

高等學校 平面構成 現況 研究

- 設計 學校 平面圖 分析 -

A Study on the Plan Organization Status of High Schools Facilities

- Through Analyzing of Recently Designed Plan Drawings -

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Rieu, Ho-Seoup

Abstract

According to seventh curriculum, new types of school design have been developed recently. However there are hardly any data of national status about plan and area organization, types and number of rooms of those.

On this background, the purpose of this study is to provide fundamental resources for architectural designing and planning of high schools and to recognize national status of plan organizations of high schools through collecting 53 school's standard design drawings(arrangement, plan drawing) which city, province education office drafted for 4 years(from 1997 to 2000) and analyzing them into plan types, building area and type, number and area of rooms.

The results of this study are as follows:

1. The range of class number of designed 53 high schools varies from 24 to 36 and 36-class-schools are 47.2% of all. Average number of class is 34.1. As a result we can find out large scale schools are mainly designed.

2. Among 53 schools, 21 schools have the department system but few of them equipped sufficient rooms and their features are very manifold. After recognizing utilization status of each schools, the standards of room type, number and plan organization should be proposed. In terms of plan type for fluent level based transferring class, most of schools are not apt.

3. In the status of type and number of rooms related to class number, range is very wide. So simplification is necessary.

4. The variations of building area, area per a class and area per a student are very large so that standard of adequate area should be established.

5. That every school which has different plan organization from conventional schools exceeds ministry of education's minimum area standards shows those standards cannot cover the diverse plan design of school. So more adequate standards should be proposed.

6. Area and number of Teacher's research room and Home Base are also very manifold from school to school. They are also considered to be simplified immediately.

Keywords : High School, Seventh Curriculum, Department System, Plan Design, Area

1.

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7
(
가
1)
7

7
2)
가
7

7

1997 2000
4
53
(1998. 6. 2001. 6.)
가

1) 가
가
2) 1997.12. , 1998. 6. 5
2 , 1999.4(15 4)
2001

2.

53
가
가
1997 2000 7
3) , [-1].
-2]



1 , 2000



2 , 1999

1 , 1) , (,
1) .
53 , <
-1> .
39.6% (21) , 13.2% (7
) , 5
가 1

3) 가 가 가
가 가 / / 가
가
1997 2000

1997
20 (37.7%), 2000 18 (33.9%)

53

1

< -3>

24	0 (0.0)	1 (50)	1 (20)	0 (0.0)	1 (14.3)	0 (0.0)	2 (9.5)	1 (20)	2 (100)	1 (100)	1 (50)	10 (18.9)
28	0 (0.0)	0 (0.0)	0 (0.0)	1 (100)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (1.9)
30	1 (25)	1 (50)	3 (60)	0 (0.0)	0 (0.0)	3 (100)	2 (9.5)	4(80)	0 (0.0)	0 (0.0)	0 (0.0)	14 (26.4)
33	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (4.8)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (1.9)
36	1 (25)	0 (0.0)	1 (20)	0 (0.0)	6 (85.7)	0 (0.0)	16 (76.2)	0 (0.0)	0 (0.0)	0 (0.0)	1(50)	25 (47.2)
45	2 (50)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	2 (3.8)
	4 (100)	2 (100)	5 (100)	1 (100)	7 (100)	3 (100)	21 (100)	5 (100)	2 (100)	1 (100)	2 (100)	53 (100)

3, 2

(39.6%) , 가 21
가 11

가

+ 가 가 15
()

가 ()

가 4

2)

53

< -2>

, 24 45

36 가 25 가

47.2% 30

14 (26.4%), 24 10 (18.9%)

2 (%)

	1997	1998	1999	2000	
24	3(15.0)	1(16.7)	0(0.0)	6(33.3)	10(18.9)
28	0(0.0)	0(0.0)	1(11.1)	0(0.0)	1(1.9)
30	9(45.0)	1(16.7)	0(0.0)	4(22.2)	14(26.4)
33	0(0.0)	1(16.7)	0(0.0)	0(0.0)	1(1.9)
36	6(30.0)	3(50.0)	8(88.9)	8(44.4)	25(47.2)
45	2(10.0)	0(0.0)	0(0.0)	0(0.0)	2(3.8)
	20(100)	6(100)	9(100)	18(100)	53(100)

4

34.1

가

3.

