Ahead of the Class

A Handbook for Preparing New Teachers from New Sources

> Design Lessons from the DeWitt Wallace-Reader's Digest Fund's Pathways to Teaching Careers Initiative

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Research Reports

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Beatriz Chu Clewell and Ana María Villegas

With contributions from Jennifer King Rice, Brian O. Brent, Clemencia Cosentino de Cohen, Tamara Lucas, Stephanie L. Mudge, and Nancy S. Sharkey



DeWitt Wallace-Reader's Digest Fund Lila Wallace-Reader's Digest Fund

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INTRODUCTION



ecent data from the National Center for Education Statistics predict that by 2010 public schools will need at least 2 million new teachers, as the scarcity of new teacher recruits is coupled with the aging of the current teaching force and the growing number of schoolchildren. Already, signs of the shortage are apparent. Demand is high in specific fields (such as mathematics, science, bilingual education, and special education) and in certain geographic areas.

Poor, high-minority urban schools, in particular, currently suffer critical shortages of teachers as a result of high turnover and the reluctance of teachers to take jobs in such schools. Aggravating the complexity of this problem, students of color are expected to constitute a majority of all K-12 students in the United States by 2035. Yet almost 90 percent of the current teaching force is white, a proportion not expected to diminish significantly in the near future.

Duplicating the Success of the Pathways Model Program

Officials at local or district levels have responded with intensified teacher recruitment. Some have developed programs that pursue nontraditional recruits—paraprofessionals, retired military personnel, and career-switchers—in addition to more traditional sources of new hires. Few, however, have evaluated program practices or documented models to guide new teacher recruitment at other sites. One notable exception is the DeWitt Wallace-Reader's Digest Fund's Pathways to Teaching Careers Program.

The Pathways Approach to Solving the Teacher Shortage

In response to the teacher shortage in urban and rural schools, since 1989 the Dewitt Wallace-Reader's Digest Fund has sponsored the largest, most intense, and novel approach to recruit and prepare a new group of teachers for these settings. Operating at 42 sites across the country by 1999, the Pathways program seeks to recruit from three non-traditional pools: paraprofessionals, uncertified teachers, and returned Peace Corps volunteers (RCPVs).

While important differences exist among the 42 programs, all share four basic features:

- A partnership between a teacher education program that prepares participants and one or more high-need school districts that employ them;
- A process that combines traditional and nontraditional criteria to select participants;
- A rigorous and innovative teacher education curriculum that is tailored to the needs of nontraditional participants and builds on their strengths; and
- Varied types of support for Pathways candidates while they pursue college degrees as well as teaching certificates.

In more than a decade of development, the top priority of Pathways has remained enlarging and diversifying the pool of well-prepared teachers for public schools in difficultto-staff, often low-income areas, both urban and rural. Pathways has also aimed to build effective strategies for recruiting, preparing, and certifying teachers from nontraditional backgrounds. The program is based on the conviction that nontraditional candidates already have a wealth of experience that, with appropriate support, college degrees, and teaching certificates, will permit them to become full-time teaching professionals with bright futures in elementary and secondary public education.

About This Handbook

Four years into a six-year evaluation of the Pathways program, researchers at the Urban Institute in Washington, D.C., and Montclair State University in Upper Montclair, New Jersey, have documented the program's considerable success in achieving its major goals. (Preliminary results of the evaluation were published in 1997 as a progress report.¹) Building on lessons learned in the evaluation of the model program, this Pathways handbook aims to help new programs make the best possible start in duplicating the success of Pathways. The handbook will be of special interest to people who are already involved in crafting local solutions to the teacher shortage, such as school hiring officers, district superintendents, state education department personnel, and faculty and deans from programs of teacher education at institutions of higher education. A final report, which will detail the research findings that inform the design lessons presented in this handbook, will be published in 2001.

A guide to the design of new programs, this handbook takes a start-to-finish approach. We begin with a review of requirements for building the essential, ongoing partnerships between teacher education institutions and school districts that are a hallmark of Pathways. How to recruit and select promising candidates from nontraditional backgrounds occupies the next section. Then we describe innovative elements in the teacher education curriculum. Section IV discusses the types of support that program participants from nontraditional backgrounds need during their preparation as teachers. The final section, on costs and budgeting, offers guidance for establishing and supporting a welladministered Pathways operation.



¹ DeWitt Wallace-Reader's Digest Fund. 1997. Recruiting, Preparing, and Retaining Teachers for America's Schools: Progress Report—Pathways to Teaching Careers. New York, NY: Author.



SECTION



he shortage of qualified teachers in urban and rural schools is a serious problem that demands concerted action. School districts with teacher shortages can begin to address their need by forming partnerships with teacher education programs—the entities that formally prepare candidates for state certification. By pooling and coordinating the resources of both institutions, partnerships can potentially maximize results and produce more new and qualified teachers. To be productive, however, partnerships require considerable planning and continuous review. Below, we outline essential steps in building effective, lasting partnerships.

2

Creating Successful Institutional Partnerships

Creating a Partnership

Putting together the planning team. The initial impetus for a partnership may come from either a school district with a teacher shortage or a university in geographic proximity to such a district. If the parties involved agree to pursue a partnership, it is advisable to form a committee to help plan the effort. The role of this committee is to assess the district's need for qualified teachers, set numerical goals, determine the pool or pools from which to draw new recruits for difficult-to-fill teaching positions, and design a program to meet the goals the partners set.

The composition of the planning committee is critical to its success. Among those who should be included are the following:

- The person slated to oversee Pathways program activities at the university
- Faculty members who are likely to teach courses for program participants
- A representative from the dean of education's office
- Representatives from the partner school district's personnel office who have access to information on local demand for teachers
- Principals from the partnering district who hire teachers for their schools and whose support is essential to recruit for the new program from the ranks of paraprofessionals and uncertified teachers

Assessing the district's need for qualified teachers. Planning begins with a systematic assessment of the local need for teachers, based on an analysis of current and projected teacher turnover rates, anticipated retirements, numbers of uncertified teachers, student enrollment trends, and existing policies on acceptable teacher-pupil ratios. But this is not enough. Because the demand for teachers varies across subjects, the planning team must also determine critical district needs for more teachers in specific subject areas. In recent years, for example, teachers of mathematics, science, bilingual education, and special education have been in high demand. Similarly, school districts sometimes seek teachers with particular characteristics. For example, concern over the growing cultural mismatch between the backgrounds of the K-12 student population and the teaching force has prompted many districts to seek more teachers from racial/ethnic minority backgrounds,

whose knowledge of minority cultures can help build bridges between home and school for the growing numbers of minority children.

In brief, to tailor recruitment programs to the needs of the partner school districts, the planning committee must estimate fairly accurately the number of teaching positions the district will need to fill in the near future and the fields in which those vacancies are likely to occur. The committee must also determine the type of teachers the district seeks to hire. This information should guide subsequent aspects of the planning process.

Setting goals. After assessing local needs, the planning team must set goals that will guide the development of program activities. Overall, the types of partnerships featured in this handbook aim to increase the number of qualified, fully certified teachers for difficult-to-fill positions in the partner school districts. This general goal, however, must be tailored to the local circumstances of each district. That means, for example, specifying the number of teachers that the program aims to produce, listing subject areas in which those teachers are to be certified and noting any other teacher qualities the district considers high priority. Without specific goals, a partnership cannot assess its progress or the ultimate impact of its effort.

Choosing the pool from which to draw new recruits. The planning team must also choose the specific pool or pools from which to recruit teachers for anticipated vacancies. Broadly speaking, school districts can draw on their own employees—by providing career ladder opportunities for paraprofessionals and uncertified teachers—or they can recruit from outside their boundaries. While several different pools exist outside the district, this handbook addresses only one group, returned Peace Corps volunteers (RPCVs), a group targeted by several Pathways programs.

The *paraprofessional* pool consists largely of instructional aides, but it also includes secretaries, cafeteria workers, bus drivers, and social service coordinators. There are important reasons for targeting paraprofessionals. Many live in the communities in which the students themselves live, and they know a great deal about the circumstances of these youngsters. They tend to mirror the racial/ethnic makeup of the student population, which makes the pool a good source of minority teachers. Because many have strong ties to their communities, they are likely to continue teaching in the partner districts after securing state certification. Paraprofessionals in career ladder programs continue their salaried positions and enroll in courses each semester toward completing the requirements for teaching certification and, in most cases, for a bachelor's degree as well. Most paraprofessionals who have participated in Pathways had at least 60 college credits when they entered the program.

