This is a report of a one-year trial of a new professional arrangement for teachers, which gave experienced teachers part-time sabbaticals during the school year for study and curriculum projects, and which attempted to give first-year teachers (who were already certified) mentoring help and other special professional opportunities. The first-year teachers provided the release time for the experienced teachers. The project was undertaken collaboratively by Wellesley College, Wellesley Public Schools, and the Boston Latin School. The report is in the form of a case-study combined with lessons and recommendations drawn from the year's experience. The planning phase, project seminar, mentoring work, and the experiences of the first-year teachers and the experienced teachers (Fellows) are described sequentially. Discussions of problems and recommendations are interspersed throughout. Participants believe that programs similar to the one described could have leading roles to play in the renewal of education and the teaching profession, since they would give to those with the most intimate knowledge of school needs and realities—teachers—time to work on those needs. (Author)
Time and Expertise: A Report of a One-Year Trial of a new Professional Arrangement For Experienced and First-Year Teachers

Kenneth Hawes
College-School Collaborative
Wellesley College
Wellesley, Massachusetts 02181
30 June 1988
Summary

This is a report of a one-year trial of a new professional arrangement for teachers, which gave experienced teachers part-time sabbaticals during the school year for study and curriculum projects, and which attempted to give first-year teachers (who were already certified) mentoring help and other special professional opportunities. The first-year teachers provided the release time for the experienced teachers. The project was undertaken collaboratively by Wellesley College, Wellesley Public Schools, and the Boston Latin School.

The report is in the form of a case-study combined with lessons and recommendations drawn from the year’s experience. The planning phase, project seminar, mentoring work, and the experiences of the first-year teachers and the experienced teachers (Fel3nws) are described sequentially. Discussions of problems and recommendations are interspersed throughout. Participants believe that programs similar to the one described could have leading roles to play in the renewal of education and the teaching profession, since they would give to those with the most intimate knowledge of school needs and realities—teachers—time to work on these needs.

Acknowledgement

Funds for the project were provided by the U.S. Department of Education Secretary’s Discretionary Fund for Math, Science, Computer Learning, and Critical Foreign Languages. It has been a pleasure working with the Department and the project officer, Patricia Alexander.
Contents

Introduction
Planning phase
The interdisciplinary seminars
Mentoring
The experience of the first-year teachers
The experience of the Fellows
Specifics of the projects
Future plans
Introduction

What follows is a report of a one-year trial of a new professional arrangement for teachers, which gave experienced teachers part-time sabbaticals during the school year for study and curriculum projects, and which attempted to give first-year teachers special mentoring help and other professional advantages in their first full year of school teaching. This work was undertaken collaboratively by Wellesley College, the Wellesley Public Schools, and Boston Latin School. These three institutions had considerable prior experience working together in undergraduate teacher education, with students from Wellesley College and from the associated Massachusetts Institute of Technology.

The present project was a new kind of collaboration. It was first formulated in 1985, and sprung from a sense that new arrangements for practicing teachers were a vital part of educational reform. Teachers possess great knowledge of the needs of students and schools, but have very little extra time in which to make contributions to reform outside of their own classrooms. What the project model does is to give teachers time to do needed school and curriculum projects, and to study. And it does this in a cost-effective way, since teachers are replaced by first-year teachers, at lower salaries.

This project was funded by the U.S. Department of Education Secretary's Discretionary Program for Math, Science, Computer Learning, and Critical Foreign Languages. The subjects named were chosen by the Department as particularly in need of attention. Consequently our pilot project consisted of work in those fields. We believe, however, that the design of and lessons from the project pertain to all school subjects.

Presented here are a description of the planning of the project and the events and results of the trial year of operation, together with a presentation of the lessons we believe that we learned. The emphasis is on extracting as much useful information as we can from our experience, for the benefit of all interested observers, including ourselves, since we plan to continue activities described for at least two more years, with a new source of funds.

How this report was produced

This report has been written by one of the participants of the project, in fact by the project director. It seeks to be critically evaluative. There was no money for a large-scale outside evaluation, but we hope that any lack of critical distance is made up for by intimacy of knowledge. What is written here is the result of the project director's close
involvement with many aspects of the project, together with his reading of questionnaires written by virtually every person involved with the project, including administrators. These questionnaires were thoughtfully done and written in many cases at great length and with many useful details and suggestions. Further, a draft of this report was reviewed by many of the participants, and revised in light of their comments.

