Maine;
- 7) To summarize and analyze the most recent data available re: public school dropout and high school completion rates in Maine (2002) for students with disabilities – including state and individual SAU level analysis, and analysis by individual disability category;
- 8) To summarize and analyze three-year trend data (2000-2002) re: public school dropout and high school completion rates in Maine for students with disabilities with major focus on students who dropped out and graduated between December 1, 2001 and December 1, 2003 [2002-2003 school year] - including state and individual SAU level analysis, and analysis by individual disability category;
- 9) To provide suggestions and recommendations, based upon study’s major findings, regarding the development of more effective student dropout prevention programs and strategies in Maine public schools – for all students, with a particular emphasis upon those programs and strategies that serve students with disabilities; and
- 10) To provide consumers with a listing of selected resources and materials that directly deal with student dropout issues and concerns.

DATA EXPLANATIONS

Data Sources

The following data sources were utilized for this study:

- Maine Department of Education EF-S-05 Reports, December 1, 2002 Child Count, State Totals Report, by Disability and Age
- Maine Department of Education EF-S-05 Reports, December 1, 2002 Child Count, State Totals Report by Exit Data and Age
- Maine Department of Education EF-S-05 Reports, December 1, 2001 Child Count, State Totals Report by Exit Data and Age
- Maine Department of Education EF-S-05 Reports, December 1, 2000 Child Count, State Totals Report by Exit Data and Age
- Maine Department of Education EF-M-11 Report, October 1, 2002, Resident Enrollment

Data Management

Data contained in the above-listed reports as well as “raw data” involving Maine students with disabilities was obtained electronically from the Maine Department of Education. These extracted data then were used by University of Maine researchers to construct a comprehensive database involving relevant exit data for Maine students with disabilities. This database was designed to accommodate the specific parameters of the study’s major research questions.

Data Calculation Methods, Rationale, and Explanations of Key Terms and Descriptors

A variety of methods commonly are used to calculate student dropout and graduation rates. In this study, the formula employed to calculate these rates is identical to the formula that is used by the U.S. Department of Education, Office of Special Education Programs, Data Analysis (DANS) in its *Annual Reports to Congress*. It was decided to use these specific calculation formulas in an effort to be totally consistent with the reporting mechanisms used in federal reports. Further, these particular calculation formulas are viewed by many researchers as representing the most valid and reliable method for determining student dropout and graduation rates. In this study dropout and graduation rates were calculated as follows:

Dropout Rate: The number of students with disabilities, age 14 and older, who dropped out were divided by the number of students with disabilities, age 14 and older, who are known to have left school (i.e., graduated with a standard diploma, graduated through certificate/ fulfillment of I.E.P requirement, reached the maximum age for services, died, or dropped out.

Graduation with Diploma Rate: The number of students with disabilities, age 14 and older, who graduated with a standard diploma were divided by the number of students with disabilities, age 14 and older, who are known to have left school (i.e., graduated with a standard diploma, graduated through certificate/fulfillment of I.E.P requirement, reached the maximum age for services, died, or dropped out.

Graduation Through Certificate/Fulfillment of I.E.P. Requirement Rate: The number of students with disabilities, age 14 and older, who graduated through certificate/fulfillment of I.E.P. requirement were divided by the number of students with disabilities, age 14 and older, who are known to have left school (i.e., graduated with a standard diploma, graduated through certificate/fulfillment of I.E.P requirement, reached the maximum age for services, died, or dropped out.

It should be noted that the dropout and graduation rates calculated for the purposes of this study do *not* include the following categories listed in the Maine Department of Education's EF-S-05 Exit Data Reports: *Parents Refuse Services; Moved, Not Known To Be Continuing; Moved Out-Of-District, Known To Be Continuing; Exited to School Age Special Education Services; Status Unknown; or Exited to Regular Education.* These categories were *not* included in this study's rate calculation formula because they are *not included* in federal rate calculations for dropouts and graduates.

Leavers: The term *Leavers* is used throughout the study to refer to those students with disabilities, age 14 and older, who are known to have left school (exited) via one of the following means: graduated with a standard diploma, graduated through certificate/fulfillment of I.E.P requirement, reached the maximum age for services, died, or dropped out. *Leavers* represent the *denominator* in all dropout and graduation rate calculations. This term was chosen to distinguish those students who exited special education services through the means/ categories listed above from those students who exited special education services but who were not known to leave school (e.g., *Parents Refuse Services; Moved, Not Known To Be Continuing; Moved Out-Of-District, Known To Be Continuing; Exited to School Age Special Education Services; Status Unknown; or Exited to Regular Education*).

