

68072

Mississippi Department of Corrections

SYSTEMS DEVELOPMENT

ANALYSIS OF ACADEMIC PERFORMANCE

Volume I

Inmates Reporting Twelfth Grade Education

Prepared by:  
Sandra K. C. Martin

W. Scott Fulton, Director  
Systems Development

August 16, 1979

68072

TABLE OF CONTENTS

	Page
INTRODUCTION.....	1
MAJOR FINDINGS.....	2
SUMMARY FINDINGS.....	3
CONCLUSIONS.....	6
RECOMMENDATION.....	7

LIST OF TABLES

Tested Reading Level.....	8
Tested Writing Level.....	9
Tested Arithmetic Level.....	10
Inmates Reporting a 12th Grade Education Below The State Average.....	11
Tested Reading Level by Date of Birth.....	12
Tested Writing Level by Date of Birth.....	13
Tested Arithmetic Level by Date of Birth.....	14
Tested Intelligence.....	15
Reading by Tested Intelligence--Black.....	16
Writing by Tested Intelligence--Black.....	17
Arithmetic by Tested Intelligence--Black.....	18
Reading by Tested Intelligence--White.....	19
Writing by Tested Intelligence--White.....	20
Arithmetic by Tested Intelligence--White.....	21

## Introduction

The purpose of this report is to evaluate the reported 12th grade graduate found in the Mississippi prison population in terms of tested average reading, writing, and arithmetic levels. An attempt was then made to compare the test scores to 12th grade students within the State of Mississippi.

Data was drawn from the Mississippi Department of Corrections, Systems Development computer files. Average test scores were used in making comparisons. Results are presented in both narrative and tabular form.

Test results were available on 582 inmates. Of that number, 89 reported completion of the 12th grade and these constitute the Target Population of this report. A further report on the total tested population is scheduled to follow.

Although no one of the Systems Development staff is a behavioral scientist, educator or sociologist, we have nevertheless proceeded to base this report upon two assumptions (which we believe are conservative, but which may be freely questioned by properly qualified authorities):

1. That inmates who perform at the fourth grade level or lower in any of the three tested areas are limited in the future to common labor or, as its probable alternative, more crime.
2. That persons of dull normal intelligence can significant-

ly advance their academic functioning if properly educated. .

For the State of Mississippi, average reading level for 12th grade students is approximately the 9th grade with writing and arithmetic slightly higher at 10th grade levels.

#### Major Findings

1. Tested reading level for the Target Population ranges from 1st grade to college senior with average being 7th grade. Tested writing and arithmetic levels for this population are somewhat lower, approximately 6th grade and 4th grade respectively, with writing ranging from 1st grade to sophomore college and arithmetic from 1st grade to 10th grade.
2. In all but one academic area (the reading level of white males) the Tested Population falls considerably beneath State averages. Approximately 65 percent read below the 9th grade, while 88 percent write below the state average of 10th grade and 97 percent function at less than the 10th grade in arithmetic.
3. Approximately half (49 percent) of the Tested Population function at the fourth grade level or lower in at least one of the three tested areas (arithmetic).

4. However, a large segment of the Tested Population has the intelligence to perform at higher academic levels than testing indicates. Approximately 36 percent are of normal intelligence and 8 percent are of higher. Although 53 percent fall below normal, 31 percent of the total test at dull normal. In short, 75 percent test above borderline.
5. Of the 49 percent who function at a fourth grade arithmetic level or lower, more than half of them (55%) test at dull normal intelligence or higher.
6. Curiously enough, older black males, those that probably finished high school before 1964, test higher academically than the younger groups of blacks. In fact, performance progressively decreases from the oldest to the youngest group.

#### Summary Findings

Of the total Target Population of 89 inmates:

58 (65%) read below average, but 37 of these (42% of the 89 and 64% of the 58) test at dull normal intelligence or higher and could perform better academically if properly educated.

78 (88%) write below average, but 53 of these (60% of the 89

and 68% of the 78) test at dull normal intelligence or higher.

86 (97%) function below the average arithmetic level, but 61 of these (69% of the 89 and 71% of the 86) test at dull normal intelligence or higher.

20 (22%) read at a fourth grade level or lower, but 7 of these (8% of the 89 and 35% of the 20) test at dull normal intelligence or higher.

28 (31%) write at a fourth grade level or lower, but 14 of these (16% of the 89 and 50% of the 28) test at dull normal intelligence or higher.

