

DOCUMENT RESUME

ED 398 005

RC 020 634

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 TITLE Twinned/Clustered Schools: Schools Sharing Resources.
 PUB DATE Mar 96
 NOTE 17p.; Paper presented at the Annual Conference of the American Educational Research Association (New York, NY, April 8-12, 1996).
 PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)
 EDRS PRICE MF01/PC01 Plus Postage.
 DESCRIPTORS *Administrator Attitudes; Cooperative Programs; Elementary Secondary Education; Foreign Countries; *Institutional Cooperation; Partnerships in Education; Planning; Principals; *Rural Schools; *Shared Resources and Services; *Small Schools
 IDENTIFIERS *Cluster Schools; *Ontario

ABSTRACT

This paper examines Ontario, Canada schools that share a principal and other resources. A literature review refers primarily to U.S. schools, termed clustered schools, and outlines forms of collaboration and advantages and disadvantages of clustering. A survey of 37 Ontario school districts received responses from 68 principals of 141 schools involved in sharing arrangements, called "twinning" in Ontario. The sample comprised 63 sets of two schools and 5 three-school sets; most schools were elementary schools. The survey covered types and sizes of twinned schools, administrators other than the principal, date of twinning, reasons for twinning, resources shared, advantages, disadvantages, and principals' suggestions for improving the arrangement. In keeping with the notion that twinning is motivated primarily by financial need, most twinning arrangements were begun in years marked by financial exigency. The principals felt that the main advantages of twinning were increased staff collegiality and improvement of programs through additional shared resources. These responses differ from those in a previous survey of district directors, who felt that the main advantages were cost savings and keeping small schools open. The fact that the principal is absent from the school was cited as the main disadvantage by both principals and directors. Principals offered suggestions in the areas of communication links, administration issues, secretaries, staff, integration of schools, and reasons not to twin. Contains 22 references. (SV)

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Twinned/clustered schools: Schools sharing resources

by

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Paper prepared for presentation at the *American Educational Research Association*
conference in New York, April 8-12, 1996.

TWINNED/CLUSTERED SCHOOLS: SCHOOLS SHARING RESOURCES

The purpose of this paper is to describe the situation of schools sharing resources, both in theory and in practice -- in one province, Ontario. To be included, each school had to have minimal resource sharing of at least the principal. As resources stemming from fiscal cutbacks become increasingly scarce, management must consider ways of deploying their resources to have maximum impact. Such is the situation in relation to school systems which have made the decision to "save money" by having smaller schools, i.e., schools in predominately rural areas, share a principal. Literature from the United States refers to such schools as *clustered* schools; in Ontario, these schools are known as *twinned* schools.

The format for this paper presents first the theory of clustered schools, and then the practice of twinning as found in 1994-95 in Ontario schools. The literature for the most part refers to American schools; consequently the term *clustered schools* is used in that reference. However, when the Ontario practice is described, the term *twinned schools* is used. The paper concludes with recommendations, found both in the theory and the practice, to school system administrators who are considering twinning schools within their jurisdictions.

Clustered schools: The theory

Clustering is defined as a joint commitment to sharing resources for mutual benefit -- and in particular, to promote school improvement (Berliner, 1990, p. 5).

There are many terms to describe cooperative arrangements that exist between/among schools, and clustering is just one term. Galton (1993) has referred to schools or school boards having different sharing arrangements: informal or loose coalitions, at one end of the spectrum and clustering in some very formal arrangement classified as federations or consortia, at the other extreme. In whatever form, sharing through clustering is considered as a preferred alternative to school consolidation, where small rural schools are closed and children are moved to a one common and larger school (Brackenbury et al., 1990).

"Small rural schools on their own are not economically viable," says Nachtigal (1992). Issues other than solely financial have an impact upon American rural schools: declining enrollment, decline in classes offered, a lack of qualified staff (May, 1990). Both May and Nachtigal, as do others, recommend collaborating or sharing -- "a means to enable [educators] to offer a comprehensive educational program, even if [educators] can't have a comprehensive school," (Stinard, quoted by May).

Ways of Sharing

Collaborating occurs in different ways: sharing staff, sharing materials and equipment, sharing facilities, sharing professional development activities, and the sharing of educational programs. Each is expanded upon below.