Uncertified teachers are individuals who temporarily occupy difficult-to-fill teaching positions. The group includes long-term substitutes who may or may not hold bachelor's degrees and emergency-certified teachers who generally hold bachelor's degrees but lack permanent certification. While emergency-certified teachers usually receive better bene-fits and higher salaries than substitute teachers, their employment status is conditional on satisfying requirements for full certification within a grace period, typically three years. This pool is another good source of permanent teachers for districts with teacher shortages. Because substitute and emergency-certified teachers have teaching experience in the partner district, they know the student population well. Many are of racial/ethnic minority backgrounds and are knowledgeable about the cultures of students of color. Because most possess bachelor's degrees, they can complete the coursework required for certification within a relatively brief period, even if they are taking courses part-time.

Returned Peace Corps volunteers form another strong pool of potential teachers for high-need urban and rural school districts.¹ For one thing, their Peace Corps experience has taught them what it is like to be in the cultural and linguistic minority. This experience has also given them insight into the important role that language and culture play in social settings, including schools. Many RPCVs are fluent in other languages as well, and they tend to be highly committed to social justice. Programs targeting RPCVs help recruits secure emergency teaching credentials and placements in full-time teaching positions in the partner districts. Participants then take courses part-time to complete the curriculum that leads to permanent teaching certification.

When deciding which pool to target, your program planning team should consider the following:

Paraprofessionals: A survey of potential participants can help the planning team gather much of the information below, which is essential to determining the ability of this pool to match recruiting goals.

How many paraprofessionals does the district employ now? How many are interested in pursuing a program of study that will lead to teaching certification? What are their demographic characteristics (i.e., race/ethnicity and sex)? How many college credits will they need? How many college credits have they already completed? How many of the completed credits are likely to transfer to the program's partner college/university? How long is it likely to take paraprofessionals to satisfy certification requirements? Is this timeline compatible with the district's needs?

Uncertified teachers: Again, a survey of potential participants could help the planning team to gather significant information about this pool.

How many uncertified teachers does the district employ? How many are interested in pursuing the program of study that leads to teaching certification? What are their demographic characteristics (i.e., race/ethnicity and sex)? How many have already completed a bachelor's degree? How many have taken courses that count toward certification? How many credits toward certification have they completed?

RPCVs: Does either member of the partnership—the teacher education program or the school district—have contact with the Peace Corps of America to facilitate recruitment from this pool? If not, which partner will be responsible for establishing and maintaining contact with the Peace Corps? How many emergency full-time teaching positions is the district willing to allocate to qualified RPCVs so they can perform paid work while completing the requirements for permanent certification? Does the timeline for hiring new emergency-certified teachers coincide with the Peace Corps return schedule?

Obviously, a pool large enough to produce a sufficient number of qualified candidates must be considerably larger than the number of teachers the district estimates will be needed in future years. Only a large pool will give the program sufficient freedom to be selective in choosing participants.

¹We use this group as an example because they were targeted by the Pathways program. Other groups in this category might include retired military personnel, career-switchers, or other nondistrict employees with a minimum of a bachelor's degree in a noneducation field.

Designing the program. After your planning team has set goals and chosen the target pool, you are well positioned to design a program that will advance those goals and address participants' needs while building on their strengths. The next aspect of planning involves decisions on the following matters:

- Strategies for recruiting and selecting program participants
- The program of study participants must complete
- The network of academic, pedagogical, social, and financial support for participants

Because the success of the partnership rests largely on the quality of the program design, we discuss each of these three essential components in separate sections of this handbook.

Overseeing the Implementation of the Program and Making Modifications as Needed

The role of the planning committee officially ends upon completion of the planning phase described above. Once the implementation phase begins, however, your program should establish another group to provide oversight. In the Pathways initiative, this advisory committee's membership mirrors that of the planning group. This is not surprising, because the same people who have been intimately involved in planning the Pathways program become central to its effective realization. In a number of Pathways programs we evaluated, the original planning committee often simply continues as the advisory committee that oversees the program as it develops.

Initially, the advisory committee formally meets two to four times a year. As the program matures, the committee meets less often. Regularly scheduled advisory committee meetings give school district representatives an opportunity to make certain that college/university staff are aware of the district's changing needs, in order to adjust program objectives as swiftly as needed.

In Pathways, the role of the advisory committee is twofold—to monitor the progress made by the program toward established goals, and to make recommendations for dealing with issues that arise during implementation. The most significant input given by the Pathways advisory committees we evaluated focused on the following matters:

- How to deal with participants who lacked the expected number of transferable credits
- How to enable participants who were working full-time to complete the required student teaching practicum without salary interruptions
- What to do about participants with marginal academic performance
- How to facilitate the hiring of program graduates

We found that, when all key parties had seats on the advisory committee—the director or coordinator of program activities from the teacher education program, teacher education faculty, the district's office of personnel, and school principals—problems that arose during implementation of a new Pathways program were generally addressed quickly and effectively. This was especially true when all of these groups had played active parts in planning the program.

The Appeal of Partnerships

Rapidly proliferating partnerships between school districts and teacher education programs are an encouraging response to the teacher shortage. One reason for this growth is that the combined resources several institutions can muster enable more effective, comprehensive solutions to problems. Carefully planned partnerships can also yield considerable benefits to all parties. Districts gain well-prepared, fully credentialed teachers for difficult-to-staff positions in their schools. Teacher education programs enhance their capacity to meet the needs of children in the partner districts by modifying the content of their traditional curricula as well as by connecting directly with the schools. Spending more time in schools helps teacher educators to stay abreast of target districts' genuine needs. Participants in your program will benefit from the support they receive to obtain teaching certification. More important, the combined effect of all these gains from partnership can improve the everyday education of the children in K-12 schools.

Barriers to Overcome and Facilitating Factors

Partnerships are not problem-free, however. To flourish and succeed, they demand much time and attention. Time pressure on everyone often makes it difficult to schedule necessary meetings. Frequent turnover among school personnel, especially in urban districts, can lead to communication problems and changing faces on program committees.

Programs targeting RPCVs face additional challenges. The decentralization caused by recent school reform efforts complicates the hiring of RPCVs for teaching positions. Because new teachers are hired by principals in many decentralized systems, coordinating applicant interviews can be a nightmare. Furthermore, because the number of teaching opportunities depends on yearly budgets, recruitment needs are unpredictable, particularly in urban settings. This uncertainty makes it more difficult for programs to recruit RPCVs.

We found that the presence of six factors helps to resolve these problems and promote program success:

- 1. A history of collaboration between the partner institutions;
- 2. Open, frequent communication between representatives from the partner institutions;
- An accurate needs assessment that enables the planning team to articulate clear priorities and precise program goals;
- Strong respect commanded in the district by the director/coordinator of program activities;
- 5. Program goals that are compatible with the mission of the participating teacher education program; and
- 6. High-caliber program participants.

Each of these factors can help to overcome problems in building a new program; the presence of all of them together becomes a powerful predictor of success for a new program.

SECTION



he success of programs to increase the supply of credentialed teachers for difficult-to-staff positions in urban and rural schools depends largely on the candidates selected for participation. In this section, we summarize Pathways programs' most successful strategies for recruiting and selecting (1) paraprofessionals and uncertified teachers, and (2) returned Peace Corps volunteers. Because the strategies that work for school employees differ somewhat from those successful with RPCVs, we discuss the two separately.

8

Recruiting and Selecting Program Participants

Recruiting and Selecting Candidates from School Employee Pools

Recruitment and selection of paraprofessionals and uncertified teachers is made easier by their status as employees in the partner district. By using the district's established channels of communication, the program can readily publicize its existence to potential participants from these two pools. A further advantage is that district and school personnel have some familiarity with potential candidates. Their direct knowledge of applicants makes it easier for the program to gauge candidates' existing skills and dispositions for teaching the student population of the target district.

Overview of the Recruitment Process

To ensure a large and diverse applicant pool, programs need to publicize information about their existence through a clear dissemination strategy. A practical plan might involve local commercial media as well as public radio's community bulletin boards and public service announcements. The district can distribute brochures or flyers to the schools, and posters can be displayed at a central location in school buildings. Information may be disseminated through newsletters sent regularly to potential participants, either by the district itself or by the professional unions to which the target employees belong. Announcements through community agencies, such as churches and fraternal organizations, also boost interest in the program. Word of mouth is another useful means of letting people know about program opportunities.