44 (49%) function at a fourth grade arithmetic level or lower, but 24 of these (27% of the 89 and 55% of the 44) test at dull normal intelligence or higher.

Of 56 black inmates:

45 (80%) read below average, but 24 of these (43% of the 56 and 53% of the 45) test at dull normal intelligence or higher and could do better if properly educated.

54 (96%) write below average, but 30 of these (54% of the 56 and 56% of the 54) test at dull normal intelligence or higher.

All 56 (100%) function below the average arithmetic level, but of these 32 (57%) test at dull normal intelligence or higher.

20 (36%) read at a fourth grade level or lower, but of these 7 (13% of the 56 and 35% of the 20) test at dull normal intelligence or higher.

24 (43%) write at a fourth grade level or lower, but of these 9 (16% of the 56 and 38% of the 24) test at dull normal intelligence or higher.

39 (70%) function at a fourth grade arithmetic level or lower, but of these 19 (34% of the 56 and 49% of the 39) test at dull normal intelligence or higher.

Of 33 white inmates:

13 (39%) read below average, but all of these (100% of the 33 and 100% of the 13) test at dull normal intelligence or higher.

24 (73%) write below average, but all of these (100% of the 33 and 100% of the 22) test at dull normal intelligence or higher.

30 (91%) function below the average arithmetic level, but all of these (100% of the 33 and 100% of the 30) test at dull normal intelligence or higher.

All (100%) read above a fourth grade level.

5 (15%) write at a fourth grade level or lower, and all 5 (100% of the 33 and 100% of the 5) test at dull normal intelligence or higher.

5 (15%) function at a fourth grade arithmetic level or lower, and all 5 (100% of the 33 and 100% of the 5) test at dull normal intelligence or higher.

There is sufficient evidence to indicate that persons who test at the dull normal level of intelligence can be academically advanced. Of the 31 inmates of all races who tested at dull normal intelligence:

22 (71% of the 31) read above the fourth grade level.

17 (55% of the 31) write above a fourth grade level.

12 (39% of the 31) function above a fourth grade arithmetic level.

3 (10% of the 31) read above the State average of 9th grade.

2 (6% of the 31) write above the State average of 10th grade.

3 (10% of the 31) function above the State average of 9th grade.

#### Conclusions

It is estimated that approximately 56 percent of this Target

Population demonstrates a need for remedial education and also possesses the intelligence to benefit from it.

Of the 34 percent who function at a fourth grade level or lower in at least one of the tested areas and are therefore considered to be in dire need of remedial education, more than half are smart enough to advance academically.

#### Recommendation

Based upon the evidence provided in this report and the additional support anticipated from the second volume on the Total Tested Population (582 inmates), the Department of Corrections should carefully assess its present capacity for delivering adult basic education and seriously consider its expansion and upgrading.

TESTED READING LEVEL  
 NO. = 89      AVERAGE = 7TH GRADE

	WHITE		BLACK		TOTAL		% OF TESTED POPULATION
GRADE 1	0		3		3		(3)
2	0		3		3		(3)
3	0		6		6		(7)
4	1		7		8		(9)
5	1		6		7		(8)
6	4		11		15		(17)
7	2		4		6		(7)
Subtotal 8	6	(14)	4	(44)	10	(58)	(11) (65%)
9*	4		7		11		(12)
10	2		2		4		(4)
11	3		1		4		(4)
12	7		0		7		(8)
13	1		1		2		(2)
14	2		0		2		(2)
15	1		0		1		(1)
TOTAL	34		55		89		(100)

\*present State average for a 12th grade student

TESTED WRITING LEVEL  
 NO. = 91      AVERAGE = 6TH GRADE

	WHITE MALE		BLACK MALE		TOTAL		% OF TESTED POPULATION
GRADE 1	0		1		1		(1%)
2	0		6		6		(7)
3	2		8		10		(11)
4	2		9		11		(12)
5	2		10		12		(13)
6	3		7		10		(11)
7	6		9		15		(17)
8	2		3		5		(6)
Subtotal 9	7	(24)	1	(54)	8	(78)	(9) (88%)
10*	6		1		7		(8)
11	0		0		0		
12	1		1		2		(2)
13	0		0		0		
14	2		0		2		(2)
15	0		0		0		
TOTAL	33		56		89		(100)

\*present State average for a 12th grade student

TESTED ARITHMETIC LEVEL  
 NO. = 89                      AVERAGE = 4TH GRADE

	WHITE		BLACK		TOTAL	% OF TESTED POPULATION	
GRADE 1	0		3		3	(3)	
2	1		7		8	(9)	
3	2		14		16	(18)	
4	2		15		17	(19)	
5	2		4		6	(7)	
6	12		9		21	(24)	
7	5		2		7	(8)	
8	3		2		5	(6)	
Subtotal 9	3	(30)	0	(56)	3	(86)	(3) (97%)
10*	3		0		3	(3)	
11	0		0		0		
12	0		0		0		
13	0		0		0		
14	0		0		0		
15	0		0		0		
TOTAL	33		56		89	(100)	

\*present State average for a 12th grade student

PERCENT OF TESTED INMATES REPORTING A 12TH GRADE EDUCATION BELOW THE AVERAGE FOR THE PRESENT 12TH GRADE MISSISSIPPI STUDENT.

		DATE OF BIRTH		1945 & BEFORE		1946-1950		1951-1955		1956-1960		TOTAL	
		NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
<u>READING</u> N = 58	BLACK	4	31	10	48	17	49	14	93	45	78		
	WHITE	4	31	3	14	4	11	2	13	13	22		
	Total	8	62	13	62	21	60	16	77	58	100		

		DATE OF BIRTH		1945 & BEFORE		1946-1950		1951-1955		1956-1960			
		NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
<u>WRITING</u> N = 78	BLACK	4	31	12	57	23	69	15	73	54	70		
	WHITE	7	54	6	29	6	17	5	23	24	30		
	Total	11	85	18	86	29	86	20	96	78	100		

		DATE OF BIRTH		1945 & BEFORE		1946-1950		1951-1955		1956-1960			
		NO.	%	NO.	%	NO.	%	NO.	%	NO.	%	NO.	%
<u>ARITHMETIC</u> N = 86	BLACK	4	31	13	62	24	71	15	73	56	66		
	WHITE	9	69	7	33	9	26	5	23	30	34		
	Total	13	100	20	95	33	97	20	96	86	100		

## TESTED READING LEVEL

N = 89

DATE OF BIRTH	1945 OR BEFORE	1946-1950	1951-1955	1956-1960	TOTAL					
GRADE 1	0	3	0	0	3					
2	0	1	2	0	3					
3	1	0	3	2	6					
4	2	2	2	2	8					
5	0	0	5	2	7					
6	4	2	3	6	15					
7	0	2	4	0	6					
<u>Subtotal 8</u>	<u>1</u>	<u>(8)</u>	<u>3</u>	<u>(13)</u>	<u>2</u>	<u>(21)</u>	<u>4</u>	<u>(16)</u>	<u>10</u>	<u>(58)</u>
9*	0	4	4	3	11					
10	0	1	3	0	4					
11	1	1	2	0	4					
12	2	2	2	1	7					
13	0	0	1	1	2					
14	1	0	1	0	2					
15	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>1</u>					
TOTAL	13	21	34	21	89					

\*present State average for a 12th grade student

TESTED WRITING LEVEL  
N = 89

DATE OF BIRTH	1945 OR BEFORE	1946-1950	1951-1955	1956-1960	TOTAL
GRADE 1	0	0	1	0	1
2	0	5	0	1	6
3	3	0	5	2	10
4	2	3	2	4	11
5	1	2	6	3	12
6	2	2	3	3	10
7	0	3	7	5	15
8	1	1	3	0	5
Subtotal 9	2 (11)	2 (18)	2 (29)	2 (20)	8 (78)
10*	0	3	3	1	7
11	0	0	0	0	0
12	1	0	1	0	2
13	0	0	0	0	0
14	1	0	1	0	2
15	0	0	0	0	0
TOTAL	13	21	34	21	89

\*present State average for a 12th grade student

TESTED ARITHMETIC LEVEL  
N = 89

DATE OF BIRTH	1945 OR BEFORE	1946-1950	1951-1955	1956-1960	TOTAL
GRADE 1	1	1	1	0	3
2	1	4	1	2	8
3	2	4	9	1	16
4	2	3	7	5	17
5	2	0	1	3	6
6	4	3	8	6	21
7	0	4	2	1	7
8	0	1	2	2	5
Subtotal 9	1 (13)	0 (20)	2 (33)	0 (20)	3 (86)
10*	0	1	1	1	3
11	0	0	0	0	0
12	0	0	0	0	0
13	0	0	0	0	0
14	0	0	0	0	0
15	0	0	0	0	0
TOTAL	13	21	34	21	89