One thing to keep in mind is that this report is both about a "model," i.e., an arrangement of professional work, and about the activities of a specific group of people and institutions who worked together under this model. It has not always been easy to separate the effects of the arrangement from the effects of the particular personalities involved. We have tried to do that as best we could, and readers will likewise want to make similar judgments for themselves.

The report has been written to maintain as much confidentiality as possible, while still being accurate and helpful. The main goal is to allow others to learn from our experience. We hope that the narrative, case-study approach will yield the kind of knowledge most useful for others who are doing or planning to do work of a similar kind.

Planning phase

Barbara Beatty, Alan November, and Kenneth Hawes submitted our original plan as a proposal to the U.S. Department of Education in October 1985. We expected a reply in April 1986 which would have given us (we thought) just enough time to prepare the program for the academic year 1986-87. For various reasons the Department was not able to reply until September 1986. Therefore we decided to use 1986-87 as a planning year, with full operation in 1987-88. In many ways this was a great advantage, since the planning and preparation phase turned out to be quite elaborate.

We had money to hire five first-year teachers, to give partial release-time to ten or more experienced teachers for curriculum work and study. Four of these first-year teachers were to be for Wellesley Public Schools, whose nearness to the College made large-scale collaboration convenient, and one of these teachers was to be for Boston Latin School.

We began holding planning meetings with the superintendent, assistant superintendent, principals and department heads from Wellesley. The strong support of the superintendent in Wellesley and the headmaster at Boston Latin have been vital throughout.

Several issues were identified and eventually resolved at these meetings. One was this: Among the teachers who would be
given release time, would some be only doing mentoring, or would they combine mentoring with curriculum projects and studying? It was decided that we would leave this decision open, and see who would apply. This was a mistake, because those experienced teachers who applied did not commit themselves to any particular degree of mentoring, but did commit themselves strongly to a project. As it worked out, mentoring and project work were combined.

A second issue: What criteria should be used to select experienced teachers for release time? The two main considerations seemed to be a.) how well the proposed project or study would contribute to the professional growth of the individual, and b.) how well the proposed project would contribute to the needs of the school system. Both these criteria were used, with no formal decision about which was of first priority. Mentoring ability and willingness were not used as a criterion of selection. Again, this was a mistake, because it made the mentoring aspect seem less important.

A third issue: How was the release time to be apportioned? The plan was to hire each first-year teacher at .8 time. So if one such teacher were hired in the math department, for example, two experienced teachers could be released at .4 time each, or one could be released at .4 time and two at .2 time each. Many combinations are possible. But further: should we decide the patterns of release time in advance, or should we wait to see what projects teachers proposed, and make the decision then? We chose to decide on the release time after we had seen the proposals.

A fourth issue: Will the teachers' union accept the hiring of new teachers, at the same time some teachers are being laid off, due to declining enrollments? This issue was successfully resolved because: a.) the first-year teachers hired were to be only temporary with no special rights of being rehired, and b.) if these teachers were not hired lay-offs would be not avoided, since these teachers only supplied release-time, not additional classes.

Outside of the planning meetings, other issues were discussed. The original plan had described the experienced teachers as using their time to take courses at Wellesley College in their subject field. But, first, was this practical? The less release time a person had, the less likely he or she was to be able to be on campus at the time a desired course met. And, was this the best use of their time? Everyone's first idea of the best thing for school teachers to do at colleges is to take courses. But by the winter of 1987 the education reform movement had progressed enough to make it plain that the need was for direct input from the teachers. Teachers seemed to have valuable knowledge of the needs of schools and how to meet them, yet their
knowledge and efforts were not being used for reform. Therefore it seemed obvious that teachers might propose to do curriculum and other projects that were not directly tied to college courses. This is what happened for the most part.

It did remain a requirement, however, that teachers be members of a through-the-year interdisciplinary seminar. This seminar (one for math-science, one for foreign language) was the main connection of most participants with the College.

Teachers learn about the project and apply

By March of 1987 we were ready to inform teachers about the specifics of applying and invite them to do so. This was not as simple a process as one might expect. This was a novel program, unfamiliar to everyone involved. There was no way to tell what participation would be like. It involved a major time commitment--even if the potential benefits also seemed major. Also, teachers are very busy people, and the task of devising and writing out a proposal for work a year away may have seemed less pressing to many teachers than dealing with the present needs of their many students.

We sent out a memo for circulation in all departments involved explaining the program and inviting those interested to an information meeting at Wellesley Middle School. At this point the responsibility for generating initial interest in the program lay heavily with the department heads, who had been at the planning meetings and who were the only teachers who had extensive knowledge of the program. The foreign language department head in particular was very enthusiastic about the program, and five people from her department applied, by far the largest number of any department.