Because principals are a main point of contact between the program and potential participants who are already employed in the schools, their recruitment assistance is critical. Discussing the program at regularly scheduled meetings of principals is an efficient strategy for informing this group and enlisting its active support.

Recruitment is strengthened when the program makes a concerted effort to identify applicants who meet the characteristics sought by the district (e.g., paraprofessionals of minority backgrounds who have two or more years of classroom experience and live in the community served by the schools). Districts' personnel information systems easily generate lists of qualified candidates. Such lists allow the program to individualize recruitment by sending letters to particular prospects, inviting them to submit applications. Principals can also help identify qualified candidates from among their staff.

Recruitment efforts culminate in a series of sessions or workshops that give detailed information about the program to people from the target pools who have expressed interest. Potential applicants need to understand clearly what the program will offer them. Necessary information includes the type of preparation they will get, the support they will receive while in training, and the financial assistance that will be available.

By the same token, potential candidates need to understand what the program expects of them in return. They need a realistic picture of the time that program-related activities

FIGURE 1 Summary of Recruitment Process





will require—including coursework and meetings. Prospects also need to understand clearly both the schedule and the rigor of required program courses. They need to know if they are expected to teach in the target district for a specified period of time following completion of the program. While the weight of program requirements may discourage some inquirers from actually applying, clearly communicating expectations up front will prevent problems down the road.

Figure 1 summarizes the salient aspects of the recruitment process.

Major Considerations in Recruiting Paraprofessionals and Uncertified Teachers

When planning recruitment activities, consider the following:

The program benefits when district staff is actively involved in recruitment. Because district personnel have easy access to paraprofessionals and uncertified teachers, their involvement in the recruitment process generally enhances the talent pool for the program. By using its information distribution system to publicize the program and its personnel database to identify qualified applicants, the district renders an invaluable recruitment service. School principals can be especially helpful with recruitment. Because they know their staff well, as we said earlier, principals can identify paraprofessionals and uncertified teachers from their schools who are well suited for the program. In brief, district involvement helps facilitate communication between the program and potential applicants. It also sends a clear, strong message to applicants that the district values their investment of time and energy in the program.

A large applicant pool is needed. The ability to select highly qualified candidates requires an applicant pool that is large enough to allow some freedom of choice while still meeting enrollment targets. Thus, the site's recruitment capability is critical to the overall success of the program. If the number of applications your program receives is small in relation to your enrollment targets, you will need either to adjust those targets or to expand recruitment beyond the original pool.

Tuition assistance must be available. To successfully recruit district employees—especially paraprofessionals—tuition assistance is essential. Paraprofessionals earn barely more than the established minimum wage in this country, and many in this population carry heavy financial responsibilities for their families. Without financial assistance, few would be able to pay for completing their college education. Tuition assistance also functions as an important incentive for uncertified teachers to complete their certification requirements. Because their positions are not secured, especially among those with substitute teacher status, uncertified teachers are often reluctant to take out student loans to pay for required college credits. In section IV, we discuss tuition assistance further.

Recruitment practices change over time. Recruitment strategies should be reviewed often. If your program becomes well known and establishes a large pool of applicants in the first several years of activity, word of mouth becomes a reliable recruitment device. If the applicant pool drops, you may need to expand recruitment beyond the pool initially identified.

Selecting Candidates from the Paraprofessional and Uncertified Teacher Pools

While we found variations in the selection of candidates across the Pathways sites that targeted paraprofessionals and uncertified teachers, an overall pattern emerged. Optimal selection generally occurred in three stages, as shown in figure 2.

F I G U R E 2 Phases in Selecting Participants from among School Employees

PHASE I: SCREENING

Application materials are evaluated concurrently for compliance with criteria for admission into teacher education at the partner college/university and for other program-specific participation requirements. Applicants who meet criteria for admission into teacher education (or are close to meeting those criteria) and also approximate the participant profile sought by the program are invited to the college/university campus for a visit and further assessment.

PHASE II: INTERVIEWING

Visiting applicants participate on campus in one or more interviews, and in some cases also produce writing samples. Applicants' performance during the interviews, and the quality of their writing samples, are assessed.

PHASE III: SELECTING

Admissions decisions for both teacher education and selection for the program are made based on the information gathered in Phases I and II. Sites might conclude this phase by asking successful candidates for admission to sign a letter of agreement that outlines (1) services to be provided by the program and (2) participants' responsibilities to the institution and to the program.

Phase 1. This begins after the candidate submits application materials, which usually include the following:

- Background personal information—employment in the district, teaching experience, minority status, gender, fluency in a language other than English, residency in the target district community.
- Copies of college or university transcripts.
- Scores on standardized tests such as Scholastic Assessment Test, American College Test, Preliminary Professional Skills Tests, Miller's Analogy Test, National Teacher Examination, PRAXIS, or State Basic Skills Test. Some programs have considered test scores optional.
- Written essays describing the candidate's interest in teaching, career goals, or past educational or work experiences.
- Letters of recommendation—from principals and certified teachers in the partner district, as well as from community leaders.

These sources of information are evaluated to determine compliance with criteria for admission into teacher education at the host institution and compliance with other program-specific requirements. Decisions on admission into teacher education are driven largely by a candidate's potential to complete the program of study. Among the traditional predictors of success that programs consider are grade point average (GPA) and scores on standardized tests.

Successful programs in the Pathways initiative, however, supplement conventional criteria with nontraditional indicators of success that give a fuller picture of applicants' strengths. Among the supplemental indicators are recommendations from principals, certified experienced teachers, and community leaders; teaching experience; residency in urban or rural communities; commitment to teaching in urban or rural settings; ability to work with others toward productive ends; leadership qualities; and level of maturity.

Program-specific selection requirements more closely reflect the needs and priorities of the partner district. Employment in the target district is a main consideration in most sites targeting paraprofessionals and uncertified teachers. Many of these sites give priority to applicants of minority backgrounds, and some sites specifically seek minority males. Others are interested in candidates who have fluency in languages other than English. Programs offering bachelor's degrees to paraprofessionals consistently expect at least 60 transferable credits so that participants, who take classes on a part-time basis, can complete the program of study within three years or so.

Phase II. Applicants who pass Phase I are invited to campus for one or more interviews. Interviews require some advance thought. They should be designed to generate a wide range of information about each candidate—personal qualities and dispositions such as self-confidence, maturity, enthusiasm, skills in oral communication and social interactions; involvement in and awareness of the communities served by the target school district; and knowledge of the schooling process.

During this campus visit, some Pathways programs ask applicants to produce on-thespot writing samples on assigned topics. Pathways staff who favor these impromptu exercises claim they are excellent predictors of how applicants will handle coursework and required papers. Some argue that writing samples are better than GPAs for forecasting how the candidate will fare with academic demands—especially for mature applicants who have had no coursework for a time.

Phase III. Selection decisions are made on the basis of what evaluators have learned about applicants during the first two phases. We have found that programs that select applicants who meet established criteria for admission to teacher education are more effective than programs that overlook those criteria. However, successful sites have made exceptions for candidates who were close to meeting set criteria, as long as they had the personal dispositions and commitment sought.

What qualities add up to the kind of "personal disposition" that makes a promising program participant? In the opinion of Pathways program staff, factors that best predict later success in the program include the following:

- Commitment to teaching—especially in difficult schools
- Commitment to completing the program
- Intention to continue teaching in the target district after securing a teaching certificate
- Evidence of having overcome adversity in the past
- Leadership skills
- Maturity

Our evaluation of the Pathways initiative shows that, while participants' GPAs play an important role in the success of a program, performance in personal interviews and impromptu writing samples (or samples required with formal applications) can tip the balance on marginal applications. Students who interview well and produce good writing samples but lower-than-expected GPAs or test scores have occasionally been admitted to programs provisionally—provided the selection team feels that they show a personal disposition toward teaching.

During the probation of provisional admittees, programs may offer a variety of academic support services to help them perform better in coursework. Availability of adequate services is essential to participants' success. (Support services are the subject of section IV.)

Responsibility for the selection of program participants must be shared by teacher education and school district staff. Both college/university staff and school district personnel must be actively involved in the selection of program participants. The primary role of representatives of the institution of higher education is to ascertain whether applicants have the academic potential to complete the coursework comprising the teacher education program. They must also decide whether to admit applicants who might fall short of meeting traditional admissions criteria but display other qualities valued highly by members of the partnership. In making these decisions, they must consider whether the academic support services available through the program will be sufficient to enable admittees to succeed.