OVERALL STUDY SUMMARY

Study Findings Re: All Maine Public School Students

- Of all states, including the District of Columbia, Maine was ranked #1 with respect to the percentage of its public school students who complete high school (94.5% completion rate between 1998 and 2000 – 3-year average rate). The average completion rate for all states during this period was 85.7 percent, with the range from 73.5 percent (Arizona) to 94.5 percent (Maine).
- The 2001-2002 Maine public secondary school dropout rate was 2.89 percent (1,802 students were considered as *dropouts* out of a secondary school enrollment of 62,295 students. In addition, 152 students were considered as *dropouts* from Maine's 11 private secondary schools (60% publicly-funded students) which represents a 2.83 percent dropout rate out of an

enrollment of 5,374 students. Of Maine's three state-funded schools, only two reported dropout data, showing that no students had dropped out (enrollment – 162 students). Thus, taking into consideration all three reporting categories, the statewide totals for 2000-2001 show a secondary enrollment of 67,831 students, with 1,954 dropouts, and a dropout rate of 2.88 percent. The Maine statewide dropout rate has shown a steady decline each year from 1998-1999 (3.33%) to the current 2.89 percent rate.

- Student dropout rates in Maine varied by county in 2001-2002, ranging from a high of 6.02 percent (*Hancock*) to a low of 1.16 percent (*Aroostook*). In addition to *Hancock* County's highest dropout rate of 6.02 percent, representing 139 dropouts out of a secondary school enrollment of 2,310 students, other Maine counties reflecting high dropout rates in 2001-2002 were *Piscataquis* (4.66%; 33 dropouts; enrollment, 708 students); *Lincoln* (4.32%; 31 dropouts; enrollment, 717 students); *Franklin* (4.01%; 86 dropouts, enrollment, 1,645 students); and *Washington* (3.57%; 50 dropouts; enrollment, 1,399 students).
- Conversely, Maine counties reflecting the lowest student dropout rates during 2001-2002 were *Aroostook* (1.16%; 50 dropouts, enrollment 4,304 students); *Somerset* (1.71%; 44 dropouts, enrollment, 2,576 students); and *Knox* (1.80%; 44 dropouts, enrollment, 2,439 students).
- The statewide *average* public secondary school completion rate for the class of 2002 (excluding private secondary schools and state-funded schools) was 86.41 percent, with a range from 57.7 percent to 100 percent among Maine high schools.
- For the class of 2002, those students who failed to complete and who were reported as dropouts, the largest number of dropouts occurred during the *junior* year (616 students, 31.5%). An almost equal number and percentage of students dropped out during the senior year (493; 25.2%) and the sophomore year (488; 25.0%). Three hundred and fifty-eight (358) students dropped out during the freshman year (18.3%). This finding suggests that students who might be viewed as posing a *high risk* for eventually dropping out of school require close monitoring – along with the provision of appropriate interventions and supports early in their school careers (43.3% of those students who were reported as dropouts had already dropped out of school prior to entering their junior year). Further, the junior year appears to be the most common time when students actually drop out of school (31.5% of all reported dropouts).
- Female students in Maine complete their secondary school programs at a slightly higher rate than do male students. The statewide *average* public secondary school completion rate for the class of 2002 (excluding private secondary schools and state-funded schools) for *males* was 84.94 percent and for *females*, 87.89 percent. For the class of 2002, those students who failed to complete and who were reported as dropouts, the largest number of dropouts for both males and females occurred during the *junior* year. For the class of 2002, 350 males dropped out during the junior year, representing 31.2 percent of all males who dropped out of school between 1998-1999 and 2001-2002. For the class of 2002, 266 females dropped out during the junior year, representing 31.8 percent of all females who dropped out of school between 1998-1999 and 2001-2002.

An almost equal number and percentage of both male and female students dropped out during their sophomore and senior years. For male students, 273 dropped out during their sophomore year (25.0%), while 277 males dropped out during their senior year (25.4%). For

female students, 215 dropped out during the sophomore year (24.9%) while 216 dropped out during the senior year (25.0%). One hundred and ninety-one (191) males in the class of 2002, dropped out during their freshman year, representing 17.5 percent (17.5%) of all males who dropped out of school between 1998-1999 and 2001-2002, while 167 females dropped out during the freshman year for the same time periods (19.3%).

