



Le projet STAR : mesurer l'effet de la taille des classes

Nico Hirtt (Aped). Genève. Le 18 Août 2012

Présentation

- ❖ Contexte
- ❖ STAR 1985-1989, Lasting Benefits Study 1989-...
- ❖ 6.500 élèves, 350 classes, 80 écoles
 - ❖ 1/3 en classes régulières + aide-enseignant
 - ❖ 1/3 en petites classes (13 à 17 élèves)
 - ❖ 1/3 en classes régulières (22 à 25 élèves)
- ❖ Affectation aléatoire des enseignants et des élèves
- ❖ Tests semestriels, pendant 12 ans

Premiers résultats...

Gains in Effect Sizes from Small Classes

Gains in effect sizes from small classes in first grade compared with all regular-sized classes and from regular-sized classes with an aide compared with regular-sized classes without an aide

	SAT Reading	BSF Reading	SAT Math	BSF Math
The effect size on performance in small classes compared with performance in regular-sized classes with or without an aide	.23	.21	.27	.13
The effect size on performance in regular-sized classes with an aide compared with regular-sized classes without an aide	.14	.08	.10	.05

Source: Finn, J.D., and Achilles, C.M. Answers and questions about class size: A statewide experiment. *American Educational Research Journal* (1990) 27,3:557-77, Table 5.

Summary of Project STAR Results in Terms of the Percentile Ranks of Average Scores Based on National Test Norms

Grade level	Percentile ^a			
	K	1	2	3
Total reading SAT				
Small	59	64	61	62
Regular without an aide	53	53	52	55
Regular with an aide	54	58	54	54
Total math SAT				
Small	66	59	76	76
Regular without an aide	61	48	68	69
Regular with an aide	61	51	69	68

^a Percentile ranks are based on Stanford's multilevel norms.

Source: Word, E., Johnston, J., Bain, H.P., et al. *Student/Teacher Achievement Ratio (STAR): Tennessee's K-3 class size study*, Nashville: Tennessee Department of Education, Figures 1 and 2.

Traduction en mois

Advantages of Attending a Small Class in K-3 Reported in Months of Schooling

	Reading	Math	Word Study Skills
Kindergarten	.5 months	1.6 months	.5 months
Grade 1	1.2 months	2.8 months	.8 months
Grade 2	3.9 months	3.3 months	5.7 months
Grade 3	4.6 months	2.8 months	4.7 months