Because the ultimate goal of these programs is to place graduates in permanent teaching positions, active involvement of partner district staff in the selection of participants is essential. At a minimum, district personnel must give input into the selection criteria. It is also advisable that both district staff and principals from partnership schools participate in the screening, interviewing, and selection of candidates. District staff and principals at the Pathways sites reported that when they play a prominent role in selecting program participants, they develop a strong incentive to hire graduates later on to fill teaching vacancies.

Recruiting and Selecting from the Pool of Returned Peace Corps Volunteers

The recruitment and selection of candidates from outside the partner school district expands the talent pool from which to fill teaching vacancies. This expansion, however, presents an initial obstacle to programs. Because recruits must be placed in full-time teaching positions while they complete the program of study, considerable effort is required to coordinate the placement of these candidates in teaching positions with their recruitment and selection for the program. This section describes strategies that have been successful with one particular external pool—returned Peace Corps volunteers.

Essentials in Recruiting Returned Peace Corps Volunteers

Recruitment is in some sense far easier with RPCVs because the Peace Corps has a tightknit communication system of country directors and direct access to volunteers in the field as they are considering post-Corps career decisions. The Peace Corps/USA Fellows Program in Washington, D.C., coordinates the 14 RPCVs programs that are part of the Pathways initiative.

Several RPCVs sites in the Pathways initiative have supplemented the central recruitment mechanism available through the PC/USA Fellows Program with a strategy of sending information about their own local programs directly to country directors of the Corps. To assist with this aspect of recruitment—which in Pathways sites is conducted by the partner teacher education institution—the program will need to prepare an information packet including a description of the course of study and support services offered, a description of the partnering district and its job opportunities, and application materials.

As the program matures and alumni spread the news, word-of-mouth recruitment also becomes a possibility. Pathways programs have found it useful to encourage potential recruits to contact enrolled RPCVs to learn more before they apply.

The major factor that contributes to a sometimes uneven flow of applications from RPCVs is the individual program's ability to place recruits in full-time teaching positions upon admission into the program. Uncertainties surrounding student enrollments and budgets for the coming school year often prevent districts from making an early commitment to place candidates. Programs unable to make this commitment are apt to experience difficulties with recruitment.



Thus, the success of an individual program in attracting RPCVs may be tied even more tightly than recruitment of school district employees to a close working partnership between the school district and the teacher education institution. When a tight collaboration exists and teaching vacancies are abundant, sites have little difficulty attracting applicants.

Selecting Candidates from among Returned Peace Corps Volunteers

Pathways programs have used two approaches to select candidates from the RPCV population. These approaches are distinguished by whether applicants are chosen for the program before or after they have been hired as emergency-certified teachers by school districts.

Approach 1: Choosing participants for the program *before* they have been hired as **teachers.** The phases of this selection approach are shown in figure 3.

This approach works best when teaching vacancies abound in the partnering district and the program is in a state that has streamlined procedures for awarding emergency teaching certificates. Direct involvement of school district personnel in the selection process typically results in teaching contracts for those admitted into the program. While Pathways sites using this selection approach have been largely successful in helping participants obtain teacher placements, the uncertainty of Phase III is challenging for many of them.

Approach 2: Selecting participants only after they secure teaching positions in the target district. Three phases also comprise this approach, shown in figure 4.

This approach works best in states where the process of acquiring emergency teaching certificates is complex, often requiring applicants to pass certain tests. This approach may also work better if the school district involved in the partnership has few teacher slots available.

Regardless of selection approach, the placement of candidates in full-time teaching positions is a major challenge for programs to overcome at the outset. Placement difficulties may be solved in part by paying more attention to returned volunteers' interests or preparation in subject areas of highest demand in the partner school districts; here, as in selection of school-employee candidates, the direct involvement of school principals and district staff in selection decisions is a must.

Program developers who are targeting groups similar in profile to RPCVs might wish to adapt the suggestions above to their specific target populations, although many of the recommendations apply to several non-school-employee groups. **FIGURE 3** Selecting RPCVs for Program Participation *Before* They Secure Teaching Positions

PHASE I: EVALUATION

Candidates' application materials are evaluated to determine compliance with criteria for admission into the teacher education program and other requirements for employability as emergency-certified teachers in the target school district. These are the main factors considered in making admissions decisions:

- Successful completion of Peace Corps service
- Prior teaching experience
- Background in subjects that receive hiring priority in the target district
- Possession of a bachelor's degree
- GPA
- Scores on selected standardized tests
- Quality of writing sample
- Evidence of personal commitment to teaching

PHASE II: CONDITIONAL SELECTION

Applicants who meet requirements are selected for participation on the condition that they find a teaching position before, or shortly after, they begin the program of study.

PHASE III: PLACEMENT

Selected RPCVs are helped to find teaching positions by the teacher education program and the school district. Once placed, they are formally selected for the Pathways program. **FIGURE 4** Selecting RPCVs for Program Participation *After* They Secure Teaching Positions

PHASE I: EVALUATION

Candidates' application materials are evaluated to determine compliance with criteria for admission into the teacher education program and other requirements for employability as emergency-certified teachers in the target school district. The main factors considered in making these decisions are the same as those described in figure 3.

PHASE II: PLACEMENT

Applicants who meet the specified requirements are helped to find placements as teachers in the partner school district. To facilitate the search, sites typically invite candidates for interviews. Whenever possible, candidates are also scheduled to take the state-required tests for emergency teaching certificates during these visits.

PHASE III: SELECTION

Those candidates hired as teachers by the target district are selected for participation in the Pathways program.



SECTION



he teacher education curriculum leading to full certification is the heart of the Pathways program. It is the vehicle for developing and enhancing the skills that participants must acquire in order to successfully teach students in the partner school districts.

Mirroring the demographics of student populations in city schools throughout the country, urban sites in the Pathways initiative largely serve poor children from racial and ethnic minorities. A similar demographic profile characterizes students in rural Pathways programs. Historically, children who are poor and children of color have not been well served by public schools. This is evident in their less than optimal grades, test scores, attendance, and high school graduation rates, among other factors.

To improve these children's chances while preparing teachers from new sources, most Pathways programs have adopted a curriculum that reflects the best current thinking on effective teaching, building on participants' strengths while addressing their unique needs.



Building an Innovative Curriculum to Prepare New Teachers

Central Themes in the Curriculum

Curriculum development was never a requirement for an institution's participation in Pathways. Nevertheless, almost all teacher education programs in the Pathways network seized the opportunity to reshape their coursework and field experiences—some more substantially than others—to serve the K-12 student population in their partner districts better. As you plan the curriculum for your program, consider the central themes that permeate the preparation of teachers at existing Pathways sites.

Valuing diversity. The value of diversity is infused throughout the teacher education curriculum. The message of diversity is strongly and consistently conveyed to participants: Teachers who consider behavior that differs from mainstream cultural norms as a problem to be remedied will generally not make accurate assessments of children's strengths and limitations. An attitude that presumes minority children suffer automatic "deficits" invariably leads teachers to emphasize what students cannot do, rather than what they are capable of doing well. To capitalize on the many strengths students bring to class, teachers must demonstrate respect for, and appreciation of, cultural differences. They must accept all students as learners who already know a great deal and who have experiences, concepts, and language that can be built upon and expanded to help these children to learn more.

Selecting participants who are favorably predisposed to diversity and the expression of cultural differences is a necessary condition for success. But to make the best use of these favorable attitudes, the program must reinforce the value of cultural diversity throughout the teacher education curriculum.

Learning about different cultures. To teach children from diverse backgrounds effectively, teachers themselves must learn about cultural differences. They need to understand the concept of culture and its changing meanings. As part of their preparation, program participants also should explore their own cultural identities and how these were shaped in their own lives. By sharing their stories and hearing their classmates' stories, Pathways participants can learn much about cultural differences. Studying the history and literature of the different cultural groups represented by children in the classes they teach will also yield important insights. **Building bridges between home and school.** While differences exist in the views of teaching and learning embraced by Pathways programs, the sites generally agree that learning is made easier when teachers help students to build bridges between their experiences inside and outside the classroom. For example, when teachers know their students well, they can select materials that children find relevant and interesting; they can also clarify new concepts by using examples or analogies drawn from the youngsters' everyday lives. To ensure that students receive help in making the necessary connections between home and school, many sites target for selection into the Pathways program people who share the students' race/ethnicity or live in the same communities. Once admitted into the program, however, participants need to be taught that students' prior knowledge and experiences—both individual and cultural—play a critical role in successful learning. Pathways trainees also must develop facility in using a variety of pedagogical strategies that help students themselves to connect what they already know to new concepts and skills they must learn. Still another way of fostering connections between home and school is to prepare participants to work effectively with the families of their students.