It is suggested that several implications might be drawn from these data. While female students drop out of school at a slightly lower rate than do male students, both males and females tend to follow a very similar pattern with respect to “when they leave school.” For both groups, the junior year represents the most common time for dropping out of school. Also, female students tend to drop out earlier than do male students, with 19.3 percent of all female student dropouts occurring during the freshman year, compared with only 17.5 percent of male student dropouts.

Study Findings Re: Maine Public School Students with Disabilities

- The dropout rate for Maine students with disabilities, age 14 and older, who were known to leave school [according to the definition of *leaver* employed in this study] between December 1, 2001 and December 1, 2002 (December 1, 2002 Child Count) was 27.54 percent. According to the most recent data available (1998-1999 school year), the *national* dropout rate for students with disabilities (all disabilities) was 28.9 percent.
- Of all disability categories, students identified within the *Emotional Disability* category recorded the highest dropout rate (53.66%). Students identified within the *Other Health Impairment* category recorded the second highest dropout rate (31.47%), followed by *Traumatic Brain Injury* (30.77%), *Speech/Language Impairment* (29.7%), *Multiple Disabilities* (26.28%), and *Specific Learning Disability* (21.69%). Students identified within *Autism*, *Mental Retardation*, and *Hearing Impairment* categories recorded the lowest dropout percentage rates – 7.69 percent, 12.50 percent, and 13.33 percent respectively (December 1, 2002 Child Count).
- Wide variance exists among Maine SAUs with respect to student dropout rates – involving both total disabilities and individual disability categories, ranging from 100 percent to zero percent.
- The dropout rate (*total disabilities*) for Maine students with disabilities has steadily declined between 2000 and 2002. In 2000, 29.84 percent of students (all disability categories combined) dropped out; in 2001, 29.35 percent dropped out; and in 2002, the total disabilities dropout rate decreased to 27.54 percent. Thus, the dropout rate (*total disabilities*) dropped 7.7 percent between 2000 and 2002.
- The decline in the number and percentage of students within the *Specific Learning Disability* category who dropped out between 2000 and 2002 is largely responsible for the *overall decrease* in dropout rates during this three-year period. In 2000, out of 953 *Specific Learning Disability leavers*, 258 dropped out, constituting a 27.07 percent *SLD* dropout rate. In 2002, out of 1,028 *SLD leavers*, 223 dropped out, representing a 21.69 percent *SLD* dropout rate. Thus the dropout rate for students identified within the *Specific Learning Disability* category dropped 19.9 percent for the three-year period between 2000 and 2002.