At Boston Latin the whole process was somewhat different, due to the smaller scale of the project there. The Science Department head let the teachers in his department know about the project, and the project director spoke informally to the one person who was interested. He presented a proposal and was accepted.

Selection process

A large selection committee was formed to read proposals from teachers at Wellesley High School and Middle School and to choose from among them. This committee consisted of college representatives, school administrators (including department heads), and representative teachers.
The choices to be made turned out not to be difficult because the number of applications was relatively small. This was a surprise, and in retrospect seems to have resulted from the unfamiliar nature of the project. Teachers are not usually offered release time to pursue projects of their own devising.

The one hard choice that had to be made followed from the large number of proposals from the foreign language department. It was decided that two first-year teachers would be hired (one in French and one in Spanish) for that department to provide more release time and, further, that the department head be assigned .2 release time to concentrate on mentoring. No first-year teacher was to be hired for the high school science department.

From these decisions, the following patterns of release times resulted:

**First-year teacher hired**

At Wellesley High School:
- Math at .8 time
- French at .8
- Spanish at .8

At Wellesley Middle School:
- Math-science at .8

At Boston Latin School:
- Science at .8

(Total of 5 first-year teachers)

To give these experienced teachers these release times

- one teacher at .4 time
- and another at .4 time
- .3 and .3 and .2
- .3 and .3 and .2
- .4 math and .4 science

(Total of eleven experienced teachers given release time)

This variety of patterns of release time yielded a varied sample of test conditions of both the project aspect and the mentor aspect of the program.

The eleven experienced teachers selected were appointed Wellesley College Fellows for the academic year 1987-88. A news release was prepared that briefly described the overall program and the projects proposed by the selected teachers. An account of these projects is given later. They included a great variety of kinds of work. Many involved computers and video technologies.
After the selection of the Fellows there were two separate tasks: specific planning and preparation with the Fellows themselves, and the hiring of the five first-year teachers. The problems of the hiring task will be described first.

Hiring the first-year teachers

A question always on the mind of both school and college participants was the quality of first-year teachers that could be found. It was a goal of the project to make the first-year experience a valuable year of learning for the teachers hired, but there was also a strong need that the teachers be quite good even at the beginning. Otherwise how could the release of the experienced teachers seem justified to the students and the wider community? A particular question in the early planning meetings was whether we should locate the first-year teachers before selecting the Fellows, thus guaranteeing their qualifications and the matching of subjects. The other alternative was to select the Fellows first, and then hire first-year teachers in the subject needed. This second alternative had the advantage of allowing more flexibility in the application process for Fellows.

The risk of hiring the first-year teachers after the Fellows were selected would be that we would not be able to find qualified first-year teachers in the subjects needed. But we judged that there would be an adequate pool of qualified people available, and so decided to take the risk and hire the first-year teachers after selecting the Fellows. The project director was given the responsibility of recruiting candidates from teacher education programs. He then referred applicants to the appropriate department head for interviewing and selection.

A main problem was to try to communicate to applicants the potential benefits of the project, while being frank that the program was new and experimental. Applicants did seem attracted to the program, but there were two important drawbacks: First, the salary was only .8 time. This was a serious drawback (even though it carried the advantage of a lighter teaching load.) Second, there was only a one-year job expectation. This was also serious. Nevertheless we were able to hire five very well-qualified teachers for the program. Their performance has on balance been a great strength of the program and earned it strong acceptance in the schools involved.

One revision to the original plan that we made during this period was to offer the applicant a modest additional amount of money to keep notes about their experiences during the year and write about them at the end of the year. This opportunity would make the position more attractive (we hoped) by offering an added professional feature, and would also aid in the evaluation and dissemination efforts. As it turned out the first-year teachers
did some very insightful writing which they intend to combine into a single article and publish.

The biggest surprise of this phase of the project was that only one of the five first-year teachers hired was from the Wellesley-MIT teacher training program, contrary to the original conception of the Collaborative. But the number of graduates of the Wellesley-MIT program is small (about 10-12 per year total in all subjects) and most of those that fit the subjects offered had plans to live in other parts of the country. In one case, a graduate of our program was interviewed for the combined math-science position but was not hired because he was certified only in math. The other first-year teachers were from Ed.M. and M.A.T. programs at nearby universities.

Recommendation: The ideal situation for a first-year teacher would be full-time salary to cover .8 time teaching and .2 time for work with a mentor, and other professional activities.