Preparing to serve as role models. Because they have ongoing contact with students, teachers are in a good position to serve as role models for them. Many Pathways sites consciously work to prepare participants—both white and of color—to fill this role. Such preparation may invoke discussion of the qualities of an effective role model and explain strategies teachers use to become effective models. Another approach is to cultivate participants' personal leadership skills. Teacher educators can also serve as role models for Pathways participants, teaching them by example as well as instruction the benefits that students may draw from admired mentors.

Making connections between theory and practice. At most Pathways sites, the teacher education curriculum aims to help participants clearly connect theory with practice in the classroom. The translation of theory into practice is made somewhat easier in Pathways programs because nearly all participants (including those who are RPCVs) are employed as instructional aides, substitute teachers, or emergency-certified teachers. Because they have access to classrooms, Pathways candidates can easily carry out field experiences associated with their coursework. Participants also bring to bear on their academic courses a wealth of teaching experience. Most of the Pathways teacher education faculty we interviewed commented favorably on the ability of program participants to ground theoretical discussions in the context of their everyday practice. Faculty interviewees also mentioned that other teacher education students who take classes with program participants benefit considerably from these practically grounded conversations.

Strengthening subject matter knowledge. If students are to attain high levels of achievement, teachers need not only well-developed pedagogical skills but also a deep grounding in subject matter knowledge. Without such grounding, teachers' ability to make content conceptually accessible to students is severely limited. Pathways sites recognize this important principle and consciously strive to provide program participants with a deep understanding of subject matter. To this end, many reported having extensive and rigorous course requirements in general education and the liberal arts, as well as in the academic majors available to Pathways participants.

Innovative Instructional Practices

We have found that teaching by modeling is a highly powerful instructional practice. At Pathways sites, teacher education faculty often reported that they model for their students the practices they encourage them to use in the classroom. For example, the faculty not only tell participants that students learn best through active participation in learning tasks; they also make a point of actively engaging participants in their own learning. Through guided reflection on their personal learning, class members gain valuable insight into effective teaching.

Further innovative instructional practices often used at Pathways sites include these methods:

- Teacher reflection—asking participants to keep journals of their teaching
- Cooperative learning
- Group projects
- Application of theories learned in courses to concrete issues in their classrooms
- Analysis of situations depicted in teaching cases
- Analysis of videotapes of themselves teaching
- Emphasis on learning by discovery rather than by verbal instruction
- Use of performance assessment to document breadth and depth of candidates' learning
- Service learning in community settings

Structural Innovations

In important ways, the Pathways teacher trainee groups of paraprofessionals, substitute teachers, and uncertified teachers differ from the traditional population of teacher education students. The people in these nontraditional pools tend to be older and to bear more family responsibilities. They also are likely to have had more teaching experience than the typical teacher education student. Because teacher education programs are designed largely for traditional students, your program may need structural adjustments in order to serve nontraditional candidates most effectively. These adjustments, we found, can often become creative opportunities to improve curricula rather than mere accommodations. Our findings about Pathways programs suggest that the ideas below should be integrated into your program planning.

Giving credit for experience. New programs should consider giving participants credit for their past professional experiences. For example, programs might reduce the required student teaching time, or waive this requirement altogether, for participants with substan-

tial teaching backgrounds. By taking such actions, programs take account of and validate the experiences of individuals from nontraditional populations.

Addressing barriers to student teaching. Most states and school districts prohibit aspiring teachers from being paid for their work as student teachers. This component of the teacher education curriculum can thus cause great problems for paraprofessionals, the group most directly affected by this regulation, who often have family responsibilities and require income. Programs need to develop a strategy that will enable paraprofessionals to continue earning during their apprenticeship period. Pathways sites used the following strategies to surmount this barrier:

- Asking paraprofessional Pathways candidates to fulfill the student teaching requirement on a part-time basis over a longer period. This adjustment allowed them to continue in their jobs without a salary interruption.
- Allowing paraprofessionals to embed student teaching into their work as teaching assistants. This strategy works well as long as the teachers who supervise the paraprofessionals are willing to serve as cooperating teachers. Such an arrangement may require negotiating a formal agreement between the teacher education program and the state or the partner school district, or both.
- Finding another source of funding to pay the salaries of paraprofessionals during the student teaching period—career ladder funds available in some districts might be a good source.
- Arranging for paraprofessionals to receive paid administrative leave to complete their student teaching.

Expanding course offerings. Adjustments in course schedules and location are often needed so that the program becomes accessible to nontraditional participants. Because paraprofessionals, substitute teachers, and emergency-certified teachers work during the day, they cannot take courses on a normal workday college schedule. Teacher education programs serving these populations can expand the number of courses offered during evenings, weekends, and summer sessions. Programs also should consider convening some classes at community agencies or school buildings in the partner district. When courses are taught on-site, instructors can use those settings as teaching laboratories. This measure can also reduce travel complications for participants who lack easy access to transportation.

Course offerings can also be expanded by adding workshops, seminars, and special courses on topics specific to the needs of nontraditional participants. These course offerings can be taken for credit or for no credit. Some Pathways programs, for example, have offered workshop series devoted to urban problems or issues of diversity in the classroom. Other topics have included whole language, science, AIDS education, math anxiety, technology and schools, site-based management, and classroom management. Pathways scholars are also encouraged to attend professional conferences.

Working Together to Adapt the Curriculum

Because the partnering college/university in Pathways programs is the agency with legal responsibility for the teacher education curriculum, its faculty must take the lead in adapting the curriculum to the needs of the target populations. This is not to say that school district personnel have no role whatever in planning the curriculum. School and district staff must help identify the specific teaching strengths and needs of recruits, important insights that should inform subsequent curriculum development.

By the same token, curriculum decisions made at the institution must take into account the district staff's willingness to find a satisfactory solution to the student teaching income barrier; to provide school locations for on-site courses; to supervise participants' field experiences; to serve as guest speakers for seminars and workshops; and to teach selected courses in the program.

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ecause candidates in Pathways-type programs come from nontraditional pools, their profiles differ markedly from those of traditional teacher education students.

Candidates from the paraprofessional and emergencycertified teacher pools tend to be older, to have families, and to have been out of college settings for some time. They tend to be less familiar with how universities work and correspondingly less confident of their ability to succeed academically. Most of them hold jobs.

Returning Peace Corps volunteers also show profiles markedly different from those of traditional students, but their differences are not the same as those of paraprofessional candidates. The RPCVs are younger than the first group and less likely to have begun families. They may be unfamiliar with teaching in U.S. public schools, and also have less teaching experience.

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Providing Support Services for Candidates

Both groups of nontraditional candidates face stresses and demands that are atypical for most teacher education students. Not surprisingly, therefore, teacher education programs do not usually offer appropriate support services. Recruitment programs that target nontraditional candidate pools can raise retention and completion rates considerably by tailoring additional support services to nontraditional students' needs, and thus improve the return on investment in the program.

This section describes unusual support services that Pathways programs have developed to help their nontraditional populations complete their studies and become credentialed in a timely manner. It also describes three types of support services for participants who have attained certification: placement in teaching positions, induction services for beginning teachers, and involvement in program activities. In closing, we offer basic principles for constructing an effective support services network to serve nontraditional teacher education students.

Supporting Participants over the Long Term

Often, Pathways participants progress through teacher training under difficult circumstances. Because they emerge from nontraditional pools, during school and their early months as teachers they need a network of services uniquely suited to them.

Main support services that Pathways-type programs have provided include orientation, academic advising, academic tutoring, preparation for certification exams, supervision of field experiences, mentoring, counseling, family support, and support in building a network of colleagues. Below, we describe these services in general, and then discuss their applications to different target populations.

Orientation. Typically, orientation begins soon after participants are admitted to the program. Orientation familiarizes new enrollees with the program's goals and expectations, together with certification requirements. It also introduces new students to the host institution and the teacher education program, as well as to program and institutional support services they may use. Some programs' orientation sessions last only a few hours or days at the beginning of each semester, while other programs make orientation

part of a credit-bearing class that goes on throughout the first semester. In other cases, orientation to a Pathways-type program is embedded in the recruitment and selection process.