In terms of shared staff, a wide variation exists. An initial strategy has been for the sharing of the schools' administrative team, such as one principal assigned to two or three grouped schools. With time, sharing of other resources than just the principal is carried out: first personnel and then materials and equipment are shared. Part-time/itinerant teachers, supply teachers, and specialist teachers such as music teachers are reported as being scheduled into the clustered set of schools. Some clustered schools have been known to share secretarial and custodial staff.

Types of materials and equipment shared between schools are computers, subscriptions to data base services and audio-visual equipment. Joint business services are undertaken -- e.g., large purchases of paper products, having joint school records, and using the same school transportation (Nachtigal, 1990).

Same facilities and special educational programs are used by the clustered schools. Students have been pooled together to share in either in-school or extra-curricular activities which might not otherwise be offered -- for example, field athletic teams, bands, drama productions, music events and student enrichment activities such as "Young Authors Day," (Nachtigal, 1990). Moreover professional development activities for the teaching staffs have been implemented in clustered schools under the management of the one principal.

Advantages of Sharing

Sharing "has proven to be a feasible way to ensure autonomy and preserve the local school without sacrificing educational equity or operational efficiency" (Berliner, 1990, p. 5). Other advantages to clustering are: educational, economic, social and political. Each is described below.

The economic benefits of clustering, usually the central reason for entering into this arrangement, are several. At the outset, there is an immediate savings of one principal's salary. Nachtigal (1990) gives three distinct advantages of this sharing: more "bang for the buck"; greater efficiency (e.g., hiring one teacher/educational assistant/support staff to work in the grouped schools; and a reduction of redundant efforts and duplication of equipment and services. Nachtigal suggests furthermore that if clustered schools inventory and computerize their library holdings and make that available to the other schools in

their set, resources sharing would increase more dramatically.

Next are the academic advantages. Those advantages identified are: a greater range and enriched curriculum; students having more first-hand experiences and more manipulation activities; a regular exchange of ideas, expertise and new knowledge; a reinvigorated teaching staff; support for creating and testing restructured/alternative delivery systems; and increased involvement of parents (Galton, 1993; Nachtigal, 1990).

Social benefits for those involved in clustered schools are also mentioned by Nachtigal (1992, 1990). Students will be able to participate in in-school and/or extracurricular activities which they would otherwise be denied; on the one hand, the school retains its uniqueness, but on the other hand, it can extend its own sense of community to the other school(s) within the cluster; students realize that they are part of a larger community of learners; a rural school (and teaching staff) can be revitalized and end their perceived isolation; this sharing arrangement can expedite the exchange of ideas; and it can provide the moral support and accountability necessary for change to take place.

And political benefits accrue to clustered schools. Nachtigal (1992, 1990) describes those as encouraging a climate of cooperation and mutual benefit rather than competition and control; improved educational equity; providing opportunities for reciprocal relationships between/among schools; and providing an opportunity to form political alliances to head off school closure. Piphoo (1987) believes that through collaboration, the schools gain in long-term stability, rather than just short-term improvements.

Disadvantages of sharing

Little was found in the literature with respect to the disadvantages of clustering schools. Streifel et al. (1991) identified a few: increased costs of transportation (moving students, equipment, staff, and principal between the schools); a higher rate of vandalism; increased salaries due to higher salary schedules; and a more specialized staff to offer the promised programs. Another drawback was noted by Nachtigal (1990) and that was the outlay of time required for the necessary discussions and meetings of members of the clustered schools, particularly when the schools begin their discussions for collaborative activities.

Ornstein's (1993) concern is that an unfavourable political climate might prevail if schools (and their communities) are forced to restructure. It is this issue which has drawn attention to the situation of twinned schools in Ontario.

Twinned schools in Ontario: The practice

In an earlier survey of all Ontario Directors of Education, 37 boards indicated that schools contained in their boards were twinned. I asked the central administrators to identify those twinned schools so that I could question their principals. Then, I sent out a questionnaire to principals of twinned schools in the spring of 1995; 68 principals of twinned schools who administer 141 schools responded. The description below is a compilation of the data obtained from both the central administrators and principals of twinned schools. The information not only complements the material found in the American-based literature, but supplements the literature as well. New findings are highlighted in the text below.