- The student dropout rate, however, *increased* between 2000 and 2002 for several disability categories. The largest percentage increase has been within the *Speech/Language Impairment* category (21.2%), from 23.48 percent in 2000 to 29.79 percent in 2002. Other major disability categories that have reflected an increase in the dropout rate between 2000 and 2002 are *Emotional Disability* (4.7%), from 51.14 percent in 2000 to 53.66 percent in 2002; *Other Health Impairment* (7.1%), from 29.23 percent in 2000 to 31.47 percent in 2002; and *Mental Retardation* (6.8%), from 11.65 percent in 2000 to 12.50 percent in 2002.
- A comparison of Maine's student dropout data between 2001 and 2002 suggests that progress is being made in reducing the *overall* dropout rate for students with disabilities. The student dropout rate (*total disabilities*) in 2001 was 29.35 percent. In 2002, the dropout rate (*total disabilities*) was 27.54 percent. Thus, during the past two years, Maine's total disabilities dropout rate has decreased 6.2 percent.
- Most disability categories reflected a *decrease* in the dropout rate between 2001 and 2002. Among the disability categories which had the largest number of *leavers*, only the *Multiple Disabilities* category showed an *increase* in the percentage of students who dropped out between 2001 and 2002, from 20.67 percent in 2001 to 26.28 percent in 2002, representing a 21.35 percent increase. All other major disability categories showed an *decrease* in the percentage of students who dropped out between 2001 and 2002: *Emotional Disability*, 54.88 percent to 53.66 percent (2.2% decrease); *Speech/Language Impairment*, from 32.28 percent to 29.79 percent (7.7% decrease); *Other Health Impairment*, from 33.07 percent to 31.47 percent (4.8% decrease); and *Mental Retardation* from 22.34 percent to 12.50 percent (44.05% decrease).
- Slightly over two-thirds (68.3%) of all Maine students with disabilities, age 14 and older, who were known to leave school [according to the definition of *leaver* employed in this study] graduated with a regular school diploma between December 1, 2001 and December 1, 2002. According to the most recent data available (1998-1999 school year), the *national* graduation (standard diploma) rate for students with disabilities (all disabilities) was 57.4 percent.
- The graduation rates (regular diploma) *overall* were highest for Maine students within the *Hearing Impairment* (86.7%), *Autism* (84.6%) and *Visual Impairment* (83.3%) disability categories. However, relatively few students *overall* were represented in these categories (December 1, 2002 Child Count).
- Of the major disability categories [those containing the largest number of identified students] students within the *Specific Learning Disability* category achieved the highest graduation (with diploma) rate (75.8%), followed by students within the *Mental Retardation* (69.2%), *Speech/Language Impairment* (68.1%), *Other Health Impairment* (67.5%), *Multiple Disabilities* (63.5%), and *Emotional Disability* (42.9%) categories (December 1, 2002 Child Count).
- Students identified within the *Emotional Disability* category, among all disability categories, with very few exceptions, consistently represented the lowest graduation with regular diploma rate across all SAUs in Maine.
- The graduation with diploma rate (*total disabilities*) increased 4.4 percent between 2001 and 2002, from 65.87 percent in 2001 to 68.34 percent in 2002. For the three-year period (2000-2002) the graduation with diploma rate increased 4.5 percent.

- For the three-year period (2000-2002) the graduation with diploma rate *increased* for students identified within all of the major disability categories with the exception of *Emotional Disability* (4.7% decrease) and *Speech/Language Impairment* (6.4% decrease). During this three-year period, students identified within the *Multiple Disabilities* category reflected the largest increase in graduation with diploma rate (23.6%), from 48.5 percent in 2000 to 63.5 percent in 2002.
- Considerable fluctuation exists among some disability categories from year to year with respect to student graduation with diploma rates. For example, the graduation with diploma rate for students identified within the *Other Health Impairment* category was 66.9 percent in 2000. This rate dropped to 61.4 percent in 2001, but it again increased to 67.5 percent in 2002. Similarly, in 2000, the graduation with diploma rate for students identified within the *Mental Retardation* category was 67.0 percent. This rate dropped to 60.6 percent in 2001; however, it again increased to 69.2 percent in 2002.
- Wide variance exists among Maine SAUs with respect to graduation with regular diploma rates -- for both total disabilities and individual disability categories.
- Very few students with disabilities in Maine graduate with a certification of completion or by fulfilling their I.E.P. requirement. Only 59 students (3,0%) of all Maine students with disabilities, age 14 and older, who were known to leave school [according to the definition of *leaver* employed in this study] graduated with a certificate of completion or by fulfilling their I.E.P. requirement between December 1, 2001 and December 1, 2002.

The following tables (Table 20, Table 43, and Table 44) provide three-year trend data (2000-2002) re: Maine Students Dropout, Graduation with Regular Diploma, and Graduation with Certificate rates.

TABLE 20
Students with Disabilities, Age 14 and Older, Three-Year Dropout Trends (2000-2002):
Total Disabilities and Individual Disability Categories

Disability	Dropout Numbers	Leavers	Dropout Rate
<u>2002 Rates & Totals:</u>			
Total Disabilities	542	1,968	27.54%

Emotional Disability	154	287	53.66%
Specific Learning Disability	223	1,028	21.69%
Multiple Disabilities	41	156	26.28%
Mental Retardation	13	104	12.50%
Speech & Language Impairment	42	141	29.79%
Traumatic Brain Injury	4	13	30.77%
Visual Impairment	0	6	0.00%
Other Health Impairment	62	197	31.47%
Autism	1	13	7.69%
Hearing Impairment	2	15	13.33%
<u>2001 Rates & Totals:</u>			
Total Disabilities	540	1,840	29.35%