Effet cumulatif

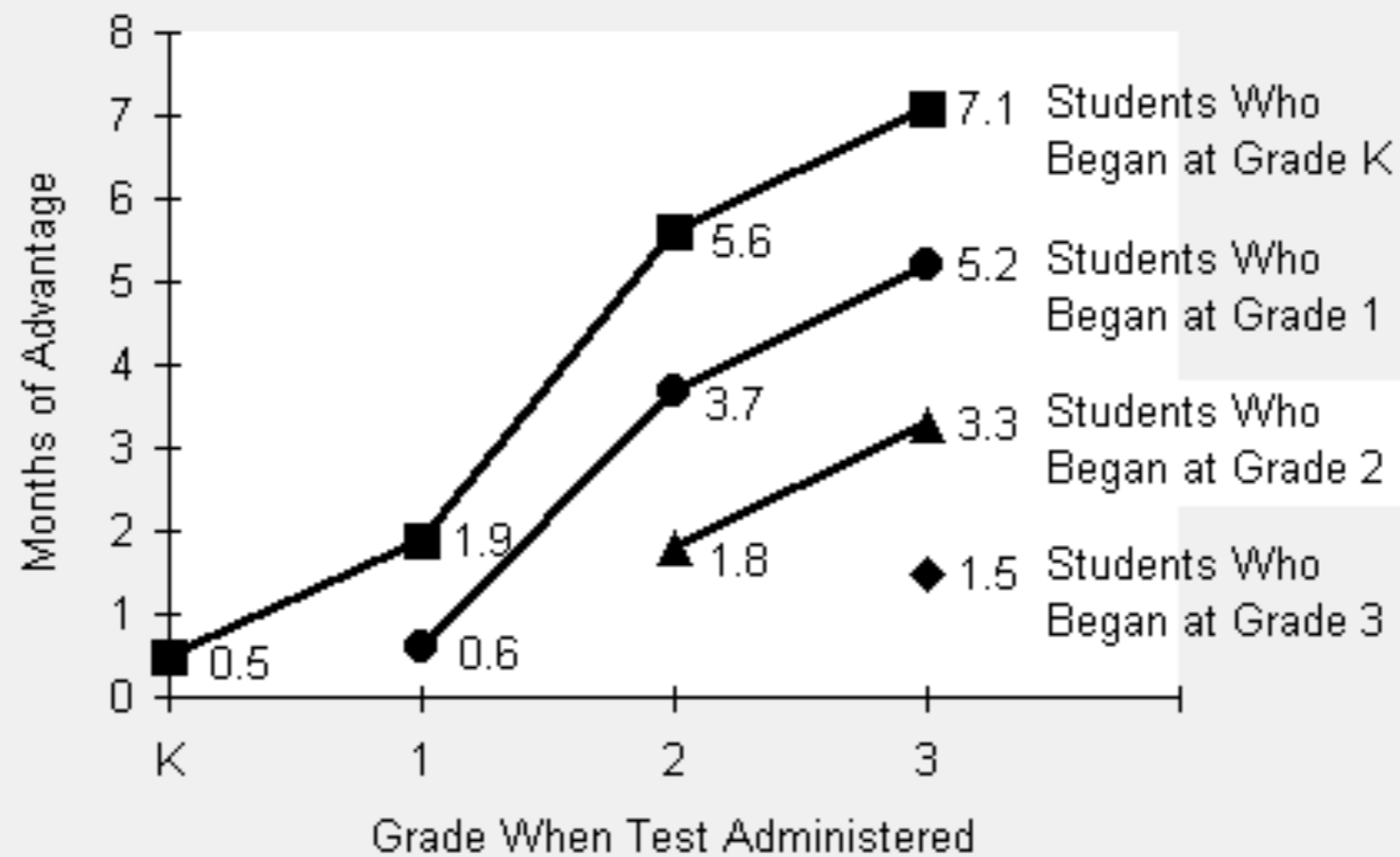


Figure 1. Average Months of Grade-Equivalent Advantage in Reading Achievement Scores for Students in Small Classes

Effet à long terme (4 ans en petite classe)

Long-term Advantages of Attending a Small Class for Four Years (K-3) Reported in Months of Schooling

	Reading	Math	Science
Grade 4	9.1 months	5.9 months	7.6 months
Grade 6	9.2 months	8.4 months	6.7 months
Grade 8	1 Yr. 2 mo.	1 Yr. 1 mo.	1 Yr. 1 mo.

(Finn, J.D., Gerber, S.B., Achilles, C.M., Boyd-Zaharias, J., 1999)

Effets divers en dixième année (16 ans)

	<i>Elèves de «petites classes»</i>	<i>Elèves de «classes régulières»</i>
Elèves en retard scolaire	16,7 %	43,5 %
Elèves en décrochage	1,8 %	8,5 %
Absences annuelles / 100 élèves	32 jours	62 jours
Cote moyenne en math	73,5 /100	62,5 /100

(résultats pour un district)

Performance dans l'enseignement secondaire

Table 1
Preliminary Results of the Effects of Small Classes on High School Performance

	Small (13 to 17 students)	Regular (22 to 25 students)	Regular/Aide (22 to 25 students)	Total Sample
Available Records	638	823	877	2338
Completed Honors English	73 (11%)	76 (9%)	83 (10%)	232 (10%)
Available Records	638	823	877	2338
Completed Advanced Math	464 (73%)	563 (68%)	593 (68%)	1620 (69%)
Available Records	752	1056	1049	2857
Graduated on Schedule	538 (72%)*	696 (66%)	680 (65%)	1914 (67%)

EFFECTS OF CLASS-SIZE REDUCTION IN THE EARLY GRADES (K-3) ON HIGH SCHOOL PERFORMANCE

Preliminary Results (1999) from Project STAR, Tennessee's Longitudinal Class-Size Study

Helen Pate-Bain, B. DeWayne Fulton, and Jayne Boyd-Zaharias¹ Health and Education Research Operative Services, (HEROS) Inc.