Recommendation: Several participants suggested that the teacher assigned as mentor help interview the first-year teacher applicants. Then they could get to know each other earlier, and the applicants could more accurately judge the job situation to which they were applying. We believe that this would help attract people to the program and help strengthen the mentor-mentee connection.

Planning and preparation with the selected teachers

In June of 1987 after-school planning meetings were held with the two groups of teachers. (The math-science group and the foreign language group were to meet separately throughout the project.) There were three main purposes of these meetings: a.) to help participants to advance their thinking about their proposed projects so that they would be ready to begin in September (many of the Fellows began work in the summer on their own); b.) to prepare participants as mentors, and c.) to begin to make the groups effective working units.

By far the most time in those meetings was spent in discussing projects. These were after all the special creations of the participants, and greatly cared about. On the other hand, mentoring was an abstraction, as no first-year teachers had been hired yet. Also, the projects were a new kind of venture for many. Each participant described his or her project to the group and got feedback and suggestions. This process seemed quite useful.
Less time was spent on discussion of mentoring in these meetings. This was a mistake. It seemed at the time that not much additional preparation was needed. Many of the participants had frequently and skillfully supervised student teachers. Two teachers had just finished working with Wellesley-MIT student teachers that very semester. And, the head of Foreign Language at Wellesley High, a renowned teacher, had undertaken to oversee mentoring for the two first-year teachers anticipated in her department. The project director felt diffident about recommending extra preparation for such highly qualified people.

But we all should have realized that mentoring an already-certified first-year teacher teaching her own independent classes is very different from working with a student teacher. And we should have planned and prepared ourselves better in this area. In some cases the mentoring worked out well, in some cases it did not, as will be discussed later. It may have been that thorough preparation would not have prevented problems, but it would at least have yielded a clearer situation.

Recommendation: Thoughtful preparation of mentors is advisable for teachers who have not already successfully mentored first-year teachers with their own classes. (Details on what might be done are given later.)

Administrative issues

This project required additional administrative tasks of various kinds, such as interviewing and hiring applicants, and special scheduling. These were additional burdens for department heads, principals, and superintendents and were in our case all borne with good will and usually with enthusiasm. A project such as this does require active support.

One very crucial factor in the success of the project is proper scheduling of all the teachers involved. Release time for Fellows is usually much more useful if it can come at the end of the day. But the biggest need of all is care in scheduling the first-year teachers. We believe that we have learned some lessons about this:

Recommendation: First-year teachers should be given classes that their mentors are teaching or have taught within the past year.

Recommendation: First-year teachers should have some common free periods in which they can meet for planning and discussion with their mentors.
Recommendation: First-year teachers should be given no more than two preparations if possible. And they should not be given especially difficult classes. If the difficulty level is too high (for example, because of an unusually high number of troublesome students), a good learning situation for the new teacher does not result.

Personnel Changes

Unexpectedly, the head of Foreign Language at Wellesley High, who was to have overseen her department's curriculum projects and mentoring work, became acting principal and a new person took on her role at a time when other unexpected difficulties in the department arose. This discontinuity made mentoring in the department harder to achieve than it would otherwise have been. Extra planning meetings with the new person would have been advisable.

The End of the preparation phase

By the end of August all the first-year teachers had been hired. They and the mentors had information on how to get in touch with each other, so that they could meet before school began. Perhaps it would have been advisable to have group meetings at this time, but this was not done.

In September, 1987 the project began its full operation. The first-year teachers began their classes. The Fellows began their own teaching, their projects, and their mentoring. The two seminars began their meetings.

The story of the project becomes much more complicated at this point. There are really many parallel stories to be told: the experiences of eleven Fellows and five first-year teachers, and of the colleagues and students of these teachers. We cannot tell here this whole story in detail. We will simply sketch a few features of the project's operation, the experiences of the participants, and the lessons and recommendations that we believe might be of use to others.

The interdisciplinary seminars

A central feature of the project was that Fellows and first-year teachers met approximately bi-weekly throughout the academic year in two groups, one in math-science and one in foreign languages. Since these seminars were intended to serve many important purposes of the project—as a means of collegial guidance of the projects, as a forum for discussion of mentoring and pedagogy, and as a chance for general professional sharing
and enlightenment—it might be helpful to describe their mode of operation.

The two seminars operated under somewhat different conditions. The Foreign Language seminar was led by a tenured lecturer in the College Spanish department, a person with extensive knowledge of language-teaching pedagogy. That seminar contained participants only from the Wellesley High school Foreign Language Department.