Emotional Disability	163	297	54.88%
Specific Learning Disability	235	984	23.88%
Multiple Disabilities	31	150	20.67%
Mental Retardation	21	94	22.34%
Speech & Language Impairment	41	127	32.28%
Traumatic Brain Injury	3	15	20.00%
Visual Impairment	1	9	11.11%
Other Health Impairment	42	127	33.07%
Autism	3	12	25.00%
Hearing Impairment	0	10	0.00%
<u>2000 Rates & Totals:</u>			
Total Disabilities	539	1,807	29.84%

Emotional Disability	157	307	51.14%
Specific Learning Disability	258	953	27.07%
Multiple Disabilities	41	134	30.59%
Mental Retardation	12	103	11.65%
Speech & Language Impairment	31	132	23.48%
Traumatic Brain Injury	1	15	66.70%
Visual Impairment	1	7	14.29%
Other Health Impairment	38	130	29.23%
Autism	0	9	0.00%
Hearing Impairment	0	7	0.00%

TABLE 43
Students with Disabilities, Age 14 and Older, Three-Year Graduation with
Diploma Trends (2000-2002): Total Disabilities and Individual Disability Categories

Disability	Graduate Numbers	Leavers	Graduation Rate
<u>2002 Rates & Totals:</u>			
Total Disabilities	1,345	1,968	68.34%

Emotional Disability	123	287	42.86%
Specific Learning Disability	778	1,028	75.68%
Multiple Disabilities	99	156	63.46%
Mental Retardation	72	104	69.23%
Speech & Language Impairment	96	141	68.09%
Traumatic Brain Injury	8	13	61.54%
Visual Impairment	5	6	83.33%
Other Health Impairment	133	197	67.51%
Autism	11	13	84.62%
Hearing Impairment	13	15	86.67%
<u>2001 Rates & Totals:</u>			
Total Disabilities	1,212	1,840	65.87%

Emotional Disability	118	297	39.73%
Specific Learning Disability	728	984	73.98%
Multiple Disabilities	97	150	64.67%
Mental Retardation	57	94	60.64%
Speech & Language Impairment	84	127	66.14%
Traumatic Brain Injury	10	15	66.67%
Visual Impairment	7	9	77.78%
Other Health Impairment	78	127	61.42%
Autism	9	12	75.00%
Hearing Impairment	10	10	100.00%
<u>2000 Rates & Totals:</u>			
Total Disabilities	1,179	1,807	65.25%

Emotional Disability	138	307	44.95%
Specific Learning Disability	687	953	72.09%
Multiple Disabilities	65	134	48.51%
Mental Retardation	69	103	66.99%
Speech & Language Impairment	96	132	72.73%
Traumatic Brain Injury	14	15	93.33%
Visual Impairment	6	7	85.71%
Other Health Impairment	87	130	66.92%
Autism	1	9	11.11%
Hearing Impairment	7	7	100.00%

TABLE 44
Students with Disabilities, Age 14 and Older, Three-Year Graduation with a Certificate Trends (2000-2002): Total Disabilities and Individual Disability Categories

Disability	Certificate Numbers	Leavers	Certificate Rate
<u>2002 Rates & Totals:</u>			
Total Disabilities	59	1,968	3.00%

Emotional Disability	8	287	2.79%
Specific Learning Disability	17	1,028	1.65%
Multiple Disabilities	12	156	7.69%
Mental Retardation	15	104	14.42%
Speech & Language Impairment	3	141	2.13%
Traumatic Brain Injury	0	13	0.00%
Visual Impairment	1	6	16.67%
Other Health Impairment	1	197	.51%
Autism	1	13	7.69%
Hearing Impairment	0	15	0.00%
<u>2001 Rates & Totals:</u>			
Total Disabilities	54	1,840	2.93%

Emotional Disability	6	297	2.02%
Specific Learning Disability	13	984	1.32%
Multiple Disabilities	12	150	8.00%
Mental Retardation	15	94	15.96%
Speech & Language Impairment	1	127	.79%
Traumatic Brain Injury	1	15	6.67%
Visual Impairment	7	9	77.78%
Other Health Impairment	5	127	3.94%
Autism	0	12	0.00%
Hearing Impairment	0	10	0.00%
<u>2000 Rates & Totals:</u>			
Total Disabilities	66	1,807	3.65%