A-1	+T · S +M · S+H · B	4 (7.5)	21 (39.6)	
A-2	+T · S +H · B	15 (28.35)		
A-3	+T · S	2 (3.8)		
B-1	+ . . .	10 (18.9)	11 (24.5)	
B-2	+ +M · S	1 (1.9)		
C-1	+T · S	17 (32.1)	21 (39.6)	
C-2	H · B/O · S/M · S	4 (7.5)		
			53(100)	

: T · S : , M · S : ,
H · B : , O · S :

[-3] 4) , (.

), , ,

1990

4)

84 1999.4(15 4)



3

가

26

(

),

가

27

B-1

가 가

7

가

A-1

A-2, A-3,

B-1 · B-2, C-2, C-1

가

4.

< -4>

64

1)

()

가

57

8

가

4

	()	(T · S)
	(M.S)	
	(O.S)	
		()
		/
	가	
	(H · B)	HALL
	()	
		/
	(T · S)	

21

< -5>

가

가

가

가

가

가

가

가

< -7> ,
< -6> ,

6 ()

24	0	3	3	1
	0	4	1	1
	2	2	4	2
	5	5	7	1
28	0	4	4	1
30	0	3	3	2
	0	4	4	1
	1	3	4	1
36	0	2	2	1
	0	4	5	4
	1	4	5	3
	2	4	6	1
	3	2	5	1
	3	4	7	1
				21

가 , , , 가

8 ()

24	0	0	0	1
	0	1	1	3
	1	1	2	1
28	0	1	1	1
30	0	1	1	4
36	0	1	1	10
	2	0	2	1
				21

9 ()

		24	30	33	36	45	
	1	2	5	0	4	0	11
		2	5	0	4	0	11
	1	3	5	1	10	2	21
		3	5	1	10	2	21

21 10
1

5 가 가

4 가 3 가
가

7 ()

		24	30	33	36	45	
	1	1	-	-	-	-	1
	2	-	-	-	-	-	-
	3	1	2	-	0	-	3
	4	0	3	-	4	0	7
		2	5	-	4	0	11
	2	-	-	-	2	-	2
	3	1	1	1	7	-	10
	4	2	4	-	1	2	9
		3	5	1	10	2	21

< -8> < -15> , ,

가

가 1 가 ,

1 2

(
+ , + + , + ,
가 +) ,

가 7

가 ()

24	0	1	1	4
	0	2	2	1
28	0	1	1	1
30	0	1	1	4
36	0	1	1	9
	1	1	3	1
	1	2	4	1
				21

11 (.)

		24	30	33	36	45	
	1	2	5	0	4	0	11
	0	0	0	0	1	0	1
	1	3	4	1	9	2	19
	2	0	1	0	0	0	1
		3	5	1	10	2	21

12 (.)

		24	30	33	45	
	0	0	0	0	1	
24	0	1	1	3		
	1	0	1	1		
28	0	0	0	1		
30	0	1	1	4		
	0	0	0	1		
36	0	1	1	10		
				21		

13 (.)

		24	30	33	36	45	
	0	0	3	0	1	0	4
	1	2	2	0	3	0	7
		2	5	0	4	0	17
	0	1	1	0	0	0	2
	1	2	4	1	10	2	19
		3	5	1	10	2	21

14 가 . (.)

	가	가			
		24	30	45	
	0	1	1	4	
24	0	2	2	1	
28	2	0	2	1	
30	0	1	1	4	
	0	0	0	2	
36	0	1	1	7	
	1	0	1	1	
	1	1	2	1	
				21	

15 가 (.)