The math-science seminar was led by the project director, an assistant professor of education, with scientific training and background, who was currently engaged largely in the pre-service preparation of teachers. That seminar contained participants from three different schools (Wellesley High and Middle School, and Boston Latin).

It had been the original plan to have undergraduates in these same seminars, along with the Fellows and first-year teachers. But further thought seemed to rule this out. The seminars for the Fellows and first-year teachers were intended to focus on their project work and on mentoring issues, while the undergraduates (it seemed) ought to work on more basic pedagogy, and projects of a different nature. Consequently, separate seminars for the undergraduates were created.

The foreign language seminar

The leader of the foreign language seminar had begun to work with the teachers who would be chosen Fellows even before they were chosen, to help them develop their projects, and continued to meet individually with them. And the conduct of that seminar was heavily focussed on the projects, with each Fellow being assigned a session in which to present his work and receive comments. The two first-year teachers in the seminar had a mostly passive role, though one important contribution the two made was to each give a presentation of their early teaching experience to the undergraduate section of the seminar.

The math-science seminar

In the beginning the normal practice in the math-science seminar was to ask each participant at each meeting to give the current status of their project work or their first-year teaching. Then, to get more depth, plans were made for two or three participants to present their own work at greater length. The first-year teachers were treated as regular participants, presenting their experience in an equivalent way to the Fellows. One advantage of including the first-year teachers as active participants was that their participation was more willing.
fact one first-year teacher ceased attending seminars in the other group.)

Recommendation: In a seminar of this type it is probably advisable that first-year teachers be treated as full participants. Their "project" is their year of teaching, and being able to communicate their experience and their problems.

In a seminar of this type it can be an advantage to have participants from different schools, so that participants can learn from getting to know new people working in different settings.

Mentoring

One thing that we learned about mentoring was that the five different people who were first-year teachers had five different sets of mentoring needs. One teacher with an unusually difficult class had discipline problems. The other first-year teachers did not need any unusual support in this area. One first-year teacher worked very closely and effectively with her two mentors. Another teacher was happy and successful with more latitude. She felt fortunate that her mentor "was secure enough not to exert any authority over me and to respect my competence ... He is there as a guide and a colleague, not a boss."

We found that some first-year teachers with strong educational experiences may have their own very definite and effective ideas about how they want to teach. These ideas may be of some interest to the veteran teacher. In any case, the mentor-mentee relationship need not be a one-way exchange. Especially for the new mentor, there is much to be learned even from the act of trying to help someone else learn to teach. In such cases, an experienced teacher may never have had the chance to share much of his or her vast knowledge about teaching his or her subject, and this opportunity can be gratifying and enlightening. On the other hand, most first-year teachers are likely to be interested in being given access to a veteran teacher's special materials, and in gaining knowledge about varieties of teaching techniques and student activities.

More structure needed?

The success of the mentoring aspect of the project was mixed, as judged by the mentors and mentees themselves. Some were pleased with this aspect, some not, as will be discussed further below. As a result, several participants suggested that the mentoring aspect of the program be more carefully "structured," and that expectations for this aspect "be spelled
out in advance." Earlier, we already described our mistake in not preparing everyone more thoroughly in this aspect of the project.

But the preparation and the structure must be such as to respect the variety of needs that first-year teachers have. This variety of needs seems to rule out any approach that would specify mentoring activities too narrowly. We have already recommended the need for regular meeting times. But in at least two cases regular meetings were held, but these were not judged to be especially useful. How the time is used, and the relationship between mentor and mentee are what is crucial.

Several participants mentioned the need to arrange a good match between mentor and mentee. As it was, mentors did not meet first-year teachers until well after they had been hired, so there was no chance for either party to assess their potential for working with each other. Since this match appears important, we repeat here our earlier suggestion that those chosen as mentors participate in the interviewing of the first-year teacher applicants, so that applicants and mentors will have a chance to assess their potential for working together.

The responsibility for the success of the mentor-mentee relationship rests with both parties. The mentee has to be a part of the process of identifying the kind of help he or she needs, and asking for it. If the assigned mentor can't meet the current needs of the mentee, the mentor has to be willing to recognize that, and feel comfortable with finding someone who can give the needed help.

And it remains true that first-year teachers will end up solving most of their problems for themselves. That is the nature of the work. One important reason for having a mentor is that a beginning professional does not know at first which problems he or she can be helped with and which he or she will normally be able to solve without outside help. That is something to be learned. Another benefit of having a mentor is that it seemed valuable to the first-year teachers just to know that someone was giving serious attention to their problems.