Emotional Disability	9	307	2.93%
Specific Learning Disability	7	953	.73%
Multiple Disabilities	18	134	13.43%
Mental Retardation	19	103	18.45%
Speech & Language Impairment	4	132	3.03%
Traumatic Brain Injury	0	15	0.00%
Visual Impairment	0	7	0.00%
Other Health Impairment	1	130	.77%
Autism	7	9	77.78%
Hearing Impairment	0	7	0.00%

RECOMMENDATIONS AND SUGGESTIONS FOR FURTHER RESEARCH

Based upon the findings obtained in this study, several recommendations are offered, including suggestions for future research. The first set of recommendations are designed to improve the high school graduation rate, as well as to reduce the dropout rate, for *all* Maine public school students, including those students with disabilities. The second set of recommendations are specifically designed to help improve the high school graduation rate, as well as to reduce the dropout rate, for Maine students with disabilities.

Recommendations for School Board Members, Administrators, Teachers, and Professional Support Personnel in Maine Public Schools – Especially Members of Dropout Prevention Committees Re: Preventing School Dropouts Among All Maine Students

- 1) Effective, well-organized, and active *Dropout Prevention Committees* at the local school level are in the position to have an extremely positive impact upon reducing the student dropout rate in Maine public schools. Wide variance exists across Maine with respect to the efficacy of these Committees in their efforts to prevent student dropouts. In some school districts, these Committees are very active, well-organized, and are engaged in a wide variety of strategies and programs designed to prevent students from leaving school before they are able to complete their high school requirements. In other school districts, however, these Committees often appear to be essentially disorganized, lacking in any real clear purpose or direction, and offering, few, if any, discernible dropout prevention strategies or programs for students. In still other Maine school districts, these Committees do not appear to exist nor to have any meaningful function.

It is strongly recommended that school administrators at the local level make the role and responsibilities of these Committees a major priority within their districts and to provide the leadership that is required to ensure that these Committees are fully supported in their efforts to prevent students from leaving school early.

- 2) Based upon the findings of this study, the following recommendations (offered in the form of specific considerations and strategies) are provided to Maine public school administrators, teachers, members of Dropout Prevention Committees, as well as to members of the broader school-community at the local level, in their collective efforts to develop and implement the most appropriate and effective student dropout prevention programs within their schools.

Dropout prevention efforts must begin *early* and they must be *comprehensive*. Some students manifest behaviors very early during their school experience (beginning, in some cases when they very first enter school) which suggest that they may be at risk for eventually dropping out of school at some point. *Dropout prevention efforts must be initiated during the early elementary school years*. Typically, dropout prevention programs are implemented at the high school level. For many students, this is too late. *Early identification and early intervention generally are regarded as the keys to success in most dropout prevention programs.*

Dropout prevention efforts cannot be episodic or isolated. To be effective, *these programs need to be as comprehensive as possible – involving the family and the entire school community*. School personnel alone cannot be expected to solve the dropout problem. The factors and conditions that contribute to why students drop out of school are multiple and complex, and they require comprehensive, multi-faceted interventions. These efforts must represent a true collaboration among school personnel, students, peers, families, social service and mental health agencies within the community, and the general public at large within any given community. School personnel should make a concerted effort to reach out to the *entire community* and to make the argument that *dropout prevention* must be a shared responsibility and that everyone's active participation in this effort is necessary.

Dropout prevention efforts need to take into consideration that students drop out of school for different reasons at different times. The “one size fits all” dropout prevention approach doesn't work. Strategies and programs, in order to be effective, must be varied and take into consideration “local conditions” and be sensitive to individual student characteristics and needs. For some students, signs are evident from early on that they may be at high risk for eventually dropping out of school (e.g., poor academic grades, behavioral and disciplinary problems, frequent absences, etc.). For these students, their difficulties appear to be more chronic in nature, and they likely are viewed as being more easily predictable as “future dropouts.” For other students, however, there are few, if any, early signs that would appear to predict that they would drop out of school. Yet, they do. For many of these students, the reasons why they leave school are very situation-specific and may be the result of behavioral patterns – or even, in some cases, a specific event or situation -- that do not emerge until very late within their secondary school years, possibly even during their senior year of high school. Thus, *dropout prevention strategies and programs need to be flexible and diversified, taking into consideration the differences that research studies have identified between “early dropouts” and “late dropouts.”*