April 1999

Diplômes de l'enseignement secondaire

Table 2

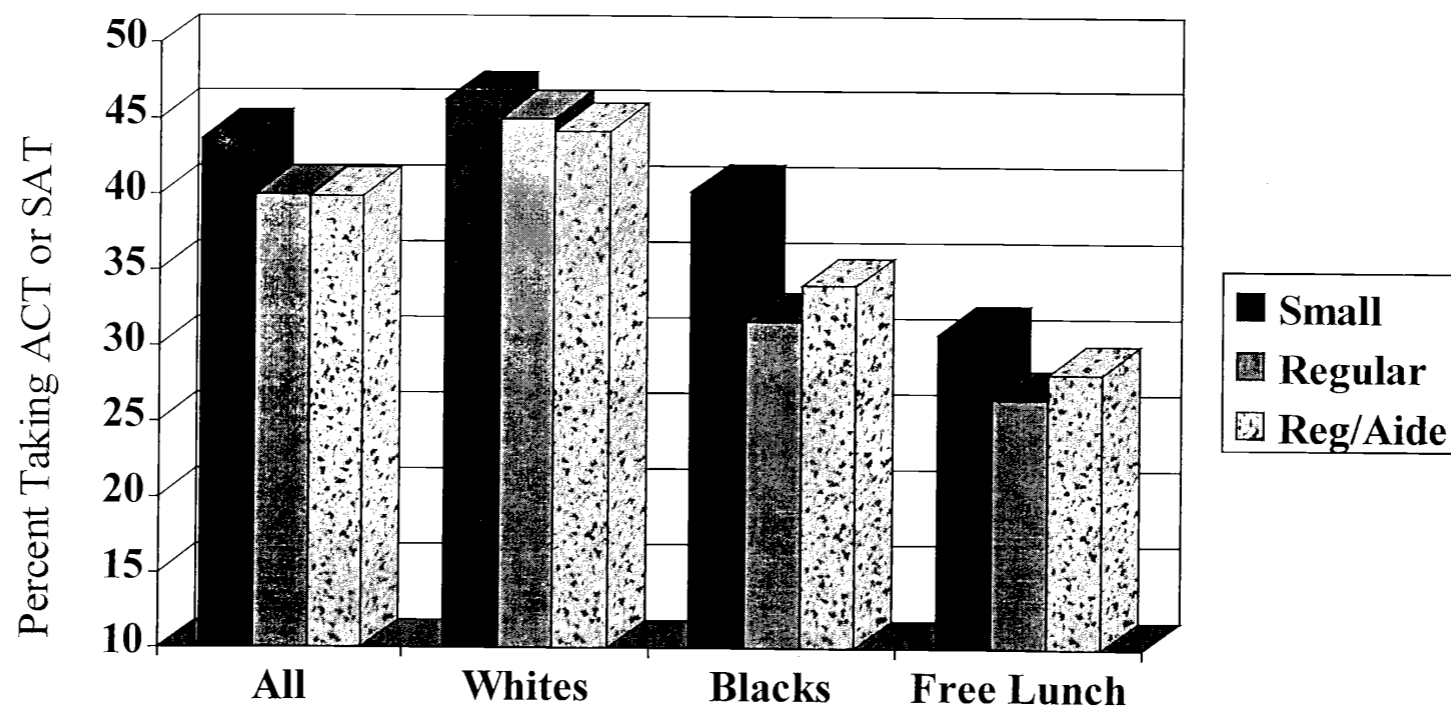
Graduation Rates and Academic Achievement by Small-Class Participation

Years in a small class	Percentage graduating			Mean achievement score ^a	
	Free lunch	No free lunch	All	Reading	Mathematics
0 (full-size classes)	70.2	83.7	76.3	49.58	49.59
1	68.1	78.3	72.8	49.33	49.32
2	70.1	85.2	76.8	50.00	50.01
3	79.6	82.8	81.1	50.75	50.72
4	88.2	87.0	87.8	52.83	52.81

^a Principal component scores plus constant (50). Standard deviations are 5.19 (Reading) and 5.18 (Mathematics).

Accès à l'enseignement supérieur

Figure 4
Percent of Students Who Took the ACT or SAT
College Entrance Exam by Initial Class Type



Notes: Figure shows percent of students who took either the ACT or the SAT exam, by their initial class-size assignment. Sample consists of 9,397 STAR students who were on grade level. Free lunch group includes students who ever received free or reduced-price lunch grade K-3.

Quand le prof est STAR

- Créativité
- Expérimentation pédagogique
- Construction de savoirs
- Manipulations en classe
- A l'écoute des élèves
- Feedback immédiat
- Planification du travail
- Organisation
- Discipline souple
- Attentes élevées
- Suivi individualisé
- Remédiation
- Communication avec les parents
- Affection pour les élèves
- Enthousiasme
- Flexibilité
- Patience
- Sens de l'humour

Conclusions

- Premières années d'école
- Effet négligeable de l'aide-enseignant
- Effet bénéfique démontré des petites classes
- Effet bénéfique durable et croissant si 3-4 ans en petites classes
- Réduction des inégalités sociales