In order then to provide the structure for a mentoring program, without making it too narrow or rigid, it would be advisable, we believe, to talk about some of the foregoing assumptions and expectations, first with the prospective or already selected mentors, then with the mentors and mentees together. Being clear and open about these assumptions could perhaps aid in establishing effective mentor-mentee relationships.

The organizational points mentioned earlier are also important: scheduling regular meeting times, having the mentor
be part of the interviewing process, assigning mentees courses that their mentor is currently teaching or has recently taught.

Mentoring: One-to-one or several-to-one?

An important question is whether mentoring works better with one mentor per mentee, or with more than one mentor per mentee. Our experience this year indicates that perhaps it would have been better to designate a main mentor for each mentee.

This past year, first-year teachers had either one, two, or three mentors. The person who had one mentor was quite satisfied with the mentoring she received. One of the first-year teachers with two mentors was teaching both math and science and had one mentor in each. She reported a very good mentoring experience. The other person with two mentors relied almost entirely on one of them, and she reported some degree of satisfaction. The two first-year teachers with three mentors each did not feel that their mentoring met their needs (not necessarily because of lack of trying). One of these teachers reported her most useful exchanges were with a teacher not officially assigned as a mentor.

Now this is a small sample from which to draw conclusions. Many factors besides number of mentors surely influence the success of mentoring relationships. The characteristics of the particular people involved matter greatly. But most of us conclude that giving a single mentor primary responsibility is probably advisable. The mentee can still learn from other teachers but there should be a single person with the assigned primary obligation.

Can mentoring and projects be combined?

The designation of a single person as mentor would ease the conflict between project work and mentoring that some participants noticed. A person assigned as primary mentor would be committing himself or herself to mentoring as a first priority, and to his or her project as a second priority. Thus, if a first-year teacher did not want or need a lot of attention a mentor would have a project as an alternative way to use his or her release time. But if the teacher needed lots of attention, the mentor would have the time.

The experience of the first-year teachers
One of the main goals of our program was to give a special first-year experience to five newly certified teachers in the specified subjects. The mentor arrangement was intended to be one part of the special arrangements of the program. Participation in the seminars (to provide a broader professional experience, especially through knowledge of the Fellows' work on their projects) was another special arrangement. So were: access to the College's facilities and faculty; the .8 time teaching load (meant to give extra time for reflection, preparation, and outside-school professional activities); and the chance to write about their first-year experiences as a paid collaborative activity.

The first-year teachers varied in their judgement of how helpful these arrangements, as implemented by us, were to them. Some were very pleased with their mentoring, some were not. Some felt they benefitted from the seminars, some did not. Some made use of the College's facilities and faculty, some did not. All five wrote in interesting ways about their year's work, and all have been part of an innovative program which had both strengths and weaknesses.

The .8 time nominal teaching load turned out to allow time for extra professional activities for some, and not for others. The difference here was the number of preparations and type of courses taught. One first-year teacher actually piloted a new curriculum by herself, which took much extra time.

The evaluation of the "specialness" of the year varied among the first-year teachers. Some were very pleased. Some were not. One commented that she sometimes felt like no more than a "glorified substitute" for the Fellows.

Of course the effects of a first-year experience may not be fully evident to participants near the end of a long year of work. We intend to follow up our five first-year teachers, and get their comments a year hence.

We have already mentioned a number of recommendations that would improve the first-year aspect of the program, recommendations about mentoring, scheduling, and the conduct of seminars. One point remains to be made. The fact that this was a position that was to last only one year may have prevented the first-year teachers from "buying into" the school, as one mentor suggested. This is a significant problem because it is the only one that seems to be intrinsic to the model itself. It will be important to provide for this situation in future versions of a program like this, for example by providing help and support in looking for a job for the year following the program.

As it happened, two of the first-year teachers in the program were offered teaching jobs for the year following the
project year. And the two offers were made in the only two departments in which openings occurred.

The experience of the Fellows: projects and professional growth

The judgments of the Fellows about the effect of the program have been uniformly positive. One participant said, "It changed my life." (She had a modest .4 release time.) The experience seems to have given most participants a renewed sense of enthusiasm for the work of teaching. Teaching could be seen as containing a wider set of professional responsibilities, and this was exciting, according to the participants. Another Fellow commented that the year "made me realize that I can make things happen professionally, that I have something to share and ways to share it."