	가						
		24	30	33	36	45	
	0	0	3	0	0	0	3
	1	2	2	0	4	0	8
		2	5	0	4	0	11
	0	1	1	0	0	0	2
	1	2	4	1	10	2	19
		3	5	1	10	2	21

6 31

29 (6, 4, 4, 2, .
13) 가 가 1

2)
< -16>
가 1 , ,
가 , ,
가 , ,
가 .

16

		24	28	30	33	36	45	(53)
		(10)	(1)	(14)	(1)	(25)	(2)	
		11	1	16	1	26	2	57
		10	1	12	0	24	2	49
		5	0	7	0	13	0	25
		6	1	5	0	12	2	26
		9	1	14	1	25	2	52
		1	0	2	0	1	0	4
		2	0	2	0	3	0	7
		15	4	7	0	18	1	45
		7	0	8	0	10	0	25
		2	0	1	0	0	0	3

가 26

3 (A : 1
, B : 2 3 , C :
)
< -17>
C

50%

가

17

	A	B	C	
	4	10	12	26

3)
< -18>
, , ,
가

18

	24 (10)	28 (1)	30 (14)	33 (1)	36 (25)	45 (2)	(53)
	10	1	14	1	25	2	53
	11	1	14	1	24	2	53
	9	0	14	1	28	2	54
	79	9	78	4	170	21	361
	0	0	0	0	1	0	1
	0	0	5	0	1	1	7
	3	1	4	0	9	2	19
	9	1	13	0	21	2	46
	14	1	17	0	23	2	57
	7	1	7	1	17	2	35
	4	1	6	1	8	1	21
	9	0	13	1	21	2	46
	3	0	3	0	7	0	13
	1	0	2	0	1	0	4
	7	0	7	1	16	1	32

5)

- 20>

20

	24 (10)	28 (1)	30 (14)	33 (1)	36 (25)	45 (2)	(53)
	2	1	1	0	4	2	10
	3	0	5	1	5	0	14
/	2	0	4	0	1	0	7
	2	0	1	0	0	0	3
	0	0	2	0	2	0	4
	0	0	2	0	0	0	2
	0	0	1	0	1	0	2

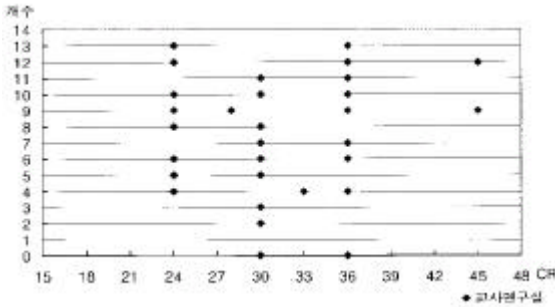
[-4]

가

4)

- 19>

1 , /



4

19

	24 (10)	28 (1)	30 (14)	33 (1)	36 (25)	45 (2)	
	10	1	14	1	27	2	55
/	8	1	12	1	21	2	45
	5	1	6	0	18	1	31
	4	1	7	1	17	1	31
	1	0	0	1	2	0	4
	3	0	5	0	3	0	11

<

5.

1997 9

()

()

< - 21>

가 120

14N, 720

960+6N, 720

1,680+5N(N)

53

, 1

, 1

21

()

	()	(m ²)
2	60	840
3	120	1,680
6	240	2,400
12	480	3,840
18	720	5,280
24	960	6,480
30	1,200	7,680
36	1,440	8,880
42	1,680	10,080

