DOCUMENT RESUME

ED 444 336 EF 005 287

AUTHOR Mayfield, John

TITLE Renewing Urban Schools.

PUB DATE 1992-06-03

NOTE 19p.; Paper presented at the O.E.C.D. Seminar (Baltimore,

MD, June 3-5, 1992).

PUB TYPE Reports - Descriptive (141)

EDRS PRICE MF01/PC01 Plus Postage.

DESCRIPTORS Community Involvement; *Educational Facilities Improvement;

Elementary Secondary Education; Foreign Countries; Public

Schools; *Urban Schools

IDENTIFIERS Australia; *Urban Revitalization

ABSTRACT

This paper describes an approach to urban renewal, called the Multi-Function Polis (MFP), which emphasizes education as a key factor in a renewal process that includes development of 21st century industries such as information technology, telecommunications, and environmental management. Focusing on Adelaide, Australia, as an example, the paper discusses the MFP educational component, where resources can be found to achieve both urban renewal and the new urban development, and the importance of community involvement. Final comments summarize the important points of each educational renewal component. (GR)



PAPER PRESENTED AT O.E.C.D. SEMINAR

'RENEWING URBAN SCHOOLS'

BALTIMORE, MARYLAND, 3-5 JUNE 1992

By Dr John Mayfield MFP Australia Project

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

Dr. John Mayfield

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

U.S. DEPARTMENT OF EDUCATION Office of Educational Research and Improvement EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality.

Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.



Further information:

MFP Australia Level 12, Terrace Towers 178 North Terrace Adelaide South Australia

Telephone: 61 (8) 303 2100 Facsimile: 61 (8) 303 2120

Please note figure references in the following paper refer to accompanying slide presentation



INTRODUCTION

Every city has its worst areas each defined by some combination of lowest amenity, least safety for residents, highest unemployment, greatest concentration of health problems, poorest transport and housing - the list of attributes is long and familiar.

Every city has made its efforts to renew or revitalise its worst areas by some combination of programs aimed at changing those attributes by which the areas are defined.

By and large the results have been mixed - successful from some points of view; disturbingly unsuccessful from other points of view. The urban renewal task is becoming more urgent and, at the same time, more difficult as funds become tougher to obtain, inequalities between the good and the bad areas widen and the complexities of the job of healing the "urban malaise" increase.

The aim of this paper is to describe an approach to urban renewal which is both new and promising. The emphasis will be on education as a key factor in the urban renewal process.

The setting is Adelaide, Australia - a city of about one million people with concentrations of urban problems which, although they might seem slight compared with the worst problems of cities such as Bangkok, Buenos Aires or even Baltimore, to the people of Adelaide still constitute a difficult urban renewal challenge.

Figure 1	Adelaide			
		_	-	
Figure 2	"Worst area"			



A NEW PROJECT

There is in Australia, focussed on Adelaide, a national project called the Multi Function Polis - the MFP. The project is aimed at the development of 21st century industries such as Information Technology,

Telecommunications, Environmental Management and Education. If it succeeds then Australia's competitive position especially in relation to the Asia Pacific region will be significantly strengthened and a knowledge and skill base established which will help ensure national prosperity in the first part of the next century. The MFP-Australia project also involves a new urban development which must be a demonstration of the future orientation of the total project and an expression of its three themes of humanity, technology and environmental responsibility.

But the new urban development must be more than just another new town. Unlike many technopolis projects the new MFP development is an integral part of an existing metropolis. The town will be built as a series of villages on low-lying reclaimed land just beyond what for a century has been the blighted fringe of the metropolis. The immediate surroundings of the new development currently include two city dumps, poor quality industrial sites, disused docks and about 50,000 people living in what many would claim to be Adelaide's worst residential areas.

Figure 3	MFP site		
Figure 4	Adjacent area	 	
Figure 5	Village concept	 	

This is where one of the real challenges of the MFP-Australia project lies. Gillman, as the new development is currently called, must not only be an exemplary development in itself on a wide range of criteria, but it must also achieve the renewal of the social, economic, environmental and educational conditions of its surroundings. For the new town to be judged a success the older depressed suburbs adjacent to it must be revitalised in the process.