Types and sizes of twinned schools

First of all, of the 37 Ontario school boards, as many as 10 schools per school board are involved in twinning and as few as two schools. Of those 68 sets, 57 or 84% are public schools and the remainder or 11 or 16% are Roman Catholic schools. The vast majority, 63 or 93%, were twinned in sets of two schools; and 5 or 7% were in three-school sets.

Almost all the twinned or paired schools are elementary schools. Indeed, of the responses, only two sets of secondary schools have been twinned, one in the north and one in the western part of the province. And two sets of K-OAC schools have been twinned.

Schools of different sizes have been twinned. The most frequent grouping of schools was the twinning of a small school with one of medium size (51%). In these schools, the student population ranged from 4 to 925 students per twinned school, averaging 196 students per site. The distance between twinned schools ranged from adjacent buildings to schools a distance of 72 km apart. The average distance was just less than 10 km, with the median being about 5 km. It appears, then, that most of the schools are twinned to schools located relatively close together.

The administration of twinned schools

The literature has indicated that one of the more compelling reasons for twinning has been the economic one -- to save money. And that money saved is through a reduction in personnel costs where one principal is in charge of two school sites.

But when the principal is at the *other* site, who is in charge? These variations are depicted in Table 1 below to illustrate that some sets of twinned schools have a travelling principal, some a travelling vice-principal, some both, and for others, something different yet.

Table 1:
Administration of the Twinned Schools

Description	No.	%
A Elementary Schools		
Twinned schools sharing one principal		
a) Just one principal	16	18
b) Principal plus:		
one assistant to the principal	2	2
one principal designate	11	12
one administrative assistant	1	1
one vice-principal	40	44
two vice-principals	11	12
two principal designates	1	1
vice-principal + designated teacher	3	3
one principal designate, group managm't	1	1
Twinned schools with two (part-time) principals	2	2
Subtotal	88	96
B Secondary Schools		
Just one principal	1	1
Principal plus three vice-principals	1	1
Subtotal	2	2
TOTALS	90	100%

Three school board officials pointed out that their teachers' collective agreements mandate that every school site in the system has a designated teacher if there is no vice-principal.

Dates of twinning

I was interested in finding out when the schools were twinned in Ontario. My hypothesis was, since twinning was initially a financial issue, that each time there would be fiscal constraint, twinning would occur.

Table 2 indicates the dates when schools were twinned. More than half of the twinning occurred since 1989, with a record number of 14 sets of schools having been twinned in 1993. My hypothesis appears to be valid -- twinning does occur in times of financial exigency.

Table 2: **Dates of Twinning**

Date	School sets	
	#	%
1970 or earlier	5	6
1971-75	9	10
1976-80	9	10
1981-85	13	14
1986-89	9	10
1990-94:	45	50
1990		4 4
1991		6 7
1992		12 13
1993		14 16
1994		9 10
Total	90	100 %

Note: Dates are grouped because the majority of the respondents indicated that the dates are approximate, e.g., 1973 or 1974.

Reasons for Twinning

Why does twinning occur in Ontario schools? The literature identified two main reasons for grouping schools as financial (to save money but to avoid school closure) and for educational equity («to promote school improvement»). The majority of the Ontario principals gave more than one reason for the twinning initiation. Most of their reasons noted below in Table 3 were financial and administrative reasons; surprisingly, only 6% indicated that the twinning was for resource sharing and for educational benefit.

Table 3: **Reasons for Twinning Schools**

<i>Reason</i>	#	%
Cost savings/budget cuts	30	33
Enrollment decline/small size at one school	22	24
Retired/promoted principal/not replaced	8	9
Avoidance of closure of a school site	6	7
Resource-sharing, new/improved programs	6	7
Administrative convenience/sharing	4	4
Reorganization due to a school closure	4	4
Overall enrollment increase	3	3
New school built to combine schools	3	3
System restructuring/board amalgamation	3	3
Developmentally-challenged programs at both sites	1	1
Totals	90	98%

Note: Error in total percentage due to rounding.