We did not attempt a case-by-case assessment of the quality of the tangible products of the Fellows' projects. Many projects did result in curriculum materials, others were focused on the development of skill and knowledge. Most of the projects are ongoing, and will take years to have their full impact and conclusion. For example, in the Foreign Language Department, many projects involved use of new technologies: use of video tapes of interviews or foreign television, use of computers in the classroom and for telecommunication. The materials already produced are being used now, but more material will likely be created and uses will continue to develop. For the Fellows also a follow-up evaluation needs to be done, and is planned. In general, we now believe that all the Fellows made good progress on the work they proposed to do, and that very valuable professional growth occurred.

Department heads, principals, and other administrators were very positive about the benefits of the program for the Fellows, emphasizing both the curriculum work and the renewal of enthusiasm for teaching.

One issue raised by administrators and others was how to insure that the projects best served the overall needs of the school system (for curriculum revision). There will always be the choice available: how much to rely upon the judgment of individual teachers as to the kind of project they would like to do vs. how much to use the project time to fulfill agreed-upon school wide needs (other than individual teacher renewal). Perhaps a good balance can be found. No one should lose sight of two facts: 1.) Many teachers are extremely well-qualified to help their schools with major curriculum projects, if given time. But, 2.) Some self-directed time during the school year to pursue projects at one's own discretion can be an extremely liberating experience, with many positive results. As one person commented; this is "an experience that should be given to every teacher at
some time in their career." Under this arrangement a teacher has a chance to try out a more varied and complete professional life. If one is looking for ways to make the school teaching profession more attractive, here is one significant possibility.

**Specifics of the projects**

A separate report could be devoted to the project work of each Fellow. These were elaborate undertakings, filled with many possibilities and difficulties some of which became apparent only as the work progressed day by day. Here we can give only a brief idea of what was done, without an attempt at case-by-case evaluation.

Naturally, the kind and quality of project work that is done depends on many factors such as how the program is presented to potential applicants, the selection criteria used and the type of seminars and other support offered. The interests and abilities of the participants are probably the main factors.

Below are brief descriptions of the projects, drawn from Fellows' own descriptions of their work.

**In the Wellesley math department**

As mentioned earlier, two experienced teachers in the math department at Wellesley High School shared the .8 release time provided by one first-year teacher. One of these experienced teachers devoted the majority of his release time to academic studies, completing 26 semester hours of studies in mathematics, special education and school law. He was particularly interested in exploring ways to approach the math phobic student. He continues to work with the Industrial Technology Department at the High School to develop a meaningful and appealing curriculum for their students. His work will extend beyond the limits of the grant with additional courses at the Center for Teaching and Learning Math this summer to further his study on the reasons for math failure. He hopes this will help him in his classes to reduce math anxiety.

The other experienced teacher used his release time to help other teachers, special educators and secretaries master various computer application in the High School Macintosh Lab. He also acted as the High School Computer Co-ordinator, developed a computerized version of the Individual Education Plan form for Special Education, and conducted seminars. He was able to visit computer installations at other schools and to act as a general troubleshooter when computers in the high school malfunctioned.

**In the Wellesley Foreign Language Department**
In the Wellesley High School Foreign Language Department, two first-year teachers, one in French and one in Spanish, provided release time for six experienced teachers. One of these teachers focused on telecommunication. She organized joined activities with students in Foxboro, Concord, Westwood, MA and in Philadelphia, PA using a modem with the computer to transmit student text in French. Using the word processor to perfect their writing skills Wellesley classes exchanged letters, wrote collaborative stories and conducted interviews with classes in other schools. Her students were also able to access the French Minitel telecommunications system to get their horoscopes and the latest French headlines from France. She felt that one of the more meaningful aspects of her Fellowship work was the opportunity to explore what other teachers are doing with technology as well as the chance to collaborate with others outside of her subject area and outside of the school system. She was able to share these discoveries at sessions on her work with the computer and on her experience with collaborations in the field of technology at several conferences and workshops during the year.

A second teacher explored both the use of video and teaching and testing for proficiency in foreign languages. She attended a special course on proficiency at Middlebury College in the summer preceding the project and a four day workshop for proficiency testing training in Albany, New York. Her video work included among other activities observation of the Athena Project at MIT, developing a unit for the classroom from a video of a French television series, investigating the use of videodisc and the organization of a local site for the nationwide teleconference on Emerging Technologies in Foreign Language Learning.

A third teacher, the acting head of the department, acted as a liaison between the College, the five other Fellows from the foreign language department and their replacement teachers. He also devoted some of his free time to taking the course "Effective Teaching Strategies" which helped improve his skills in his new role as acting department head.