5



This is a relatively new challenge in an Australian context. New developments have long had to prove a positive or at worst neutral impact on what could be termed the natural environment, but rarely has a new development ever had to demonstrate a substantial positive impact on the quality of life in its surrounding urban environment to gain approval.

In fact the reverse has generally been the case. New developments on the urban fringe have typically been negative for their surrounding areas by attracting more traffic through adjacent suburbs, drawing away scarce capital earmarked for the refurbishment of existing infrastructure, depressing local retail business by attracting custom to new shopping areas and tending, by their sheer newness, to further highlight the relative inadequacies of neighbouring areas. It is ironic that evidence of this real (and certainly perceived) depression of a neighbouring area by the advent of a modern adjacent development is most clearly seen in some projects specifically aimed at urban renewal. La Villette in Paris is a striking example. The clearance and replacement of what must have been one of the worst areas of Paris by an ultra modern, some would say alien,

residential complex coupled with a large public educational science centre, has created years of disturbance in the immediate surroundings and established a stark contrast between the new and the now doubly depressed older environs.

It is a further irony that the very area which the MFP-Australia development must help renew, was the site more than a decade ago of a major project "The Parks" Community Centre the objective of which was to

Figure 7	The Parks		
6			



enhance the quality of life in its surrounding community. Like La Villette the buildings were massive and in sharp contrast to the surrounding urban form and, as it turned out, bewildering in their complexity. "The Parks" has been successful in many ways, providing a focus for a wide range of activities including education and attracting visitors into the area to make use of its outstanding facilities such as theatres, gymnasium and library. It has also been less than successful in many ways. The area is still regarded as one of Adelaide's worst. Poor health, unemployment, vandalism, drug abuse and crime statistics reveal a picture which may

Figure 8 Social atlas

well be better for the presence of "The Parks", but still demands revitalisation and renewal. The shortcomings and the reasons for them

Figure 9 Headline

have been of special assistance in determining the approaches to be adopted as the new MFP-Australia development takes up the challenge of renewing its urban surroundings.

While there is no doubt that the experience of "The Parks" (and a number of other separate programs) over the last decade have provided insights which will improve the renewal process, the lessons learned need to be assessed in the current context - especially the economic context in which the new development will occur. In the seventies, large amounts of public funds were available for urban renewal projects. It was fashionable for central governments to fund major capital projects especially in education. The ongoing cost implications were of less concern in a period in which sustained growth was assumed and both capital and recurrent funds were relatively easy to obtain.

That situation has altered radically in Australia and in many other countries. Although central government programs (in Australia the "Better Cities Program") continue to be directed at urban renewal, the overall availability of new public funding is limited especially for ongoing recurrent costs.



Thus the urban development part of the MFP-Australia project is faced with a number of unique challenges. It must prove itself to be a model for the 21st century. Part of this proof will be seen in its own built forms and operations, but an equally important part must emerge in terms of its positive impact on an adjacent depressed area. Since the project must be influential and potentially transferable, its economics must be in tune with the tough times of the nineties.

THE EDUCATION FACTOR

In the context of education the first step has been to accept that whatever is done in providing education in the new villages must enhance educational provisions in the adjacent areas.

If, for example, a new school is constructed in the first new village, then the design and operation of that new school must make a positive contribution to existing nearby schools.

This is a new approach for Australia. In the past, the challenge in designing a new school has been to produce a better building than the last school built. The aim has been to improve by correcting past mistakes and incorporating every possible advance in educational technology, construction materials and building innovation. It has been a continued pursuit of excellence in educational building and the results have often been cause for justifiable pride.

The trouble with this approach is that each new school has tended to set new benchmarks of excellence. By definition, each new school has made existing schools out of date and increased the 'facilities gap' between the worst and the newest. Very rarely, if ever, have the designers of a new school been asked to help close this gap as part of the new school's impact. For a long time, the independence and autonomy of individual schools has been the focus. Only recently has the interdependence between schools and the idea of developing identity and pride as part of a collaborating network of schools begun to find expression.