In their efforts to most efficiently and most accurately identify those students that would most likely benefit from dropout prevention strategies and programs, as well as to avoid possibly targeting the “wrong students,” it is recommended that dropout prevention committees “cast as broad net as possible” and that they should look at four types of information, as suggested by Gleason and Dynarski (1998): (1) *ecological characteristics*, such as neighborhood conditions or peer group effects, (2) *unobserved psychological factors* (e.g., persistence, resilience, optimism); (3) *measure of the persistence of specific characteristics over time* (characteristics or factors that lead to dropping out may have a more *cumulative* effect; performing poorly in school one year may lead to temporary disappointment and an increased resolve to do better; however, performing poorly in school for several years in a row may lead students to become detached from school and to believe that they are failures, eventually leading them to drop out – thus risk factors that measure student performance over several years may be better predictors of dropping out than those that measure performance over a single year); and (4) *transitory events that occur closer to the time that students decide to drop out* (some students may drop out not because of the cumulative effects of poor academic performance but because of an unexpected event that severely affects them, such as having a child, being arrested, initiating drug use, or experiencing serious personal problems at home).

It has been common practice for dropout prevention committees to rely heavily, if not exclusively, on a wide variety of “dropout predictor lists” or “risk factor characteristics” to identify those students that appear to be at the highest risk for dropping out of school – and

subsequently to target these students with dropout prevention programs or strategies. Results of recent research have shown that these “risk factor lists” are not particularly reliable as they frequently tend to target the “wrong students.” Many of these risk factor lists either (1) *over-identify* students for interventions who don’t necessarily need them, or (2) *under-identify* students who would benefit from interventions but who do not receive them because they fail to meet the “screening criteria” established by the “risk indicator list.” Determining a student’s “risk status” for dropping out of school is a complex, multi-stage process that involves several components, factors, conditions, and perspectives. *Dropout prevention committees need to recognize that no one single model for predicting future dropouts has been shown to be totally effective.* However, it is suggested that the “student risk determination model” [included in Appendix I of the Full Report] may be helpful to Dropout Prevention Committee members in their efforts to initiate and/or to expand upon dropout prevention programs and processes within their schools.

Recommendations Specifically Involving Maine Students with Disabilities

It is recommended that Maine public school personnel who are particularly interested in reducing the dropout rate for students with disabilities view this issue from both broad and very focused perspectives. First, it is suggested that the “students with disabilities dropout issue” needs to be placed in the larger context. *It is suggested that, at times, the reason and/or reasons why some students with disabilities drop out of school may have little, if anything, to do directly with their disability per se.* These students often leave school early for the same reasons that other non-disabled students drop out (e.g., personal, family, school, and community related factors and conditions). Clearly, having a disability may, for some students, exacerbate their difficulties and problems, thus increasing their likelihood for dropping out of school. However, for other students, their disability appears to have minimal, if any, direct connection to the reasons why they leave school.

Thus, it is suggested that *school personnel, in their efforts to keep students with disabilities in school, need to view this issue through a broader lens and to become actively engaged in dropout prevention programs and strategies for all students.* It is suggested that by doing this, they may be more effective in their efforts to ensure more positive outcomes for their students with disabilities. Having stated this, it is patently evident that students with disabilities drop out of school at a higher rate than do their non-disabled peers, and that often the reason or reasons why these students leave school may be directly, or indirectly, related to their disability. Thus, it is clear that *specific efforts at the local school level* also need to focus on preventing these students from dropping out. Following are some specific recommendations regarding this population of students.

- 1) Clearly, of all disability categories, Maine students within the *Emotional Disability* category are the most likely to drop out of school. Over one-half (53.7%) of the students, age 14 and older, identified within this category who were known to leave school between December 1, 2001 and December 1, 2002 dropped out. This particular finding is consistent with disability dropout data at the national level which, for several years, repeatedly has shown that students within the *Emotional Disability* category are far more likely than students within any of the other disability categories of special education to drop out. This finding strongly suggests that dropout prevention efforts in Maine need to specifically target this population of students.

In an effort to help reduce the dropout rate for students identified within the *Emotional Disability* category, it is recommended that the following actions be taken. First, a comprehensive review and analysis of the *overall programs* in which these students are currently participating within our public schools should be conducted. Specific strengths and weaknesses within these programs need to be identified and specific strategies need to be identified to improve the overall educational service delivery system for these students.