In the DePaul University Fellows Program, students in each cohort take their first three weeks of classes together during August, when they first enroll. Classes meet daily, giving students ample opportunity to become acquainted with each other, program staff, and the staff of the schools where they will intern. During this time they are also oriented to the city of Chicago and the Chicago Public School System. Key courses that program staff believe are helpful when completed before entering the classroom are also offered in August: "Instructional Strategies in Critical and Creative Thinking," "Curriculum in Language Communications," "Teaching and Learning Elementary Math," and "Professional Practice."

Orientation is of particular importance for RCPVs because it is the main source of their knowledge about the school districts where they will teach and their chief opportunity to learn about the teaching profession before they assume full-time jobs in it. Peace Corps programs often offer orientation in the summer, some integrating orientation into a set of summer courses. RPCV program orientation includes local orientation to the area, the host institution, the program, and the school district; pedagogical techniques are also taken up. Programs that serve predominantly American Indian schools offer orientation to American Indian culture as well.

Beyond preparing new students to participate most effectively in the program, orientation may also help to build support on the part of the new students' family members, if they are included in certain sessions. Another, less obvious aspect of a successful orientation program is laying the foundation for future colleagueship among the new students by asking all entering students to attend the same sessions.

Academic advising/monitoring. All programs provide some type of academic advisory services focused on course selection and sequencing. In some programs advising is done by program staff, in others by faculty or host institution staff, and in still others by both program and host institution staff. Some sites offer group as well as individualized advising. A few programs embed advising into seminars that discuss issues such as required courses, manageable course loads, and potential difficulties. Because programs for RCPVs tend to mandate a set course sequence, most provide very little advisement.

Some Pathways sites used their own version of the Bank Street College advising model, in which project staff meet with small groups of students weekly or every other week to discuss problems participants may face in the program, questions about teaching and learning, general issues in education, and connections between educational theory and classroom practice. These sessions promote a sense of community and mutual support among the students, while ensuring they receive adequate academic advice.

Almost all programs monitor participants' progress semester by semester. Transcripts and grades are reviewed to judge whether the academic program is being followed and how nontraditional students are faring in it. Several programs meet with participants at the end of each semester to discuss past or potential problems. Participants who are in academic difficulty may be referred to support services provided by either the program or the institution. A number of programs ask faculty who teach Pathways students to report periodically during the semester on their progress in class, so that problems can be addressed before it is too late. Faculty are also asked to give end-of-semester reports on Pathways scholars.

Academic tutoring. Programs for paraprofessionals and emergency-certified teachers offer academic tutoring on an as-needed basis to both individuals and groups. Tutoring sessions can be institutional or program-supported. For example, several host institutions hold workshops to develop skills in math, writing, critical thinking, test-taking, studying, time management, and use of the library. Institutions also have labs or learning centers—open to all students, not just Pathways scholars—that offer help with math, writing, and other subjects on request. Some Pathways programs hire in-house tutors on an as-needed basis, although most RCPV programs report not needing this type of support.

Preparation for certification exams. Almost all programs for paraprofessionals and emergency-certified teachers provide test preparation assistance. A wide variety of test preparation programs are used, including noncredit courses, a workshop series, skills development through tutors, student support groups, and regular courses that embed training in test-taking skills in a more content-focused syllabus. In addition to providing help with teacher certification examinations, some programs offer assistance with institutional admissions exams such as the Graduate Record Examination (GRE) and the Miller Analogy Test (MAT). Many of these test preparation activities are sponsored by the host institution. Programs also provide this assistance, and boards of education may sponsor test preparation help. Such assistance is especially important for participants, such as paraprofessionals, who have been away from a college setting for several years and who may not have taken standardized tests in a long time.

Norfolk State University's support for Pathways Scholars, who must pass the PRAXIS exam as part of certification requirements, begins as soon as the

program accepts a student. He or she is assigned to a class called "Seminar in Assessment and Evaluation," which is offered for college credit. Course participants' weaknesses are diagnosed using "retired" versions of the National Teacher Exam (NTE), after which the remainder of the course concentrates on remedying those problems. Saturday workshops are held in conjunction with the classes, addressing specific topics assessed by the NTE. Approximately 85 percent of the students who take this course later pass the NTE.

Supervised field experiences. All Pathways students receive some type of supervised field experience. The experiences available include, first, school visitations, which consist of regular observations and feedback in their classrooms from other teachers, faculty, program staff, or principals. Field experiences may also be integrated into regular teaching responsibilities. Principals usually supervise all beginning teachers. Finally, there is student teaching, the most organized and consistent type of field experience.

Scholars in the University of Memphis Pathways program are monitored by a supervising instructor hired by the program. This person visits them once a week to provide feedback and support. In addition to evaluating participants' teaching, the instructor may also perform some modeling of certain teaching strategies if students need it.

Field experience supervision may be provided by program staff, faculty of the teacher education program, or school-based personnel (such as a cooperating teacher or principal). Some Pathways programs employ a supervising instructor whose major responsibility is to provide supervisory support to program participants in their classrooms. Student teaching requirements range from one semester to one year. As explained above, most Pathways programs have negotiated with school district partners to help participants fulfill student teaching requirements without having to quit their jobs to do so.

Kean College assigns each entering Scholar a faculty mentor, whom he or she contacts regularly through individual conferences, classroom observations, telephone conversations, and group meetings. Faculty mentors are expected to provide individualized support in order to ensure that each student stays in the program through graduation. Faculty mentors also track participants' progress, using monthly reports summarizing their contacts and flagging any problems their students may have. Faculty mentors then must refer their mentees to special support services as needed.

Mentoring. Mentors provided by Pathways programs might be teachers, program staff (such as the supervising instructor), retired school personnel, or program alumni. They provide feedback and support on classroom teaching, resources, and materials, as well as advice on negotiating the educational system. Mentoring offers critical support to non-traditional participants. Pathways program experience shows that several factors must work together to ensure high-quality mentoring. In general, mentors should be carefully selected and matched to mentees; they should be paid or given released time for mentoring; they should undergo mentor training; and other program staff must monitor the frequency and quality of mentoring contacts.

As programs have matured, with a critical mass of graduates in the cooperating school district, program alumni teaching in the district may mentor program participants. This has occurred especially in the RPCV programs, where Pathways graduates are still teaching in the schools where RPCVs are interning.

First- and second-year Fellows at Teachers College, Columbia University, are placed in teams of 8 to 12. Each team is assigned a project associate who is a graduate of the program. Beyond the monthly seminars Fellows attend, the teams meet regularly, sometimes at associates' or program participants' homes, with discussion topics generated by Fellows.

Counseling. Most counseling services are available through the host institution's counseling center, although Pathways staff listen sympathetically to problems. Because most participants must juggle the demands of full-time jobs, family responsibilities, and coursework, they are under constant pressure and there is never enough time in the day. Spending many hours away from home to complete coursework and participate in other project-related activities, participants often find that spouses and other family members come to resent the program. For some participants, especially paraprofessionals, their participation in the program threatens the stability of relationships with spouses, many of whom lack formal education past high school. Access to counseling is essential for students in these unusually stressful situations.

Family support. Programs sponsor family support activities such as reimbursement for child care, family socials, activity days for families, awards dinners that invite families, and workshops for spouses. Although most child care assistance takes the form of reimbursing participants' child care expenses, a few programs provide dedicated services at the host institution's child care center, kept open in the evenings for the children of Pathways students.

Some programs include participants' families in orientation activities, hold seminars or workshops to introduce families to the goals of the program, discuss its demands or requirements, and enlist the family's support for participants. Because paraprofessionals and emergency-licensed teachers are more likely to be older and to have families, programs serving these populations list family support activities as a vital service. RPCV programs, on the other hand—which serve younger, single participants for the most part—do not place as much emphasis on family support activities. **Cohort-building.** Cohort-building—encouraging a community of professional and personal colleagueship among program participants—helps graduates begin to develop their own support networks. In several programs, especially in the Peace Corps cluster, entering students are grouped together from orientation and in courses provided to program participants only during the program's first semester. Programs follow up by arranging regular meetings and social activities for students in the same cohort.

The University of Michigan Fellows Program begins building a sense of group cohesion during the orientation session, when Fellows first meet each other and spend considerable time together. Subsequently, colleagueship is fostered by first-year seminars in which Fellows discuss their teaching difficulties and share classroom experiences.