One of the implications of this approach is that a proportion of what would otherwise have been included in the 21st century schools of the first Gillman villages will now be established in the nearby existing schools. Innovations, new programmes, special features of the model 21st century villages will be located deliberately in the schools of an existing 20th century suburb - and one of Adelaide's worst suburbs at that. It is a bold and somewhat risky proposition which is an extension of the environmental theme of the MFP project. Whatever is done in village number one should have a positive impact on its social as well as natural surroundings. The risks lie in the fact that marketability of the new development will, according to past experience, be heavily predicated on the unique superiority and exclusiveness of the new. The diffusion into the older suburb of those elements (especially education) which contribute to exclusive superiority seems likely, at least at first glance, to make it harder for the real estate salespeople.

One solution to this apparent problem lies in the very nature of a 21st century urban development. In cities of the future, transport and communication capabilities will be such that access to specialist educational programs will be less dependent on location. When, for example, we establish interactive video conference capabilities between

Figure 10	New I.T.	

schools, technical colleges, universities, the work place and the home, specialist facilities will not need to be replicated at every site. The opportunities for close personal interaction between individuals and between teachers and their classes will, we believe, still need to be replicated at each site but, given the best communications currently available, we believe we can site some of the specialist facilities in nearby existing schools as one contribution to their renewal. This means that older schools will achieve the status of being key elements of a network which includes the new MFP schools. In turn the new MFP schools will depend for some of their special educational opportunities on schools in what are currently Adelaide's worst areas.



Whether we will continue to use the word "school" is debatable. In the first half of the next century education will not, we believe, be confined to an institution, restricted to certain times and regarded as a preparatory phase which, when completed, qualifies the learner for life. There is mounting evidence that education will be distributed to homes and workplaces in addition to institutions, be available at times which are of the learner's choosing and constitute a lifelong cumulative experience. If these expectations about the nature of education are accurate, then the education buildings appropriate for the medium future will be different from those of the past and present. Educational buildings will still be needed but the conventional forms and functions conjured up by the word 'school' may no longer be appropriate.

Any urban renewal program in which refurbishment or reconstruction of the existing educational buildings is a part, must take these likely changes into account. In the light of our current expectations, the educational buildings in both the new urban development and in its surrounding areas will exhibit the following characteristics:

- much greater environmental responsibility especially in respect of energy and water usage, landscaping including the planting of trees, the introduction of recycling and improved waste management.
- facilities which enhance the opportunities for interpersonal and group interaction between learners and between teacher and learner
- a centre in which people of all ages are likely to be involved on a 24 hours basis
- domestic rather than 'factory' form and scale
- . a communications centre for the community through facilities which include modern information and communication technology.



AN INTEGRATED APPROACH

One of the lessons from the mixed success of The Parks Community Centre is that revitalisation of a relatively depressed area cannot be achieved piece meal. Reconstruction of educational buildings will not on its own achieve very much at all in terms of the needs of the community. Renewal must be tackled on a broad front with the real needs of the community being met by an integrated set of services and coordinated programs.

For example, one of the real needs of the area is increased employment opportunities for young people. What we will do to respond to this need illustrates the way in which the new urban development will result in adjacent urban renewal with education as a key factor. Tenderers for the design and construction of the first villages will not only be required to enter agreements by which local people will be preferred for employment in the construction phase but also demonstrate how they will train local recruits in the necessary skills. Local educational institutions (including The Parks Centre) will contract with tenderers to provide training programs not only for the construction phase but also for employment opportunities which will emerge as the new villages become operational.

There are two objectives behind this approach. People, particularly young people in the renewal area will be groomed for genuine jobs. In so far as they take up these jobs they will be helping to create the new village and be engaged in the renewal of their own area by reducing unemployment levels. There will be landscaping and beautification schemes established in the older area and these will generate local employment but the "genuine" jobs will come from the impact of the new MFP villages.