Resources shared

School board officials were asked to identify which resources were shared among/between the twinned schools. The responses varied considerably -- from "nothing, other than the principal" to "at the principal's discretion" to "everything". One set of twinned schools even shares the same parent-teacher association. One person observed that the distance between schools was a deterrent to their sharing, i.e, the greater the distance between schools, the less the sharing -- a point to investigate at a later date. Annexes normally use the main school for its gymnasium and library resources, and for all-school activities. In most cases, the annex houses the primary division classes.

Similar to the literature, the principal, vice-principal, some specialty teachers, and some secretarial and custodial staff are shared between the twinned schools.

The majority of the principals reported that their school budgets were not shared with their twinned school(s). In general, the principal receives an operating budget based on the total school populations at the twinned schools and then allocates a budget to each school. Five sets of twinned schools reported sharing a common budget; only those schools with annexes pool community-raised funds.

A variety of materials and supplies are being shared by the Ontario twinned schools: instructional supplies, testing kits, computer software and other resources and staff professional development materials. Equipment shared is: computers, video camera recorders and other audio-visual resources, and musical instruments.

As mentioned in the literature, the gymnasium and the library are the main two school facilities shared. Also the playing field was noted several times as being used for communal outdoor school activity days.

To date, not many communal activities have been undertaken in these Ontario schools. Outdoor activity days, a school newsletter, shared planning between staffs, a joint staff meeting, and joint professional development sessions are activities undertaken collaborative between the twinned schools.

Advantages of twinning

Ontario Directors of Education and then principals of twinned schools were asked, separately, to identify first the positive and then the negative aspects of twinning. Interestingly, the advantages of twinning differed considerably between the two groups of educators.

Directors had given their three reasons as: one, cost savings; two, keeping small schools open; and three, an improved quality of programs for the students. The majority of the school board officials mentioned the fundamental advantage of twinning schools: a cost savings due to a reduction in the schools' administration (usually in the form of a shared principal). Other savings mentioned were savings in transportation costs and secretarial/support staff costs. Next, 25% of the officials indicated that by twinning, small schools could be kept open. Moreover, twinning allows the board to maintain a public school presence in a small community and was said to bring two small communities together, thus facilitating a broader community base for parental interaction. And the third reason given for twinning was to enhance the quality of the student programs. Examples given were: more and diverse programs; program delivery is more uniform; the smaller school can join in programs, events and activities such as dances previously offered only in the larger school; more resources such as a gymnasium; the smaller school is the lucky recipient of excess equipment from the larger school; optimum use of available space for instructional purposes; a consistent focus on the curriculum and a continuum of initiatives; increased familiarity and consistency for students; increased flexibility for grouping students; and a smooth transition between divisions.

But as observed in Table 4 below, principals of twinned schools ranked the advantages differently. The main benefit from principals' perspective was increased collegiality among the teaching staff -- a point, by the way, not mentioned in any literature to date -- and then improvement in programs through the access to additional resources. Fiscal issues other than preventing school closure did not seem to be paramount for these principals.

Table 4

Advantages of Twinning

<i>Description</i>	Frequency	%
Staff Development; collegiality	24	27
Sharing of & increased access to programs, resources	16	18
Sharing of staff responsibilities	15	17
No change in school site, no closures	15	17
Improved reorganization of grade levels	10	11
Cost Savings	6	7
Better sized schools	2	2
Totals	88	99%

Note: Error in total percentage due to rounding.

Disadvantages of Twinning

In the initial survey, Directors discussed various negative implications of twinning, mainly as a result of a principal not being on site. Certainly the most commonly-heard complaint related to twinning was that "the principal was not always available" or was not viewed as being accessible, especially when a critical incident occurred at the site where the principal was not! Central administration reported that parents would like a "home" principal; parents and teachers are said to miss having their own full-time principal.

This perception of inaccessibility has resulted in some school boards and principals having a tarnished public relations' image, as warned in the literature by Ornstein (1993). Board officials observed that the perception of central administration and parents perceive the supervision by the principal of the staff and of the students, respectfully, to be somewhat less stringent.

Principals provided more detailed responses to this question. They were concerned, justifiably, with a poor public relations' image to the board. Yes, the majority gave the main negative reason as the principal's absence from the school, but gave as the second most common reason the resulting communication issues at both schools: increased workload with more meetings with parents and staff and increased need for communication within the school. Nachtigal (1992) had alluded to some of these reasons. The other disadvantages as pointed out in the American literature by Streifel et al. (1991) were the increased costs of transportation, a higher rate of vandalism, increased salaries and a more specialized staff required to offer the promised programs.

The reasons against twinning schools as revealed by the principals are given in Table 5, rank-ordered below. The coordination of the shared facilities and the isolation of the smaller school community are two new reasons not previously found in the literature on the negative outcomes of twinning.

Table 5: Disadvantages of Twinning

Description	Frequency	%
Principal absent from site	41	26
Communication duplication, meetings	25	16
Difficulty joining different communities	20	13
Not enough administration time & support	20	13
Difficult to administer two sites	19	12
Disruption due to travel, bussing	18	11
Isolation of smaller school community	8	5
Coordinating the sharing of facilities	4	3
Loss of continuity between grades	4	3
Totals	159	102%

Principals of twinned schools have extra work due to multiple staff meetings (one for each site), multiple Parent Advisory Committee meetings (one for each site), multiple school concerts and evening performances (again, one for each site), larger school staffs with concomitant problems. As well, a loss of efficiency is perceived, for time is expended driving between or among the twinned schools -- mainly by the principal, but also by the vice-principal and the staff who are employed in both sites.

Twining appears to have repercussions on the staff. Teachers and especially the shared principal have reported that they have additional responsibilities and additional work-related stress at twinned schools; the staff of the smaller or annexed school is said to feel isolated or forgotten; and teaching staff turnover was reported by one board official as being high -- a point worthy of further investigation.

Indeed, some school staffs, principals' association and local teachers' federations are putting pressure on the school board to maintain the status quo -- one principal for every school. Moreover, one board reported that their community had articulated that it perceived that the board did not value local small schools. Certainly, parents are worried that the school will lose its unique identity as a twinned school. In addition, parents are reported not to like their elementary children often being located in two schools. In schools where a primary school is twinned with a junior division school, the primary division is reported to lose access to the "older" children who, in many schools for an activity such as paired reading -- the older child who is assigned a reading buddy to a younger child.

Another disadvantage given was the accompanying time management problems: for the principal him or herself to establish and attempt to stick to a schedule; moving materials and supplies between school sites on time; scheduling of facilities; and, scheduling the two school staffs to meet together.

Because the principal is often absent from one or more of the school sites for periods of time, one board official indicated that a more collaborative model of leadership was necessary for the school staff in general and the administrative team in particular. Another observation was that the other school site where the principal did not have an office mandated an experienced vice-principal. And for those buildings that have a head teacher as principal designate, the reality is that the time which a person spends on administrative tasks ultimately takes him or her away from the classroom.

And the final disadvantage of twinned schools as noted only by the Ontario school board officials was the fiscal one. Initially, one of the main reasons advanced for twinning schools was a financial savings due to a reduction of

personnel. Yet, twinning has been found to generate its own costs: transportation costs for staff and students, courier service, costs of moving equipment and materials between sites, cost of delays and costs for additional supply teachers. Operating two or even three small schools is, despite twinning, more expensive than closing one school, because of the ongoing capital and maintenance costs.

Recommendations

Since fiscal restraint is now a reality, cooperative efforts between schools and school boards to share and conserve their increasingly scarce resources will become more in evidence. Indeed, I would expect that in the new few years, the number of twinned schools will increase, not only within individual school boards in Ontario but between school boards.

For those school districts/boards contemplating such collaborative arrangements, several suggestions emerge from the literature (Brackenbury et al., 1990; Nachtigal, 1990). They are:

- the clustered schools must have a common purpose, and believe that a clear advantage will be gained from cooperation and/or the pooling of funds;
- participants should enter into cluster development with a minimum of a three-year commitment. Time is needed to interact and to establish a trust relationship among participants, to begin "thinking in a cooperative way", to evolve to a common agenda, to develop and implement programs that serve the needs of the participating schools, and to assess their impact. Moreover time is also needed to develop relationships and trust among local school personnel and outsiders.
- the structure of the cluster should be kept simple but have in place good communication links in order to share information regularly;
- leadership within the cluster is essential; someone from within one of the collaborating schools must assume the role of facilitator or convener;
- there should be school board and community member involvement and support, as there are likely to be financial implications and possible restructuring;
- early success is essential, and all schools involved in the collaborative activity should perceive the benefits;
- equal credit in each successful endeavour should be given to all participants (regardless of their degree of involvement); everyone should bask in the glory;
- meetings will be frequent at the beginning -- to get to know each other, to develop trust, to reinforce the support and importance of these activities, to keep the consortium idea on track, to maintain the cooperative working relationships essential to its effectiveness, and to allow for the generation of ideas that can be addressed by/within the cluster; and
- consider accessing outside (additional) funds for these shared activities/projects.

While sharing takes time and effort, joint ownership of projects can give schools more clout and power than each has on its own (Brackenbury et al., 1990). On the one hand, schools may consider that they have sacrificed some of their own autonomy; but on the other hand, they can gain (both in money savings and in program enhancement) from the interaction.

Principals in twinned schools in Ontario were asked to respond to this final question: «*Having had experience with twinning, what suggestions would you offer?*» Almost two-thirds of the principals offered multiple suggestions. Their responses have been divided into categories: communication links, administration issues, secretaries, staff, school issues, and a final section entitled *Reasons not to twin*. Interestingly, 13 or 20% of the respondents explicitly said "Do not twin"; some provided reasons. Categories and suggestions are summarized in Table 6 below, in rank order.

Table 6

Suggestions from Principals of Twinned Schools

<i>Types of suggestions</i>	Frequency	%
Communication Links	65	38
Dedicated phone line, special phone features	29	
Fax Connection	25	
Link Schools by Computer/compatible systems	11	
Administration Issues	38	22
Allot more time/help for VP or Designate	16	
Add another VP or Designate	10	
Clear protocol/roles for administration	4	
Administration should be visible	2	
Monetary Compensation	2	
Board should budget for expenses associated with Twinning regardless of population	2	
Pay one school rate regardless of population	1	
Training for principals of "special" schools	1	
Secretaries	22	13
Full-time secretary (or extra help)	20	
Good communication between secretaries	2	
Staff	15	9
Combine/integrate staffs for certain activities	5	
Good communication/problem-solving & attitude	3	
Mature staff in small school, capable of working with parents	3	
Share part-time staff	1	
Limit the number of staff	1	
Limit time full-time staff spend in small school	1	
Pay parents to do Yard Duty Supervision	1	

(Table cont'd.)

Table 6, cont'd.

Suggestions from Principals of Twinned Schools

<i>Types of suggestions</i>	Frequency	%
Schools	7	4
Select schools for twinning carefully	2	
One budget for twinned schools	1	
Arrange inter-school busing	1	
Strategies to emphasize 1 school/multi-sites	1	
Ensure students are not treated as second class	1	
Combine Parent Councils	1	
Reasons not to twin	22	13
Do not twin	13	
Parents & students want one principal per site	6	
Not effective use of principal's time	1	
Savings do not warrant twinning	1	
Add portables instead to larger school site	1	
Totals	169	99%

Note: Error in total percentage due to rounding.

Conclusions

The literature and the Ontario findings highlight many advantages and a variety of disadvantages for schools joining into a clustered or twinned arrangement. Sharing could make scarce resources go further and with more effective results. However, twinning takes time, concerted effort and planning. The joint school staffs and parent groups will have to develop trust and confidence in the each other as they move to articulating their common purpose and working together toward that end. A shared administration may require some adjustment, by all parties. Roles must be reconceptualized and understood by all. And transportation and time commitments must be worked out amicably -- all without causing undue stress or inappropriate expenditure.

In theory, the results of these joint efforts should not only be increased efficiency -- i.e., increased cost-saving which is sufficient to avoid school closure, but also encourage increased equity of programs and program opportunities -- i.e., leading to an improved education for children. These successes, the positive results gained from the sharing of resources, should convince the boards and their twinned schools to continue their collaborative efforts. However, the practice of twinning has a paucity of documentation. Furthermore, no studies have been undertaken to date by Ontario school board on the results of twinning. Much more research is required to determine explicitly the efficiency and the effectiveness of twinning and to reveal more comprehensively the long-term impact of twinning on students and their communities. And always, educators must remember to ask whether the political fallout is worth the cost (or the savings) of twinning.

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