A fourth teacher spent the first semester of the year leaning computer applications including word processing, data base and desktop publishing all of which she was able to use with classes and with her project. She did several computer related activities with her students including a Spanish newspaper. Second semester, she attended a course on the Spanish filmmaker, Luis Buñuel at Wellesley college and helped to plan the first regional Foreign Language Institute for high school teachers at the Slater International Center. Much of her time, however, was spent creating a network of contacts and gathering materials for the Spanish curriculum on Latin America. These resources will be computerized and will be made available to the entire staff of the Wellesley Public School.
A fifth teacher traveled to Central America in the summer preceding the project year, where he videotaped many interviews with people from all levels of society. He adapted these videos as well as Spanish language TV programs and commercials for classroom use. These materials are designed to enable students to acquire a knowledge of social customs and political life in Latin America.

A sixth teacher used his release time to learn how to use a data base program and how to apply it to the Spanish classroom. He has worked on coordinating topics that pertain to the language proficiency classroom, to classifying conversation and text topics and has perfected his personal record keeping thanks to the computer.

In the Wellesley Middle School

At Wellesley Middle School, one first-year teacher provided release time for one experienced math teacher and one experienced science teacher. The math teacher investigated the DMP (Developing Math Processes) curriculum, a K-6 math program, by studying all the materials and visiting classes in other school systems in which it was in use. This program interested him because it was hands-on and discovery oriented. He wanted to know if the approach should influence how middle school math is taught. He was able to share his knowledge of this subject with K-5 and 7-8 teachers and explore supplementing the 6th grade curriculum with some of the DMP topics.

The science teacher observed the use of computers and video in High School, Middle School and Elementary classrooms in order to explore how she could use technology to assist in science and math instruction at the Middle School. By attending seminars and conferences on technology and education she was able to glimpse the best of what was happening in Massachusetts. She also acted as chairman of the Middle School Interdisciplinary Technology Team and represented the Middle School as a member of the Computer Steering Committee for the School system. This broadened her perspective of how technology fits into the Wellesley Schools. As a co-presenter at computer conferences she was able to share these insights with many other teachers. Her exploration of technology led her to a collaboration at the local educational television station on their newest interactive video design. They used the Macintosh computers and Hypercard programing to control scientific exploration for students on a video disc.

In the Boston Latin Science Department
One experienced biology teacher at Boston Latin received the entire .8 release time provided by a first-year teacher. He initiated or took part in over 30 projects, seminars, workshops, and conventions, including organizing field trips and special laboratory experiences for biology students. Many of his projects involved parents and fellow teachers in addition to students.

Management of the project in retrospect

Several specific issues about decisions and arrangements of the program have already been mentioned. Some final comments are appropriate here. The program has had both the strengths and weaknesses of a college-school collaboration. One strength was that the program could provide a setting where teachers could work out some unaccustomed ways of doing things. A weakness was that participants were sometimes confused about who was responsible for what, and were unsure about how to clear this up. One suggestion was that we should have had a small management committee that met monthly to assign responsibility for problems that had arisen. Another suggestion, even simpler, was that we should have had a mid-point evaluation via written questionnaire, similar to what we had at the end. Then every person involved could have influenced the work left to be done. We did have one general meeting in February, but this did not meet every need.

Some opportunities missed

No matter how successful an activity, one can always see something more that one wishes had been done or tried. One thing that two or three participants mentioned was a desire to have had more contact with College undergraduates who were intending to be teachers. There was some of this. Two of the first-year teachers presented their views to the undergraduate section of the foreign language seminar. One Fellow gave a presentation to the undergraduate student teachers. But we did not work out a way for this contact to be more extensive and effective. We are now working on new ways for this to happen, including a new program that will provide the College with a teacher-adviser for each subject area.

Another thing we could have improved upon was finding a way for more extensive collaboration between individual school participants and college faculty other than seminar leaders. There were many contacts of this sort, but these did not have the depth or regularity that one might wish. We intend in our next year of operation to match each Fellow with a particular faculty member with compatible interests.

Future plans
We plan to continue the work of the Collaborative. We have received funding from the Hughes Medical Foundation for two more years of operation, though on a smaller scale. And the Wellesley Public Schools are exploring ways to make a partial release time arrangement provided by first-year teachers a regular part of their program for all faculty members.

We intend to continue our efforts to share our experience of this program with various audiences who might be interested, as we already have this year at several conferences. This report is part of our effort at dissemination, and is backed up by the willingness of the participants to respond to requests for further information about their experience and to give advice. Many of us have come to believe that programs similar to the one we have described have leading roles to play in the renewal of education and the teaching profession.