Financial support. For program students who are substitute teachers and paraprofessionals who typically hold low-paying jobs, financial assistance with tuition and other expenses is a *must*. Emergency-certified teachers usually shoulder heavy financial responsibilities that bar them from paying for the additional courses a teaching certificate requires unless they receive financial aid. Pathways programs provide funding to cover at least twothirds of tuition. Programs may also reimburse participants for child care, books, and transportation, and provide loans for emergencies that might arise. RPCV programs, where the typical participant is a younger, single person earning a teacher's salary, are called upon to provide less financial assistance.

Easing the Transition into the Classroom

After participants have completed their programs and obtained a teaching license, three additional supports help to smooth their transition into the teaching force.

Placement in teaching positions. Programs—especially those that serve paraprofessionals—are faced with assisting their graduates in finding teaching jobs in targeted school districts. Some Pathways sites provide guidance for participants in negotiating the district bureaucracy and procedures; the guidance includes preparing them for interviews and helping them with paperwork. Placing school district staff on project advisory councils has strengthened this process. Sites also maintain informal communication with district personnel to learn about job openings and ensure that program graduates are considered for those jobs. Facilitating the transition of Pathways graduates into teaching positions in cooperating school districts ensures that these districts reap the main benefit of collaboration: an increased supply of highly qualified teachers to fill shortage areas.

Participants in programs that serve noncertified teachers or RPCVs are placed in teaching positions when they enroll in Pathways, and usually stay in those jobs after they are licensed. Obtaining this initial placement becomes easier when programs have a close relationship with the district. Other factors facilitating initial placements include a pressing need for teachers and a district hiring cycle that coincides with the program's enrollment cycle.

Induction services: support for beginning teachers. Pathways programs often invite graduates to participate in seminars, workshops, and meetings that contribute to their professional development and support. In their first year of teaching, graduates also receive informal assistance from programs, which encourage them to consult program staff about questions or problems. Program staff observe graduates' classroom teaching and offer feedback.

Induction services may also be provided by the host institution to all its teacher education graduates, or by the school district or teachers' union to all beginning teachers in the district. In addition to seminars, workshops, and beginning teacher institutes, induction services may offer the assistance of mentor teachers, additional supervision by the principal, and other support.

Cleveland State offers a four-hour seminar focused on classroom discipline, while Kean College gives a graduate course called "Survival for Beginning Teachers" and pays tuition for program graduates to attend. The University of Louisville holds less formal small-group meetings for beginning teachers. Several programs offer workshops on classroom management to Pathways graduates.

Involving alumni in Pathways-related activities. Some Pathways programs continue to involve their alumni in activities such as meetings, seminars, orientation, and social functions. Alumni are often encouraged to act as mentors for current program participants and program graduates. The programs also maintain connections through mailings and telephone calls to alumni.

Ensuring a Successful Support Network

In developing a network of support services, prospective Pathways-type programs should be guided by the following basic principles:

Support services should match participants' needs, while acknowledging and building on their strengths. Specific needs in these target populations call for specific support strategies. Paraprofessionals, for example, typically have low-paying jobs, are older people with families, lack bachelor's degrees, and have been absent from postsecondary institutions for a while. A program serving this population might offer tuition assistance, family support services, advising, academic tutoring, test preparation, and cohort support to build confidence. RPCVs, on the other hand, typically hold a bachelor's degree and are younger and single, but lack familiarity with teaching in the U.S. educational system as well as teaching experience in U.S. schools. Tuition assistance is necessary to attract

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RPCVs to teaching because, generally, they have a range of career options open to them after they return to the United States. An adequate support system might emphasize an early orientation that exposes them to teaching strategies and familiarizes them with the school district in which they will teach. A support system will also back them after they have entered the classroom and offer at least partial tuition assistance.

Support services should be monitored (and revised) to ensure that they are offered only as needed. For example, when a program is young, services such as orientation are more important than in mature programs that no longer enroll large cohorts of students. Mature programs might choose to conduct orientation on a smaller, more intimate scale. It is also important to obtain feedback from participants and staff on the effectiveness and appropriateness of services. Services can outlive their usefulness as the population of participants changes or the program matures.

Whenever possible, programs should use or augment support services already offered by the host institution. Many programs can use existing institutional resources and services with augmentation that tailors them to nontraditional students' needs. For example, many programs use the institution's regular advisory services, supplemented by program staff sessions with participants. Academic support through established learning labs and writing centers can be reinforced by individual tutoring the program offers.





SECTION



ike all teacher preparation programs, the Pathways to Teaching Careers model requires many different resources to support its activities. This section summarizes findings of the separate cost study that drew on data from eight Pathways programs to explore the costs and efficiencies of this model for certifying urgently needed new teachers.

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Costs and Budgeting for Success

by Jennifer King Rice, University of Maryland, and Brian O. Brent, University of Rochester¹

In calculating cost estimates, this study gave attention to seven general cost categories:

- Administration. All of the programs had a director, clerical support, an advisory committee, and administrative costs including postage, telephone bills, and photocopying.
- **Infrastructure**. Most programs had an office, and all used resources such as computer hardware and software, fax machines, telephones, and copy machines. Often, these resources were shared with other programs.
- Student recruitment and admissions. Student recruitment and admissions involved a number of activities, generally conducted by the program director. It was the exception for programs to incur costs beyond the normal admissions process.
- Academic program. Costs associated with the academic program include tuition for required coursework (10 to 12 courses for the uncertified teachers and RPCVs models, and 20 to 22 courses for the paraprofessional model), compensation for instructors, books and supplies, stipends, supervisors for field experiences, and the time of mentor teachers.
- Support services. As discussed in section IV, support services offered by Pathways
 programs include orientation programs, advising, counseling, workshops, and
 tutoring.
- Student assessment. In all the sites the cost team studied, requirements and procedures for student assessment were the same as those in the traditional teacher education program offered by the same institution. No additional costs could be identified for these activities in the Pathways program.
- Follow-up services. The only follow-up services that Pathways programs offered were related to continuing education for graduates. This occurred in only two sites, both representing the uncertified teacher model.

¹ With the assistance of Sarah Manes (Urban Institute) in data collection and analysis.

Findings on Program Cost

Estimates yielded by the cost study were based on "standard values" of resources so that cost estimates could be generalized, rather than merely reflect the unique circumstances of each site. We expected program cost to vary somewhat depending on the target population—paraprofessional, uncertified teacher, and RPCVs—because programs serving different populations differ somewhat in structure, design, length, and services offered. We also expected cost to vary depending on whether a site was affiliated with a public or a private higher education institution. Given this variation, a template was constructed for each type of institution and program "model" (determined by the pool of teacher candidates—paraprofessional, uncertified teacher, and RPCVs).

Total cost estimates include not only external support but also many resources that may not translate into expenditures. For instance, universities donate space for Pathways offices, and school systems donate personnel time to attend meetings and other activities. It is important to remember, though, that these institutional resources are associated with costs and that therefore decisionmakers considering implementing a Pathways-type program must recognize them. The study focuses on two estimates of program cost as the main calculations: (1) the total cost of producing a single teacher via the Pathways program and (2) the total external support per student enrolled in the Pathways program. The external support estimate reflects the sum an institution must raise to support the program. This figure gives funding sources that wish to support Pathways-type programs a sense of how much they would need to commit.

Table 1 presents the range of costs by institution type and program model. Because we found little difference in the cost of preparing teachers from the uncertified teacher and RPCV pools, estimates for these two models are presented together. The estimates in the top half of the table are based on standard values for public institutions, and those in the bottom half are based on standard value for private institutions.² Cost estimates are calculated for the total number of students enrolled in the programs studied. If some enrollees fail to complete the program, this will increase the cost per teacher produced. The final report on this evaluation—planned for publication in mid-2001—will present data and analysis on the rate at which enrollees completed the Pathways program. Early indications suggest that completion rates will be high.³

Because cost estimates can vary greatly depending on the length of the program and the number of students served, the table presents estimates of the total cost per student that control for these design factors. As shown, the total cost of producing a teacher from the uncertified teacher and RPCVs candidate pools at a public institution ranges from \$7,380 to \$21,713. External funding sources contribute between \$4,074 and \$6,570 of this amount. The cost of preparing a paraprofessional for teacher certification at a public



² The standard values here represent national averages. Local policymakers using the cost analysis should substitute figures more reflective of their own circumstances to generate more accurate estimates for their localities using templates provided in the full report, "A Cost Analysis of the Pathways to Teaching Careers Program" by Jennifer King Rice and Brian O. Brent. This report is available on the Web at http://www.urban.org/education/tchr_coststudy.html.