Health, welfare, church and community based groups are being brought together with educational institutions to ensure an integrated approach. In many depressed areas, past efforts to improve aspects of the situation have lacked coordination with consequent dissipation of resources and a degree of confusion on the part of those to whom the various services are directed.



The assessment and description of what the new development must achieve by way of urban renewal has been undertaken in advance of the design of the new villages. The results, in the form of "social imperatives" for the new villages have specified a set of performance objectives which must be met by designers, developers and future managers. Some of these performance objectives are described in terms of what must happen in the surrounding areas. Again, this is a new approach which has required new thinking on the part of development proponents and funding agencies such as the education authorities who have traditionally regarded new developments and their existing surroundings as separate entities.

RESOURCES FOR RENEWAL

There is, of course, a basic question of where the resources are to be found to achieve both urban renewal and the new urban development.

The MFP-Australia project is a model project. As such it will attract some special funding. There is no doubt, however, that the urban development aspects of the project will risk failure if they become dependent on funding arrangements which are so extraordinary that outcomes and processes are not transferable. Very little of real worth will be achieved unless the desirable outcomes, especially the urban renewal aspects, are able to be replicated in other locations without large injections of scarce public funds. It is worth noting that The Parks building was fully funded by a special Federal capital program. Once that program had run its course and the special funds were exhausted, no other communities were able to be provided with such facilities.

The search for an urban renewal process which does not become a one-off event has led to an approach to funding which has a number of important steps.

Commitment to urban renewal by those involved with the new urban development.

The revitalisation of the adjacent depressed area must be seen as part of a total project. The tendency to focus on the opportunities of the new villages is strong and needs to be resisted with some vigilance.



12

Figure 11 Visual impression

Whenever the project is described, discussed or visual impressions displayed, the renewal aspects must be as prominent and seen to be as important as the new villages. Of even greater importance is the need for the financial calculations to include the renewal aspects as well as the new development. Once the project managers, designers and financiers begin to think of the project as a whole then a number of new strategies start to emerge. In the case of educational provisions duplication is reduced, opportunities are found to provide some educational services from the existing area and providing some services to the existing area from the new villages. One result of this approach is a change in the economics of new service provision. Unit costs alter as the population of the existing area is brought into the calculations and funds which would have been allocated for the existing area are brought into the equation along with the existing building stock.

Capture of a portion of improved capital values.

The proximity and special features of the new development will cause capital appreciation in the existing area. This appreciation will also be increased by urban renewal. The capture of these betterments by the total project will provide an important source of funds.

Taking an integrated services approach, leading to reconfiguration of service delivery and rationalisation to achieve capital and recurrent gains.

The depressed area has for some time been the focus of a range of special programs. Many of these programs are separately funded and operate from their own premises. Despite the existence of "The Parks" as a focus for service delivery, there is considerable potential for rationalisation and the capture of consequent savings. In terms of educational services, the opportunities lie in reconfiguring preprimary, primary, secondary and post secondary schools,



Figure 12 Joint venture G.G.

establishing joint ventures between public and parochial school authorities, redirecting special programs (e.g. welfare, remedial, minority group services) through the reconfigured educational organisation and redeploying freed up resources to the benefit of the renewal program.

The organisational structure of The Parks Community Centre is being reviewed as part of a more integrated and more efficient approach to service delivery.

Extend incentives associated with the new urban development

New urban development projects tend to attract special assistance by way of infrastructure priorities, tax incentives and local authority support. These concessions, if they apply, will be extended back into the existing adjacent area.

Assess and capture savings on social costs

Crime, vandalism, youth unemployment and almost all the other concomitants of a depressed area are a direct, ongoing and

Figure 13 Vandalism

measurable cost to the wider public. In so far as the total project can demonstrate reductions in these costs then a claim can be made against these savings and in favour of the renewal project.