< - 22>

1

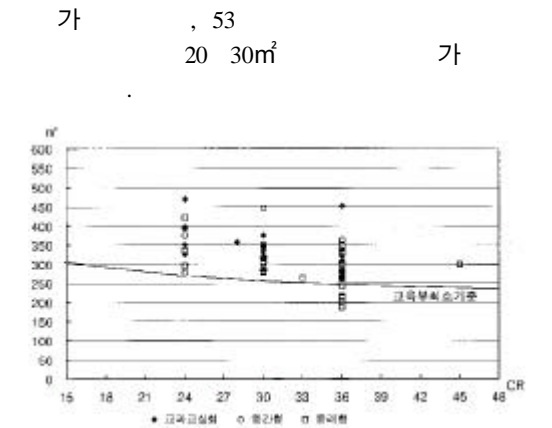
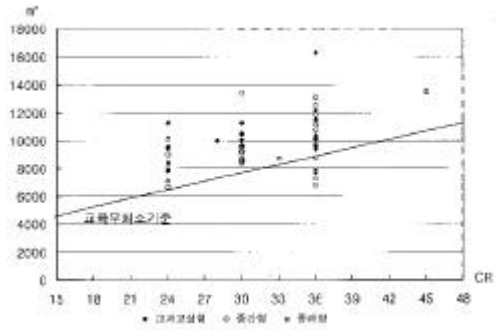
1

1)

53

[-5] 가 1.6 가 36 9,480m²

2) 1 53 1 < -22> , [-6] 189.1 m² 469.7m²



5 (88.7%) 6 (11.3%) 가

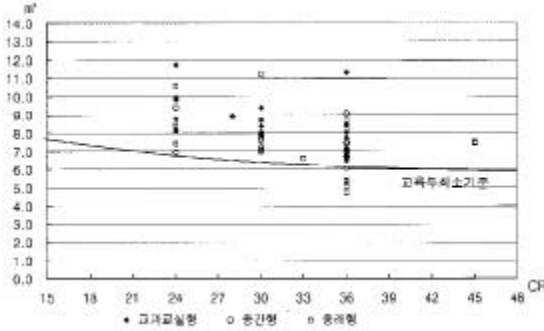
6 1 < -23> 1

22 1 1

	1	1
1997	20	296.2
1998	6	287.4
1999	9	311.0
2000	18	334.1

()	1			1					
24(5)	9301.61	11271.95	7809.80	387.57	469.66	325.41	9.69	11.74	8.14
28(1)	10008.13	10008.13	357.43	357.43	357.43	357.43	8.94	8.94	8.94
30(4)	10355.71	11259.13	9650.01	343.58	375.30	315.22	8.59	9.38	7.88
36(11)	11410.20	16287.84	9374.27	316.10	452.44	260.40	7.90	11.31	6.51
24(2)	7850.48	9025.18	6675.77	327.10	376.05	278.16	8.18	9.40	6.95
30(5)	9104.74	9582.93	8496.72	303.04	319.43	283.22	7.58	7.99	7.08
36(4)	10905.87	13081.11	9667.78	302.94	363.36	268.55	7.57	9.08	6.71
24(3)	8448.40	10146.52	7126.36	352.02	422.77	296.93	8.80	10.57	7.42
30(5)	9974.36	13422.23	8388.10	332.48	447.41	279.60	8.31	11.19	6.99
33(1)	8743.18	8743.18	8743.18	264.94	264.94	264.94	6.62	6.62	6.62
36(10)	9113.45	12547.07	6807.42	252.23	348.53	189.10	6.31	8.71	4.73
45(2)	13498.56	13525.22	13471.90	299.97	300.56	299.38	7.50	7.51	7.48

3) 1
53 1 < -22> ,
[-7]



7 1

4.73㎡ 11.74㎡

, 2.48 가

7.85㎡ 9.65㎡, 7.58㎡

8.74㎡, 6.31㎡ 8.80㎡
가

4)

(1)

, ()

(20)

< -24>

23.98㎡ 148.5㎡

59 가

가

67.5㎡

57.2%

24

			%
0	-33.75	30	1.7
	33.75	15	0.8
33.75	-67.5	220	12.4
	67.5	1013	57.2
67.5	-101.25	450	25.4
	101.25	6	0.3
101.25	-135	23	1.3
	135	2	0.1
135	-202.5	12	0.7
		1771	100

(2)

2 , 135㎡ . 53

< -25>

138

1/2

67.5㎡ 221.67㎡

135

㎡ 97 (20.3%) 가 .6)

가

25

					가			
67.5	0	0	1	1	0	1	0	3
67.5 - 101.25	6	4	4	3	1	4	1	23
101.25	15	4	4	2	3	5	9	42
101.25 - 135	63	17	14	15	12	11	13	145
135	37	6	11	10	14	8	11	97
135 - 168.75	54	12	17	14	17	3	22	139
168.75	1	0	0	0	0	2	2	5
168.75 - 202.5	1	6	2	0	1	0	6	16
202.5	0	0	0	0	0	0	0	0
202.5 - 236.25	1	2	1	0	1	1	3	9
	178	51	54	45	49	35	67	479

(3)

가

20.65

㎡ 145㎡(78.96㎡)

가

(4)

가

26

1

1

< -26>

가

, 1

5.6㎡

39.7㎡(16.4㎡)

가

1

0.14㎡ 0.99㎡(0.41㎡)

() ,

2/3 7)

6) ㎡ 135㎡ 가 101.25

7) 뉴스쿨디자인사典編輯委員會, 뉴스쿨디자인사典, 株式會社事典産業調査會 事典出版セン

가

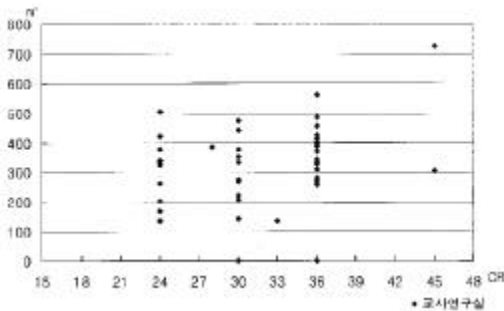
26

()		1			1		
24(6)	421.0	17.54	24.60	11.33	0.44	0.62	0.28
28(1)	491.4	17.55	17.55	17.55	0.44	0.44	0.44
30(5)	434.6	14.49	21.17	11.76	0.36	0.53	0.29
36(12)	610.0	16.94	39.67	5.63	0.42	0.99	0.14
45(2)	695.6	15.46	17.66	13.25	0.39	0.44	0.33
		16.40			0.41		

(5)
53 ()
[-8]

가 가
가 가
가 가

가

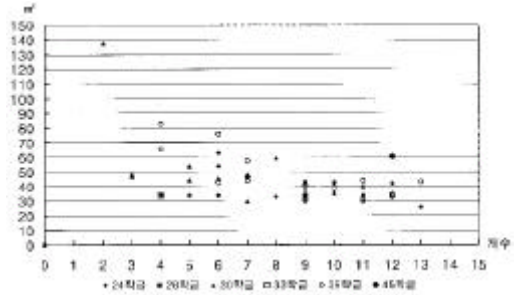


8

[-9]
가 가
40m²
40m² 1 6 8

ター、1997. 166 2/3

8)



9

6.

1997 2000 4
53

1. 53 24
45, 36 가
47.2% 34.1 가
2. 가 21
가

3. 7

8) ニュースクールデザイン事典編輯委員會、ニュースクールデザイン事典、株式会社事典産業調査會、事典出版センター、1997. 157 1 10m²

4. 가 1) , , 1997.12,
5. , 1 , 1 가 2) , , 1998.
- 가 6, 5 2 3) , 1999.4(15 4)
- 4) , , 2001
6. 가 5)長倉康彦 (1995), 4 , 22 ,
- 가 6)ニュースクールデザイン事典編輯委員會, ニュー
 スクールデザイン事典, 株式會社事典産業調査會 事
 典出版センター、1997.
- 가 7) 가 , 가
 , 1997. 12, 1999. 12, 2001. 12
- 가 < .>
- 4
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- 7
- 가