³ DeWitt Wallace-Reader's Digest Fund. 1997. Recruiting, Preparing, and Retaining Teachers for America's Schools: Progress Report—Pathways to Teaching Careers. New York, NY: Author.

TABLE 1

Estimates of the Cost to Produce a Teacher through the Pathways to Teaching Careers Program by Population Served and University Type

	Nonce	ertified		
	and Peace Corps		Paraprofessional	
	Low	High	Low	High
	Estimate	Estimate	Estimate	Estimate
Costs if affiliated with a public institution				
Total cost per student	\$7,380	\$21,713	\$14,814	\$22,855
Total external support per student	\$4,074	\$6,570	\$8,568	\$12,274
Costs if affiliated with a private institution				
Total cost per student	\$14,738	\$30,770	\$41,736	\$49,350
Total external support per student	\$5,345	\$16,962	\$34,823	\$39,174

institution is about twice as high at the low estimate end, ranging from \$14,814 to \$22,855, as is the proportion contributed by external support, which ranges from \$8,568 to \$12,274.

The estimates for programs operating at private institutions follow a similar pattern, but they are much higher because of the higher cost of tuition. The cost to produce a teacher from the pools of uncertified teachers and RPCVs ranges from \$14,738 to \$30,770, and between \$5,345 and \$16,962 of the total comes from external sources. Preparing teachers from the paraprofessional pool ranges from \$41,736 to \$49,350, and external sources cover \$34,823 to \$39,174 of the total cost.

The most costly category in the programs studied is the academic program, because this category includes tuition. Administrative and support services are the next highestcost categories because of the personnel costs associated with the program (e.g., for program facilitators and mentor teachers). Costs related to the other categories are comparatively much lower.

The cost study also reveals how costs are distributed across different individuals and organizations. Our findings include the following:

- Universities shoulder many costs associated with the administration, infrastructure, and tuition expenses of the Pathways program.
- School systems allocate the time of school principals and teachers to support the program. In one case, the school system paid a portion of the tuition cost through a loan forgiveness program.
- Students in Pathways programs contribute by serving on the advisory board, paying for a portion of the tuition for coursework, and purchasing books and supplies.
- Neither university professors nor teachers incur uncompensated personal costs from the Pathways program, with the single exception of time donated to serve on the advisory committee. While both faculty and district teachers are extensively involved with Pathways programs, their responsibilities are recognized and compensated by their own institutions.

In most cases, external sources supply the largest portion of the Pathways programs' cost, followed (sometimes closely) by university contributions. The exceptions are a few cases where the university takes the responsibility for the entire administration or a large portion of the tuition costs for a program. School systems also make noteworthy investments, usually in terms of teacher time devoted to mentoring Pathways participants. Contributions from the remaining categories are comparatively small.

Efficiency Issues

Those who seek to improve efficiency in the start and operation of Pathways-type programs should consider the following practices:

- Identify state and district staffing needs and the most appropriate population from which to recruit teacher candidates (i.e., paraprofessionals, uncertified teachers, or RPCVs).
- Use multiple recruitment strategies such as Web pages, flyers, and program graduates' connections to ensure a pool of desirable candidates.
- Use institutional admission functions (e.g., application packet and review process), leaving program personnel only program-specific responsibilities (e.g., interviewing candidates) in the admissions process.
- Maximize the use of available resources by serving as many students as possible (i.e., full classes), as long as effectiveness is not compromised.
- Align program requirements (e.g., coursework and student teaching) with the institution's existing teacher certification program, as long as no major differences exist in the program content required of the two groups.
- Offer support services such as tutoring and counseling when the benefits of doing so (e.g., reducing program dropout rates) outweigh the costs.
- Use lower-cost personnel such as graduate students, as long as they are sufficiently qualified and effectiveness is not compromised.
- Share personnel, equipment, office space, and similar facilities with other programs in order to share costs and fully exploit all resources.

Conclusions

number of useful conclusions can be drawn from the Pathways initiative. These practical recommendations summarize main points this handbook has discussed in greater detail in the sections above.

On Building Strong Partnerships

- Teacher education programs can increase the number of qualified teachers for urban and rural schools by drawing candidates from nontraditional pools (e.g., paraprofessionals, uncertified teachers, substitute teachers, and RPCVs). To accomplish this, they should form partnerships with urban and rural school districts.
- Productive partnerships involve thoughtful planning. A planning team must essentially include representation from both the partner institution of higher education (e.g., an institution contact person such as someone from the office of the dean of education and the teacher education faculty) and the school district (e.g., district contact person, personnel office representatives, principal). The planning team assesses the district's teacher supply and demand, sets recruitment goals, chooses the pool or pools from which to recruit new teachers, devises recruitment and selection strategies, adjusts the teacher education curriculum to address participant needs, and designs support services to enable participants to complete the program and meet certification requirements.
- Partnerships with a history of collaboration and a system of open communication are more apt to succeed in solving implementation difficulties than partnerships with no previous collaborations or with poor communication.

On Effective Recruitment and Selection

• Recruitment and selection strategies should be tailored to partner school districts. These strategies should target and select candidates who have the characteristics and dispositions the partner school districts value highly (e.g., minority background; male gender;

interest in becoming teachers of science, math, special education, or bilingual education; commitment to teaching children in urban or rural settings).

- The program's recruitment pool should be large enough to allow some freedom to choose the most qualified candidates while still meeting enrollment targets. Consequently, information on the number and characteristics of individuals in a potential pool or pools should drive the choice of pools from which the partners will recruit.
- The target school district should be actively involved in recruiting and selecting program participants. School district representatives should help define the population from which to recruit, participate in framing selection criteria, disseminate information about the program, recommend applicants, review applications, interview promising candidates, and contribute to final selection.
- Key factors to consider in selecting participants from nontraditional pools include (a) background in minority cultures, (b) entering GPA, (c) performance in writing samples, (d) interview performance, and (e) years of teaching experience. All candidates should have backgrounds in minority cultures. Candidates who enter the program with higher GPAs are more likely to complete certification requirements in a timely manner than candidates with lower GPAs. Candidates with marginal GPAs should not be automatically disqualified, however; a low GPA might be balanced by strong writing samples and/or interview performances.
- Programs that target persons from more than one applicant pool should tailor separate selection criteria to screen each type of recruit.

On Preparing Nontraditional Candidates

- In adapting the teacher education curriculum for preparing candidates from nontraditional populations to teach in urban and rural settings, consider the extent to which your program attends to valuing diversity, learning about different cultures, building bridges between home and school, preparing participants to serve as role models, making connections between theory and practice, and improving knowledge of content.
- To meet the needs of participants from nontraditional pools while building on their strengths, teacher education programs should closely consider the following: giving credit for experience, addressing potential barriers to student teaching (especially for paraprofessionals), and expanding course offerings.

On Supporting Participants throughout the Program

 Well-crafted recruitment and selection strategies and a carefully designed teacher education curriculum alone do not guarantee that program participants will complete certification requirements in a timely fashion. Support services are essential. These services may include thorough orientation, consistent academic advising or monitoring, academic tutoring, preparation for certification exams, classroom supervision and feedback, mentoring, cohort-building, and family support. Programs must adjust their network of services to their participants' real, practical needs.

On Calculating Program Costs

- Financial incentives (e.g., scholarships that pay for tuition, fees, and books) are essential to recruiting participants from nontraditional pools and retaining them through graduation.
- The total cost to external funding sources of preparing one teacher through the Pathways program ranges from \$4,074 to \$12,274 for public institutions and from \$5,345 to \$39,174 for private institutions. Program cost varies according to the type of student as well as the type of institution. The highest costs are associated with programs serving paraprofessionals.
- In addition to external funding sources, Pathways programs are supported by fiscal as well as in-kind contributions from universities, school systems, and students.
- Practices that promote the efficiency of these programs include the following: (a) carefully identifying the student population to be served and using multiple recruitment strategies, (b) using existing university infrastructure (e.g., the admissions process) when appropriate, and aligning program requirements with the institution's existing teacher certification program when possible, (c) offering support services when benefits outweigh costs, (d) using lower-cost personnel (e.g., part-time) so long as effectiveness is not compromised, and (e) sharing personnel and equipment with other programs.

About the Contributors

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