A CONTINUING PROCESS

One of the lessons which has been learned from the experience of The Parks Community Centre is that urban renewal is a continuous process. Whatever hopes may have been held for the effects of The Parks a need for further renewal remains and, by the same token, whatever is achieved by the MFP-Australia project, the need for renewal will re-occur sometime in the future. Waiting for the emergence of a "sick suburb" before devising a renewal program makes the task of revitalisation very difficult - in some cases too difficult altogether. Experience suggests that urban areas need to be continuously renewed and that areas in which the statistics of crime, unemployment, ill health, etc. currently give little cause for concern need continual review and renewal to ensure adaptation to meet emerging needs.

Those involved with educational building know how a shift in just the age-profile of an urban area can change the nature and extent of demand for educational building. In a future in which learning is a life long process aided by the increasingly powerful tools of information technology and telecommunications, the education buildings of today are very likely to require change. They may very well prove to be in the wrong place, of the wrong design and organised in ways which have become outdated.

This concept of continuous revitalisation which, from time to time will require a response from education, has important implications for the urban renewal aspect of the MFP project. Whatever is done to reconfigure the educational building stock to meet existing and anticipated needs must be capable of future change. One aim will be to make the educational buildings more responsive to change over the medium to long term.

There are two steps in the achievement of this objective:

any new buildings will need to be as flexible as possible to accommodate education change

Figure 14	School/houses	
Figure 15	School/offices	



15

buildings will be designed and located so that they have alternative future uses (e.g. offices, housing) which ensure their capital value increases rather than decreases over time and that unused elements can more easily become revenue producing.

It is likely that recent changes in our approach to the design of new educational buildings will be reflected in any redevelopment program and in the new villages. Where once we built single purpose, large schools many of which are now underused and a maintenance liability, we now site and design educational buildings so that elements can be easily adapted to housing or commercial premises as demand changes. Teachers and students have reported high levels of satisfaction with these design features. The buildings are more conducive to the development of group identity, reflect rather than contrast with their surrounds and have proved to be much more adaptable in a context in which the nature and extent of demand changes.

The need to reconfigure, upgrade and redeploy educational building stock in the existing area creates the opportunity to contribute to the renewal of key buildings which are important to the community (e.g. heritage value) and to regroup educational services with other services. Using "The Parks" as a focal point, the aim will be to re-establish a "village" environment with an appropriate aggregation of shops, meeting places and a range of human services.

THE PEOPLE FACTOR

We know that change within a community will only be effective if the people of the community concerned lead the process. Consultation is essential but not sufficient. Leadership must emerge from the community itself and be supported by responsive external agencies.

Raising the competence, confidence and aspirations of people in a depressed area is a central part of the renewal process. It does not happen overnight. It takes time to develop skills and establish the networks and organisational structures by which this aspect of the renewal process can be sustained from within the community itself.



It is here that "The Parks" has achieved one of its most important successes. Through the involvement of local people in educational programs ranging from informal group sessions through pre-vocational courses, work experience, formal secondary and adult education, "The Parks" has prepared the way for the next phase of renewal.

People from within the existing area will be fully involved in decisions about how the new MFP villages will be designed, what impact they will have on the adjacent depressed area and what relationships and organisational arrangements will be most appropriate for the new and old communities.

As these arrangements are worked through, there may well be a need for external authorities to respond by adapting their organisation to the unique circumstances of the project. It is likely that the normal criteria for funding, staffing, organising and programming of schools will need to change. New partnerships will emerge between education and industry, public and private educational institutions, and between Federal, State and Local Government agencies. For example, it has been decided that a new utility company will be formed to assist the new MFP villages to achieve high standards of energy, water and waste management. The existing gas, electricity, water and waste management utilities are cooperating in this new approach as part of the drive to make the new villages models of environmental responsibility. A new educational or human service "council" involving the various providers of these services may also be developed to manage educational services as the new and the old areas collaborate to achieve the most appropriate outcomes.

SUMMARY

It is rare for a new urban development to be required to contribute to the renewal of an adjacent urban area.

It is even more unusual for such an obligation to apply when the adjacent area is generally regarded as badly depressed.