\*present State average for a 12th grade student

TESTED INTELLIGENCE  
 N = 83 AVERAGE = 4.7

INTELLIGENCE	RACE		TOTAL	% OF REPORTED TESTED POP.
	WHITE	BLACK		
1 Very Superior	0	0	0	
2 Superior	1	0	1	(1)
3 Bright Normal	5	1	6	(7)
4 Normal	16	15	<u>31</u>	<u>(36)</u>
5 Dull Normal	10	16	26	(31)
6 Borderline	0	16	16	(19)
7 Mental Defective	0	3	3	(4)
Total	32	51	83	(100)

READING  
BLACK N = 56

TESTED INTELLIGENCE	VERY SUPERIOR	SUPERIOR	BRIGHT NORMAL	NORMAL	DULL NORMAL	BORDERLINE	MENTAL DEFECTIVE	NOT REPORTED	TOTAL
TESTED GRADE LEVEL									
1					1	2			3
2					2		1		3
3						4	1	1	6
4				3	1	3	1		8
5					4	2			6
6				4	4	3			11
7				1	1	1		1	4
8			1	1	1			1	4
9				3	1	1		2	7
10				2					2
11					1				1
12									
13				1					1
14									
15									
TOTAL			1	15	16	16	3	5	56

WRITING  
BLACK N = 56

TESTED INTELLIGENCE	VERY SUPERIOR	SUPERIOR	BRIGHT NORMAL	NORMAL	DULL NORMAL	BORDERLINE	MENTAL DEFECTIVE	NOT REPORTED	TOTAL
TESTED GRADE LEVEL									
1						1			1
2				1	2	1			6
3					3	4	1		8
4				2	1	3	1	2	9
5			1	4	2	1	1	1	10
6				2	3	2			7
7				3	4	2			9
8				1				2	3
9				1					1
10				1					1
11									
12					1				1
13									
14									
15									
TOTAL			1	15	16	16	3	5	56

ARITHMETIC  
BLACK N = 56

TESTED INTELLIGENCE	VERY SUPERIOR	SUPERIOR	BRIGHT NORMAL	NORMAL	DULL NORMAL	BORDERLINE	MENTAL DEFECTIVE	NOT REPORTED	TOTAL
TESTED GRADE LEVEL 1						3			3
2				2	1	4			7
3				2	4	5	3		14
4				4	6	3		2	15
5				1	3				4
6				4	2	1		2	9
7				1				1	2
8			1	1					2
9									
10									
11									
12									
13									
14									
15									
TOTAL			1	15	16	16	3	5	56

READING  
WHITE N = 33

TESTED INTELLIGENCE	VERY SUPERIOR	SUPERIOR	BRIGHT NORMAL	NORMAL	DULL NORMAL	BORDERLINE	MENTAL DEFECTIVE	NOT REPORTED	TOTAL
TESTED GRADE LEVEL 1									
2									
3									
4									
5					1				1
6					4				4
7					2				2
8			1	3	2				6
9			1	2	1				4
10				2					2
11		1		2					3
12			2	5					7
13				1					1
14				1				1	2
15			1						1
TOTAL		1	5	16	10			1	33

WRITING  
WHITE N = 33

TESTED INTELLIGENCE	VERY SUPERIOR	SUPERIOR	BRIGHT NORMAL	NORMAL	DULL NORMAL	BORDERLINE	MENTAL DEFECTIVE	NOT REPORTED	TOTAL
TESTED GRADE LEVEL 1									
2									
3					2				2
4			1		1				2
5					2				2
6			1		2				3
7				4	2				6
8			1	1					2
9		1	1	4				1	7
10				5	1				6
11									
12			1						1
13									
14				2					2
15									
TOTAL		1	5	16	10			1	33

ARITHMETIC  
WHITE N = 33

TESTED INTELLIGENCE	VERY SUPERIOR	SUPERIOR	BRIGHT NORMAL	NORMAL	DULL NORMAL	BORDERLINE	MENTAL DEFECTIVE	NOT REPORTED	TOTAL
TESTED GRADE LEVEL									
1									
2			1						1
3					2				2
4			1		1				2
5					1			1	2
6			2	6	4				12
7			1	2	2				5
8				3					3
9				3					3
10		1		2					3
11									
12									
13									
14									
15									
TOTAL		1	5	16	10			1	33