Second, it is recommended that those specific public school programs in Maine which have been identified in this study, as well as in other studies, as having earned an especially strong “track record” with respect to successful programming for students within the *Emotional Disability* category [e.g., high student graduation with diploma rate] be studied to identify the *specific reasons* for their apparent efficacy. It is suggested that the essential components and characteristics of these particular programs might serve as *effective models* for other schools in Maine who are struggling in their efforts to provide appropriate and meaningful programs for their students who are identified within the *Emotional Disability* category.

Third, it is recommended that a comprehensive review and study be conducted regarding the types and the quality of pre-service and in-service training in the area of *Emotional Disability* that currently are available at institutions of higher education in Maine. Arguably, a major factor that presently may be contributing to the high student dropout rate for Maine students within the *Emotional Disability* category involves the quality of training that the teachers of these students receive. It is recommended that this study be designed to identify possible gaps and inadequacies within personnel preparation programs and to suggest specific methods for improving the training for teachers who work with students presenting emotional/behavioral difficulties.

Fourth, it is suggested that the Maine Department of Education assume the lead in sponsoring a conference or symposium that focuses specifically on *strategies for decreasing the dropout rate for students with Emotional Disability*. It is suggested that this type of conference or symposium could be extremely beneficial by serving not only as a clearinghouse for the exchange of important information but also as an effective vehicle for highlighting the need for immediate and comprehensive action involving this particular population of students.

- 2) Students within the *Other Health Impairment* category represented the second highest category of Maine students who were known to have left school between December 1, 2001 and December 1, 2002 by dropping out. Nearly one-third (31.5%) of the students identified within the *Other Health Impairment* category dropped out. It is suggested that this finding raise several questions that require attention and action. Among these suggested questions are the following: What are the specific characteristics of the types of students who being identified within this category? Are the majority of the students who comprise this category those who have been diagnosed with AD/HD? Obsessive Compulsive Disorder? Tourette’s Disorder? Some other mental health disorder? Why are such relatively large numbers of these students dropping out? What programming changes and additional support services may be required to ensure that a greater percentage of students identified within the *Other Health Impairment* category are able to successfully complete their high school programs? *It is recommended that research studies designed to provide answers to these questions be conducted.*
- 3) It is recommended that all Maine SAUs, with guidance and support from the Maine Department of Education, make a concerted effort to develop and implement a more effective mechanism to “track” students with disabilities who are known to have left school

without completing their high school education. This “tracking mechanism” should include those students who are routinely reported in Maine’s EF-S-05 Child Count Exit Data Reports as (1) *dropped out*, (2) *moved, not known to be continuing*, and (3) *status unknown*. These categories represent relatively large numbers of Maine students who are known to exit each year – and yet, little is known relative to their *true status*. The most recent state-wide Maine Child Count data (December 1, 2002) indicate that for Maine students with disabilities, age 14 and older, 199 students were reported in the “status unknown” category, while 290 students were reported in the “moved, not known to be continuing” category.

It is conceivable that many of those students that are represented in either of the latter two categories listed above may indeed have dropped out of school but they are not being reported as such. Arguably, this situation not only serves to underestimate the *true dropout rate* but, more importantly, it arguably allows for the situation to persist in which many students who might be encouraged to remain in school and complete their high school education, do not – primarily because no-one is aware of their *true status* and, therefore, no efforts conceivably have been made to encourage them to remain in school.

Regarding Maine students with disabilities who are *known dropouts*, it is recommended that local school districts “track” these particular students on a yearly basis. This “tracking system” holds the potential for yielding important information regarding *specific reasons* why *individual students* with disabilities drop out of school. This information, then, could be used in two ways: (1) to possibly help those individual students return to school, if this is considered to be feasible, and (2) to analyze the information collected to explore ways to prevent other students from dropping out.

- 4) Findings generated from this study suggest the need for several studies to be conducted (some of them mentioned in earlier recommendations) including a series of related research studies that focus on the *specific reasons* why *individual students with disabilities*, within a *specific school environment*, drop out of school. It is suggested that in order to significantly improve the chances for many students with disabilities to complete school we need to discover much more about not only the specific reasons why many of these students drop out, but also we need to learn a great deal more about their individual school cultures and programs. These studies would be conducted in a sample of schools throughout Maine that reported higher than average student dropout rates (for both total disabilities and individual disability categories), and they would involve comprehensive analyses of programs and staff, and in-depth qualitative student interviews involving both current students and students who already have dropped out.