In the context of the future, however, such an obligation is appropriate. There is every indication that the future will be marked by a greater concern and deeper appreciation of environmental responsibility to include not only the natural but also the social and economic surroundings.

There are many ways in which the new village development of the MFP-Australia project will contribute to the renewal of the neighbouring area.

Education will be one key factor in this process.

Once the commitment to renewal as an integral part of the new development is accepted, a number of resource opportunities emerge especially in relation to educational buildings.

These opportunities are augmented if education is viewed as one of a number of human services.

Re-configuration of service delivery, collaboration between the new development and the existing area and the inclusion of the people who live in the existing area as full participants in the development decisionmaking are essential steps.

At this stage there are encouraging signs that the outcomes will be positive and influential. The successes of earlier renewal efforts will form the foundation for a collaborative approach, not based on one-off injection of funds and external decisions but a joint effort between the new and old areas as part of what will be a continuing renewal process.

Figure 16 MFP-Australia

Renewing urban schools as such is not the focus of the approach in the MFP-Australia project. The aim is to include the renewal of urban schools as an integral part of the revitalisation of one of Adelaide's worst residential areas.



18

From the point of view of educational buildings, the impact of the project will result in:

- collaboration on a range of building issues between the new and the old urban areas
- reconfiguration of existing services and their building components
- the installation of new information technology to distribute educational services to new and old areas
- new and upgraded buildings which will be less of a contrast with surrounding urban form
- educational buildings which by their design, ownership and operation are themselves renewable
- funding, management and ownership arrangements which bring into operation new partnerships between external bureaucracies, industry and the local community.





U.S. Department of Education

Office of Educational Research and Improvement (OERI) National Library of Education (NLE) Educational Resources Information Center (ERIC)



REPRODUCTION RELEASE

I DOCUMENT IDENTIFICATION	(Specific Document)	
Title: Renewing Urban Schools	V :	
Author(s): Mayfield, John		· · · · · · · · · · · · · · · · · · ·
Corporate Source: MFP Australia Project		Publication Date: 1992
II. REPRODUCTION RELEASE	:	1
monthly abstract journal of the ERIC system, Re and electronic media, and sold through the ER reproduction release is granted, one of the follow	e timely and significant materials of interest to the education (RIE), are usually made available IC Document Reproduction Service (EDRS). Credit in wing notices is affixed to the document.	le to users in microfiche, reproduced paper cop s given to the source of each document, and,
The sample sticker shown below will be affixed to all Level 1 documents	The sample sticker shown below will be affixed to all Level 2A documents	The sample sticker shown below will be affixed to all Level 2B documents
PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY	PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY	PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY
Sample	TO THE EDUCATIONAL RESOURCES	TO THE EDUCATIONAL RESOURCES
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)	INFORMATION CENTER (ERIC)	INFORMATION CENTER (ERIC)
Level 1	Level 2A	Level 2B ↑
Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g., electronic) and paper copy.	Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only	Check here for Level 2B release, permitting reproduction and dissemination in microfiche only
	ents will be processed as indicated provided reproduction quality p eproduce is granted, but no box is checked, documents will be proc	
as indicated above. Reproduction from to contractors requires permission from t	ources Information Center (ERIC) nonexclusive permis om the ERIC microfiche or electronic media by perso he copyright holder. Exception is made for non-profit re tors in response to discrete inquiries.	ons other than ERIC employees and its system

Printed Name/Position/Title: Sign here,→ please (over)

III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, *or*, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Address:
Price:
IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:
If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:
Name:
Address:
·
V. WHERE TO SEND THIS FORM:
Send this form to the following ERIC Clearinghouse:
· · · · · · · · · · · · · · · · · · ·

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being contributed) to:

ERIC Processing and Reference Facility 4483-A Forbes Boulevard Lanham, Maryland 20706

> Telephone: 301-552-4200 Toll Free: 800-799-3742 FAX: 301-552-4700 e-mail: ericfac@inet.ed.go

e-mail: ericfac@inet.ed.gov WWW: http://ericfac.piccard.csc.com



Publisher/Distributor: