POLICY AND MODEL ANALYSIS: THE CASE OF SOVIET IMMIGRANT TEACHER RE-TRAINING IN ISRAEL

IRIS GEVA-MAY

Abstract - This paper presents an evaluation study of the re-training programme for immigrant science teachers from former USSR (FSU) that took place in Israeli universities and teacher-training colleges for the first time during 1990-1991 following the mass immigration from FSU. The main criterion for this evaluation was the degree to which the re-training programmes catered to professional, social and cultural inherent affecting factors and met the aims of the re-training policy. On the basis of this study, a list of policy recommendations is offered. The re-training considerations and the models identified in this study might be applied in countries where major social changes, such as immigration or recession, occur.

Introduction

In 1989-1991, the mass immigration from former USSR (FSU) brought a large number of academics to Israel. According to the publications of the Israeli Center of Statistics, in 1991, out of 400,000 new-immigrants, 160,000 were academics. Four and a half percent were teachers from different fields of expertise. The absorption needs of the new immigrants on the one hand, and on the other hand the needs of the Israeli school system for teachers, especially in science and technology, led to the initiation of special teacher-training courses in several teacher-training colleges and universities. The overall number of new-immigrant teachers in this pilot teacher re-training project was over 1,200. The main aim of the policy that led to the initiation of this project was to enable the new immigrant teachers to find employment; in so doing, it also aimed to facilitate social absorption and to reinforce the education system so that it could benefit from their experience and professional skills.

This teacher re-training policy was initiated and financed by the Divisions of Teacher-training and Immigrant Absorption of the Ministry of Education and Culture. The training courses were designed by each of the institutions of higher education individually according to its own academic teacher-training philosophy in the particular subject matter, and according to their institutional requirements for conferment of a teaching certificate. At the end of the re-training course the scientists were expected to obtain a teaching certificate similar to that received by Israeli students attending the same department.

Six random sample institutions were involved in this study: two university Schools of Education and four Teacher-training Colleges, each In a different geographical area of the country. The Schools of Education offered teacher-training programmes to teachers of physics and of chemistry; one of them also offered programmes in electronics and mechanics; two of the colleges offered mathematics and physics programmes; one offered teacher-training in technology, and finally another college offered a programme for elementary-school science teaching.

Such a re-training programme had not been previously attempted in Israel, and in the academic year 1990-1991 it was considered a pilot project. Therefore, the Ministry of Education and Culture decided to commission an evaluation study for purposes of both accountability and formative feedback.

The analysis of the re-training models evaluated in this study were meant to provide decision-makers with feedback information concerning the degree to which the re-training programmes helped to implement the re-training policy. Therefore the focus of the study was on the impact of the course on teacher re-training and on appropriate preparation for coping in the new school-system. The main variables operating within such a teacher re-training context were identified with methodological expertise and to pedagogical/content-matter knowledge as a springboard for professional integration; the socio-cultural aspect of the re-training related mainly to change of status (socio-occupational considerations) and to preparation for teacher socialisation.

Immigrant teacher re-training: affecting factors as evaluation variables

The projects presented in this study are referred to as re-training programmes because of the major adaptation patterns the immigrant science teachers needed to adopt in respect of their profession. These go beyond mere teacher-training and involve affective factors ranging from sociological and cultural to professional and methodological (Geva-May, 1996). The degree to which these affective factors-cum-variables, were catered for at the re-training programme level and prepared for future professional attainments served as our criterion for the potential success of this re-training enterprise.

Socio-occupational considerations

Socio-occupational considerations should be of major importance when proposing re-training and hence related professional status change. In this case, the re-training of teachers in their own profession implied a shift from the distinctive career patterns identified in studies related to the teaching occupation. More than other professions, the teachers' occupation follows a career pattern characterised by an orderly path of horizontal stable movement (Wilensky, 1962; Form and Miller, 1962) where experienced teachers usually move within their own network towards the improvement of the school environment: teachers change schools until the institution in which they work suits their professional, social or personal needs. This type of change means betterment of work conditions, prestige, power or other awards (Wilensky, 1962). In the case of the immigrant science teachers, the re-training process implied following a different path characterised by a starting-point low professional status and by future employment in institutions that do not necessarily suit expectations or teaching experience.

This study looked into the manner by which the programmes managed to alleviate possible feelings of frustration or unease connected with going down the occupational ladder. Interviews with programme directors showed that they made serious attempts at finding adequate jobs for their trainees, although this was not their responsibility. The trainees expressed their appreciation for the sense of 'one among equals' imparted by the lecturers, and the respect, consideration and support with which they had been welcomed (see *Findings* below).

Teacher socialisation

Another important aspect of effective absorption into any new professional system is that of socialisation ability. Re-training programmes, therefore, should consider means of bridging the gap between the immigrant mentality and socialisation patterns in the old country and in the new one. Since teaching requires more than knowledge of the subject matter and methodological techniques (Lacey, 1977), effective teaching behaviors depend also on an understanding of attitudes, values, norms and beliefs which underlie teaching behavior (Berliner, 1986) particularly in a new society. If a teacher is not sensitive to these cultural components s/he is likely to be alienated from her/his students (Silberman, 1970) and this may become, in time, an impediment in effective teaching. Therefore, it follows that re-training courses in teaching should make a special case for facilitating future socialisation in schools - possibly by a series of activities meant to throw light on the mentality and behavior of Israeli students and peers, immersion in schools over long periods of time, and so on.

The socialisation aspect of re-training bears particular potential difficulty in view of the custodial socialisation patterns generally held by FSU teachers. Research touching on the socialisation patterns of immigrant teachers in Israel

(Silberman, 1990; Horowitz, 1990; Geva-May, 1996) points to a comparatively custodial orientation in the case of FSU teachers. For instance Horowitz's study suggested that Soviet teachers teaching in Israel indicated a more custodial attitude, as opposed, for example, to teachers who immigrated to Israel from North or South America. Custodial orientation was identified with the traditional school, which is autocratic, maintains order and provides a tightly controlled setting, where a distance is kept between teacher and students, and in which the teacher is the provider of information and the guardian of discipline and order. The problem, in the case of this re-training project, lies in the fact that the Israeli school environment strongly supports a humanistic/naturalistic approach (Willower, 1965; Oliver and Butcher, 1962) which allows flexible status roles, learning through experience and self-discovery, and encourages self-expression and less strict codes of behavior. For example, other studies undertaken in Israel point out that a major problem faced by the FSU teachers was discipline and that this was the result of the clash between the socialisation codes of the students and those of the teachers (Horowitz, 1990; Geva-May, 1993).

Since developing awareness and sensitivity to new norms it was an important pre-requisite to adequate performance in terms of effectiveness and student achievements (Ryan, 1960; Morrison and McIntyre, 1980), managing to cater for this development was considered an important prerequisite. As such it was considered an equally important criterion in our evaluation.

Yet, socialisation being a long and complex process, adults in mid-life may have difficulty in their future professional life to adapt to the new gestalt or develop societal sensitivity. We estimate in this evaluation study that a higher degree of exposure to activities that foster such sensitivity, should facilitate future socialisation.

Professional considerations and stages of expertise

In teaching, professional mastery has always been considered a problem particularly in science teaching (Henry, 1947; Helgeson, Blosser and Howe, 1977; Shulman, 1986). Efficient teaching requires primarily mastery of subject matter (Schwab, 1978; Shulman, 1986). It should be correct, rich in relationships, organised by a conceptual model of the domain and transferred to the students by a person who is able to translate her knowledge into teaching. In this respect, as the new immigrants' profile shows (Table 1) the background experience of the immigrant teachers could be a good indicator for their future success in the new school system. On the other hand, 'own content-matter knowledge' (in Schwab's terms, 1978), and methodological patterns that the new-immigrant teachers bring with them, being deeply rooted and supposedly difficult to change, may present difficulty in the design of the re-training programmes. This aspect connects with the issue of teaching expertise discussed below: although the immigrant teachers might be experienced, some of their former approaches and methodologies might not be what is currently adhered to in the West. The manner in which the deconstruction and methodological updating were dealt with in the re-training programmes served as another criterion for evaluation.

Nevertheless, the discrepancy between past experience and the requirement to use new pedagogical tools in the new science classroom may lead to an inevitable lack of the necessary mastery or 'artistry' (Schon, 1978) in some acceptable teaching techniques used in the West. This, in addition to the socialisation difficulties and awareness of mentality and Israeli students' behavior patterns, places the immigrant teacher, at least in the beginning, in the position of a beginner teacher at the classroom management level.

Recent literature concerned with the first year of teaching considers this period particularly difficult for any new teacher, whether native or immigrant. It is a major cause for teachers' resignation, lack of motivation, burnout and eventual dropout. A number of reports and studies concerned with attempts at institutionalised support for non-immigrant new teachers showed significant positive results (Armstrong, 1983; Farber, 1984; Goodman, 1987; Hulling-Austine and Emmer, 1988; Odell, 1988; Amir and Tamir, 1992; Geva-May, 1993; Geva-May and Dori 1997). Future long-term professional absorption may therefore be facilitated by provision of appropriate support during the first year of teaching. The ability to take this factor into account in the retraining design served as another criterion for programme and policy potential success.

Study method

The study was undertaken at six institutions of higher education and comprised 292 immigrant science teachers. These represented about a third of the immigrant teacher population taking these courses in Israel in the first year of re-training policy implementation.

The findings provided formative information for the decision makers on two decision levels: on the macro-level it was concerned generally with the implementation of the re-training policy and with the programmes' *potential* contribution to integration, and benefit to the Israeli school system; on the microlevel it was concerned with the suitability and efficiency of each of the six programmes in preparing the immigrant teachers for the new environment and for providing appropriate guidance towards professional integration. The feedback received as to the efficiency and suitability of this first attempt at re-training was meant to provide data for future teacher re-training courses, as indeed it did. The findings also allowed inter-institutional exchange of ideas of a formative kind, i.e., what components of the various courses better served the purposes of the re-training either at the methodological or at the future assumed socialisation level and could be taken up by the other institutions. Since the research has not been followed up, this study cannot provide data concerning the impact of the courses on the actual social absorption in the school system, i.e., degree of employment after certification or performance in schools. Such future research is recommended.¹ This study was intended as no more than a formative evaluation of the re-training courses undertaken in Israel as part of the professional and related social absorption policy for the immigration wave at the beginning of the 1990s and with implications for future implementation in similar circumstances. The variables and the related criteria for efficiency and suitability used in the questionnaires and interviews have been drawn from the variables identified as affective factors influencing immigrant-teacher absorption (see Evaluation Tools description below).

The evaluation model adopted followed the Phi-Delta-Kappa Committee model and included three stages (Stufflebeam et al., 1971): identification of decision-makers' information needs, collection of data, and finally provision of analyzed data to the parties concerned. The information needs pertained to the effectiveness and contribution of the re-training courses to potential professional absorption and to potential contribution to the school system. The evaluation tools devised for this purpose referred to questions of efficiency and suitability. The criteria applied referred to the degree of efficiency and suitability with which the re-training courses could cater to the problematics of immigrant re-professionalisation. Examples are: what support was given to find a job; what new methodologies were acquired; mastery of Hebrew; exposure to the school system and to Israeli students' mentality; interaction between course lecturers and teacher trainees; gaps, if any, between the needs of the trainees and the amount of exposure (weekly hours) in subjects of importance such as Hebrew, methodology, psychology, and practice teaching; visits to gain acquaintance with the country and its people; trainees' attitudes towards the general and particular level of the programme; and their rapport with its lecturers and organisers.

Feedback questionnaires administered to all the immigrant teachers and to all the course directors were used to obtain factual information about course components, i.e., acceptance criteria, course titles and subject taught, time allocation for each subject, evaluation criteria, lecturers' credentials and qualification for teaching new immigrants, and so on.

The attitude questionnaires administered to the new-immigrant teachers were concerned with the degree to which the courses answered their present and future professional needs. The questions pertained to the contribution of the various courses and to their efficiency. They consisted of statements on a four-point Likert scale, ranging through strongly agree, agree, disagree, and strongly disagree. Care was taken to use the kind of language that the new immigrants would be able to understand yet without oversimplifying the statements in a way that would affect the message implied. The questionnaires administered to the immigrant participants, the programme directors and lecturers offered a number of parallel statements so that the validity of the statements could be assessed.

A series of semi-structured interviews with all six programme directors and with a random sample population of 21 lecturers and 58 immigrant teachers were designed so as to validate and expand on the informative and quantitative data obtained in the feedback and attitudes questionnaires.

Thus, in accordance to the problematics identified in immigrant teacher re-training contexts above, a number of operational variables were addressed in both the questionnaires (q.) and the interviews (i.). The following are examples of some parallel interrelated operational questions and statements that we asked trainees (t.), lecturers (l.) and programme directors (d.) as regards four main variables of concern:

Socio-occupational implications:

- (i.t.) Have you been assisted in finding employment? Is the position offered suitable in your view?
- (i.l.d.) What attempts have you made in presenting or immersing the immigrants into the Israeli school system? Have they become acquainted with it, in your opinion? How do you know?
- (i.d.) Has the programme included meetings with teachers, students and teacher training students from other institutions?
- (q.t.) I don't mind teaching a weak class. I will feel very upset if I don't teach in the (Tel Aviv) area.
- (q.l.) There have been quite a few trainees absent from my classes over the year.

Socialisation:

- (i.t.) Has the course provided you with a better understanding of the Israeli student?
- (i.l.) Do you attempt to prepare the trainees for the future encounter with the Israeli student? How?
- (i.d.) In what way has the model designed by your institution acquainted the trainees with the Israeli student and her/his mentality?

- (i.d.) Has your institution offered trips around the country and meetings with peers on an informal basis?
- (q.t.) This programme has assisted me to understand Israel and its culture. This programme has assisted me to understand the Israeli school learner.

Professional considerations:

- (i.t.) Do you feel that you have mastered the Hebrew language for teaching purposes?
- (i.l.) Have you been 'flexible' in your implementation of the course syllabus? In what issues?
- (i.d.) Will your institution provide teaching guidance in the first year of teaching?
- (q.t.) I have indeed acquired some new methods of teaching that I had not used before.
- (q.l.) What were the aims and contents of your course?
- (q.l.) Have you taught the same topics as in your classes given to native Israeli teacher trainees? In what respect?

Stages in teaching expertise:

- (i.t.) What difficulties, if any, do you envisage to have in your future work at school?
- (i.t.) How do you assist the trainees in overcoming future potential difficulties in school?
- (i.d.) What is in your view the percentage of trainees that can start working successfully?
- (q.t.) My Hebrew is good enough to teach. I am not worried about starting to teach in an Israeli school.

Study findings

The findings obtained in this study pointed to a number of factors that could affect the implementation of the re-training policy and its goals. In general, whether at the administrative or at the professional level, the main difficulties were in meeting the socio-cultural rather than the methodological needs of the immigrant teachers.

Prevalent components in the re-training models

Acceptance criteria and required participant profile

In order to assess the adequacy of the re-training programmes and their match with the re-training policy it was important to find out who the target population was and whether the programmes could adapt their standards to their needs. Participant profile assessment could throw light on the potential contribution of the trainees to the educational system, and in fact, was determined by the institutions' acceptance criteria.

Only 292 candidates were accepted by the institutions involved in this study; 476 others were not accepted. The qualifications of the applicants were particularly high in comparison to those of Israeli teachers aspiring to the same employment positions. The majority of participants held M.Sc. or Ph.D. degrees, and some had publications in their field of expertise (see Table 1). In this respect, it could be accurately predicted that the goal of the re-training policy with regard to reinforcement of the Israeli educational system will be attained. An additional factor of importance in this respect relates to the fact that in most teacher-training institutions a prerequisite for acceptance was also *previous teaching experience*, and a degree or certificate in teacher-training or education studies. The majority of participants in the project were found to have a teaching experience of over ten years (Table 1). However, from interviews with the programme directors and the lecturers it clearly transpired that the trainees needed upgrading mainly as regards methodology, use of computers, and developments and standards acknowledged in the West.

Although none of the institutions required standard achievement in Hebrew, an examination for *mastery of the first language*, i.e., Hebrew, was required by all institutions. All the applicants were supposed to have taken a six-month intensive course of Hebrew offered to all immigrants by the Ministry of Absorption prior to enrolling in this programme. The level of linguistic mastery was mainly assessed during the preliminary acceptance interviews with the applicants. From interviews with the programme directors we learnt that after the first year of experimentation, all the institutions acknowledged the need for entrance exams not only as a criterion for acceptance but also as a diagnostic tool for planning the Hebrew courses in accordance with the needs of the learners.

Age limit as an entrance criterion was the only controversial issue among the institutions. The directors of two of the institutions bluntly pointed out that they believed that above the age of 50, trainees for teaching cannot master the language well enough, the generation gap would be too big to deal with the mentality of the students in the new environment, and the adoption of completely new professional

habits would not be possible. This view was not shared by the other teachertraining institutions. Rather, 'openness', ability to cope with teaching, and willingness to adapt to the new environment, i.e., personality factors, were assessed in personal interviews held with the candidates. Indeed all the programme directors and lecturers interviewed pointed to the unusually high motivation and hard work of all the immigrant teachers, regardless of age.

The following is a table showing the trainees' profile according to institutional acceptance criteria:

Institute	N]	Degree	•	Education Degree	Tea	ching l	Experie	ence.
		B.A.	M.A.	Ph.D.		1-5	6-10	11-15	16-20
Weizman Physics and Chemistry	67	-	87	13	100	11	7	24	58
Technion Physics Chemistry Electricity	27 23 12	26 45 -	59 50 100	15 5 -	81 73 -	20 17 -	24 33 -	. 28 28 -	28 22 -
Mechanics	18	-	94	6	11	-	-	<i>-</i>	-
Oranim Physics and Mathematics	46	1-	83	7	15		not re	quired	
Yelin	21	24	71	5	not required	33	-	5 -	62
Minhal Technology	.52		93	7	50	19	5	3	8
Kibbutzim									
Physics and Mathematics	29	3	90	7	34		not re	quired	·

TABLE 1: Participant profile according to acceptance criteria (in percent)

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Re-training programme design — subjects and requirements

The main concern in this study was the impact of the re-training programmes and the degree to which they succeeded in catering to the trainees' present and future professional needs. Those who commissioned this evaluation study believed that the profile of these programmes and their suitability could predict the feasibility of this re-training policy. The evaluation focused on the re-training models and on their rationales, on major re-training components and on time allocation. In view of the affective factors identified, the following re-training components were considered to be of particular importance: exposure to language and culture, subjects taught, practice teaching and pedagogical and methodological updating.

Academic requirements.

The re-training courses in each of the teacher-training departments were designed according to the individual teacher-training model used for their Israeli students. The academic requirements were the same both as regards subject matter mastery and teaching performance. Additional programme elements were those required by the Ministry of Education and Culture concerning a minimal number of weekly hours for Hebrew language classes and for exposure to the culture, history, and geography of Israel. The degree of emphasis on these additional subjects varied according to the convictions of each training institution. These course components were assumed to assist in familiarisation with the new country's society and culture.

Interviews and open-ended questions in the attitude questionnaires showed that this decision was only partly adequate. Whilst it assured that both Israeli and immigrant trainees receive exactly the same teaching certificate for the same type of teacher training, additional emphasis was needed in the immigrant re-training in order to reach the same target. For instance, the trainees suggested that more Hebrew language and exposure to the school system should have been included in these programmes.

Subjects

The major subjects taught at all universities, although at different levels of emphasis, were: profession oriented subjects, (i.e., *basic subject matter review* in mathematics, physics, chemistry, mechanics or electronics, *subject matter updating*, and methodology); the *use of computers* for teaching; and *general education subjects* such as introduction to teaching, the education system of Israel,

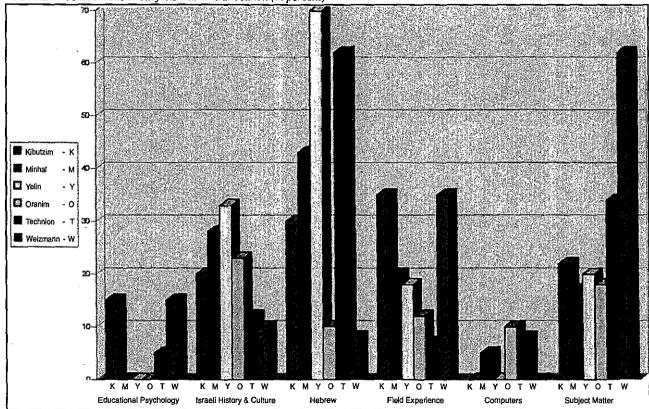


FIGURE 1: Course models: Subjects and time allocation.(in percent)

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social psychology, cognitive psychology and the psychology of the child. In the majority of institutions, a considerably high number of weekly hours (20%-40%) were allocated for *language classes* (Figure 1).

First language

Following the experience of the first year all teacher-training institutions agreed that a considerably larger number of hours should be allocated to the study of the first language. The attitude questionnaire pointed to a generally positive feeling of over 50% of the respondents about the impact of these classes for linguistic ability. An obvious correlation can be traced between the number of language hours and the attitude of the respondents (Figure 1 and Table 2). It was recognised that good mastery of the language is a primary and most important tool for teaching, i.e., for professional and for social integration. Interviews with the trainees suggested that an important feature of any future re-training programme for new immigrant teachers should be the acquisition of professional and classroom terminology and student slang, and exposure to listening comprehension. These were not sufficiently catered to by the re-training programmes. A majority of trainees suggested that they did not fear not being understood when explaining in class ('I could prepare thoroughly at home, look up words in the dictionary, etc.'), but that they were concerned with not being able to understand their students ('What if a student asks me a question, and I misunderstand what s/he says?'). Moreover, the immigrant teachers feared that lack of thorough linguistic mastery might hamper their communication with their students' parents and with their students. All these factors point to a certain degree of anxiety about functioning on the professional and communication levels, and to a deficiency the preparation for socialisation.

Culture

In all institutions a number of hours per week were allocated to Israeli *history*, *culture and geography*. These classes were given in Hebrew and the discussions assisted in forming a better understanding of the cultural context of language use. Despite the importance of the topic, some institutions allocated class hours ranging from 4 to 180 only. In the interviews the trainees attested that these subjects were particularly important for integration in the new society and in the school system, as well as for gaining an understanding of the mentality and the behavior of the host professional and social system. The immigrant teachers felt that these courses helped them to obtain a sense of orientation, identity and belonging (see Table 3). The trainees as well as the programme directors stressed

that since socialisation and absorption are of major importance for immigrant re-training, these subjects should be given far more emphasis in any future similar re-training efforts. They also pointed to the particular impact of guided tours, and in the case of one college, a three-day seminar held at a kibbutz guesthouse involving an encounter with Israeli artists, writers and politicians.

Institute	N	Enough Heb	ew Lessons	Hebrew Teach	ing Mastery
		agree to a large extent	seldom agree	agree to a large extent	seldom agree
Weizman	2	33	77	54	46
Technion	59	53	47	58	. 32
Oranim	33	21	79	39	61
Yelin	9	75	25	88	12
Minhal	52	79	21	66	34
Kibbutzim	17	-	100.	82	18

TABLE 2: Trainees' attitude toward programme contribution to mastery of Hebrew (in percent)

TABLE 3: Trainees' attitude toward programme contribution to knowledge of the host country (in percent)

Institute	N	Contribution to Exposure to the History of Israel and Its Culture		
		agree to a large extent	seldom agree	
Weizman	25	76	24	
Technion	59	· 34	66	
Oranim	33	85	15	
Yelin	9	100	-	
Minhal	52	34	-	
Kibbutzim	17	100	66	

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Pedagogy and methodology updating

Pedagogy, subject-matter related, and methodological updating were considered central components in the re-training courses. From the feedback questionnaires we learnt that the percentage of hours per week devoted to this subject ranged between 17% and 36% of the overall number of programme hours. The methodology courses usually followed the pattern used in the regular teacher-training classes of the teacher-training institution. Additional stress was put on acquainting the new-immigrant scientists with books and materials used in schools and with teaching approaches for different learning levels, and for different student populations. In our interviews with the immigrant teachers, and from the information received from their lecturers, it transpired that deductive and inductive learning, cooperative versus individual learning, and group work procedures were aspects of methodology rarely employed by the Soviet teachers in their country of origin. So were evaluation and assessment. In this regard the trainees said that 'in the Soviet school system it was mainly the state that handled the evaluation procedures, and teachers were, on the whole, not required to perform these tasks'. The interviews held with them suggested that these aspects needed more emphasis, especially as part of practice teaching and involvement in schools.

According to the programme directors, the rationale for emphasising methodology was based on the assumption that the teachers participating in this programme are acquainted only with the subject-matter but not with methodological approaches and educational processes practiced in the western world. With the exception of one institution, (see Table 4) the participants expressed highly positive attitudes towards the contribution of the programme to subject-matter exposure and to teaching techniques. Trainee attitudes towards the impact of the courses related directly to the extent of exposure, that is, to the number hours allocated for these subjects.

Psychology

Psychology classes were offered by some of the institutions in their curriculum for the regular teacher-training courses. The immigrant teachers reported that they had not been exposed to educational psychology in the former USSR. They regarded the issues raised in these classes as interesting and important for the teaching profession. The attitudinal findings (Table 5) point to the fact that future re-training courses for immigrant teachers should provide a more comprehensive look into the mentality and the social behavior of the absorbing country, which would then enable new immigrants to develop more appropriate tools

TABLE 4: Trainees' attitude toward programme contribution to teaching: subject matter and practice teaching (in percent)

Institute	N	Contribution to	Subject Matter	Contribution	to Teaching
		agree to a large extent	seldom agree	agree to a large extent	seldom agree
Weizman	25	72	28	96	4
Technion	.59	21	79	86	14
Oranim	33	33	67	35	65
Yelin	9	9.	45	100	_
Minhal	52	52	13	93	7
Kibbutzim	17	17	24	100	

of communication and facilitate their integration. Overall, in the interviews it was strongly recommended that more concern should be given to understanding the social behavior of children in Israeli schools, as well as to the disciplinary practices used in handling problems. In this respect, again, the suggestion given by the trainees was that in parallel to the theory classes, more field practice could cater to this need.

Teaching practice

Initially, according to the directors' feedback questionnaires, the standards for the *teaching practice*, in all institutions, were the same as those expected of the Israeli students, including 42-50 annual hours trainees were required to spend at schools under the supervision of an experienced teacher/mentor (Figure 1). The role of the mentors was to assist the trainees in analysing classes and situations observed, to advise on the planning and the teaching of lessons, and to involve them in school activities. Beyond the field training, this would provide the best opportunity for exposure to and understanding of the professional environment, and with its communication modes and requirements.

The immigrant teachers admitted that:

' I got ideas and new tools to handle problems in class; it did not always help me';

' I learned new methods to deal with discipline problems';

TABLE 5: Trainees' attitude toward programme contribution to an undestanding of educational psychology (in percent)

Institute	N	Contribution to an Understanding of Educational Psychology and Mentality		
		agree to a large extent	seldom agree	
Weizman	25	33	67	
Technion	59	71	29	
Oranim	33	67	33	
Yelin	9	48		
Minhal	52	48	52	
Kibbutzim	17	53	47	

'The practice teaching exposed me to a variety of teaching strategies';

'The practice teaching helped me a lot in understanding the usefulness and importance of applying different teaching aids such as transparencies and demonstrations';

'I worked with the mentor on designing a test and she helped me see where students may encounter difficulties';

'I learned to understand that although the Israeli kids are less disciplined they can be handled if they are approached as sensitive and reasonable human beings'.

The attitudes of the new immigrants towards the impact of the teaching practice, as expressed in their questionnaires and in the interviews, supported the proposition that future programmes should allow for a considerably longer period of time on this activity (Table 3). They argued that an adequate re-training model:

'should give immigrant teachers the opportunity to participate far more actively in school activities and experiences';

'should promote an accurate understanding of the mentality of children in the new country and of appropriate ways of approaching their various difficulties':

'should help to internalise everyday language including professional school-language and particularly children's slang';

'should offer field experience of the school system hierarchy, requirements and acceptable procedures'.

All these were believed to allow for the development of socially acceptable communication skills with students, parents and peers.

A related topic raised by all the respondents both in interviews and in the 'Suggestions' section of the questionnaires was the envisaged need and importance for a built-in induction/support programme for the first year of teaching. The respondents perceived this as the best way 'for support', 'consultations', 'planning', 'sharing of frustrations', 'advice on handling the students discipline-wise', 'coping with the hierarchy in the educational system: whom to approach for what', 'handling the parents'.

Faculty training

When these first programmes were started, only a third of the faculty staff had had previous experience in working with immigrant teachers. In some teachertraining institutions faculty members held weekly meetings 'to share doubts and problems' but interviews with the lecturers showed that 'this was insufficient'. Initially, faculty were not required to take any training in order to work with immigrant trainees. Moreover, only in few colleges did faculty members hold PhD degrees. In this respect they were outnumbered by the immigrant teachers. Some of the lecturers and teacher-trainers considered this 'reverse' role situation highly unusual. Although there was a sense of unease among faculty, the academic gap was not an impediment to adequate interaction between the lecturers and the trainees.

Whereas the immigrant teachers did not state this in their interviews, the programme directors declared unanimously that course organisers should strive to employ faculty who hold similar academic degrees to those of the immigrant teachers; mostly they felt that the re-training programme could be more efficient if 'empathy and an understanding of the immigrants' mentality, culture and habits are created for well in advance' – i.e., if the faculty members are fully ready for the interaction with the immigrant trainees prior to their lecturing in these classes.

Summary and conclusions

The re-training of new immigrant FSU teachers to teaching in their new country was undertaken in a number of colleges and universities in Israel following the massive immigration of 1989-1991. Given the great influx of immigrants from the former USSR, and the large numbers of immigrant teachers, this pilot retraining programme bore particular importance for assessing the efficiency, suitability and feasibility of the re-training policy and recommending

ways of improving its implementation. Six random teaching-training programmes were studied during the first year of the implementation of this policy in order to evaluate its viability.

On the basis of the data obtained, a number of conclusions and recommendations that can be adopted and/or adapted in other similar re-training contexts are offered:

- The aims of the re-training policy were to facilitate social absorption through professional absorption and to reinforce the Israeli educational system. The re-training policy can be considered a feasible proposition provided that certain changes are made at the micro-policy level, i.e., at the level of programme design.
- At the macro-policy level, the motivation, skills, academic qualifications and professional experience of the immigrant science teachers could be considered good predictors for positive integration into the Israeli school system. Given these qualities, adequate components at the implementation stage of the re-training policy had the potential of proving successful when the immigrant teachers started to teach in schools.
- In general, the re-training models implementing this policy proved to be suitably composed. In all the institutions evaluated in this study, they addressed the major operative factors in an immigrant teachers' re-training programme, namely socio-occupational sensitivity, socialisation, language mastery and methodological and pedagogic expertise. Moreover, the recommendations given following this evaluation study were intended to be of formative benefit and improve future re-training courses.
- According to the interviews with the trainees, the majority of immigrant teachers were ready to teach in any type of school, including primary schools, schools in difficult socio-economical areas and vocational schools. No hard feelings were expressed about having to 'start at the bottom of the ladder' in the school system or in less prestigious schools. They felt committed to their profession and ready to contribute. The great majority were chiefly motivated to becoming involved in the new trend of methodological thought, which was very different from that in the FSU. Hence, it may be inferred that the socio-occupational variable did not interfere with the success of this programme's implementation.
- Furthermore, the willingness of the immigrant teachers to work in schools and in socio-economic areas where teachers of their calibre do not normally teach points to the attainment of the second goal of this policy, namely contribution to the educational system in Israel.

- The issue of teacher socialisation proved to be a major concern for the immigrant teachers. They were mainly worried about being unable to cope with discipline problems and with understanding the mentality of their students. This is why one of the major recommendations they offered for re-training contexts is longer practice sessions with more involvement in schools, and support programmes during the first year of actual teaching in schools.
- In view of the different authoritarian socialisation patterns of the FSU teachers as compared with the humanistic/naturalistic Israeli Western context, the process of adjustment and sensitivity development is regarded as complex, lengthy and personality-dependent. Immigrant re-training programmes need, therefore, to foster involvement in all school activities during long and intensive teaching practice periods, so that immigrant teachers may apply the socialisation codes of the new environment. Particular emphasis should be put on acquainting the trainees with the educational system of the new country. This could be attained through course hours devoted to the subject, as well as through visits to a variety of school types and institutions throughout the country. Only then can immigrant teachers, re-trained to teach in a new country, understand and adopt codes of behavior and communication suitable for the new environment.
- According to the trainees and lecturers interviewed, for more efficient adoption of socialisation patterns, and for better understanding of the mentality of the host society, such a re-training course should also require a minimal number of years in the new country as part of the acceptance criteria. A basic understanding of the new society, its culture and its mentality is necessary a successful encounter with school students.
- All the respondents agreed that the re-training policy has good chances of success if socialisation patterns are put forward in the re-training programmes. This can be achieved by presenting and discussing the geography, history, culture, tradition and mentality of the new country in the context in which the immigrant teachers are going to work. Exposure to the new society and initiated absorption procedures (e.g., new immigrants being invited to the homes of peer teachers or to join extra-curricular school activities, visits to places of interest and longer practice periods) could further potential positive socialisation and social absorption.
- Although age as an acceptance criteria was found to be a controversial consideration, it was not reported to be an impediment either at the learning performance level during the re-training course or at the teaching level in schools during the training period. This feedback information is supported by

Loevinger's Adult Development Taxonomy (Loevinger, 1986). Development and growth are considered to be the outcome of motivation and interest rather than a chronological factor. Indeed, the same sweeping motivation and exuberant involvement was found in the interviews held with a mother and her son taking the same re-training course. Both had the same chances of success.

- On the professional level, re-training programmes for immigrant teachers from FSU should put added emphasis on methodology updating related to school subject-matter reorientation. In addition, they should promote the use of computers and multi-media as a teaching tools and for problem solving and facilitating deduction/induction processes; the Soviet educational system did not highly value these tools and approaches.
- First language mastery and content-matter knowledge should be assessed prior to acceptance and should serve as an evaluation and dissemination tool, as well as a diagnostic means for any appropriate programme planning. In some cases pedagogic content-matter mastery was found lacking, according to the lecturers interviewed.
- Intensive language classes given prior to the beginning of regular courses, as well as throughout the programme, can facilitate the socialisation and absorption process. Emphasis should be put on the teaching of professional language and on learners' slang. Listening comprehension activities to improve this skill in the first language should be provided more extensively.
- The first year of teaching, whether for a new-immigrant or Israeli-born teacher should be regarded as a period of adjustment and transition, and during this period possible shortcomings in classroom management should be identified and dealt with in the re-training period. Professional teacher-training literature suggests support programmes for beginning teachers to assist them in their work and prevent dropout. The same post-training considerations should apply even more to the immigrant teachers than to native beginning teachers, because immigrant teachers need counseling on basic acceptable ways of coping with class management, problem solving patterns, and communication styles inherent in the mentality and social patterns of the new country. Immersion in the school environment for longer time periods during the teacher-training programme can also provide the immigrant teachers an opportunity to become acquainted with student language and slang, and can facilitate the acquisition and internalisation, through use, of the professional language theoretically learnt.
- The decision to offer the same type of teacher-training instruction and assessment to immigrant science teachers as to native students in the teacher-

training departments was considered suitable. In this way the immigrant teachers could not be discriminated against when seeking employment.

• Particular attention should be paid to acquainting the immigrants with the mentality and social behavior of the host country. If this is done at the micro-level of the re-training programme design, the macro-goals of the re-training policy will have more chances of success. On the other hand, lack of appropriate preparation for personal confrontation with students, parents and peers, may jeopardise the whole enterprise.

In view of appropriate re-training models at the policy implementation level, and in view of the potential benefit likely to be provided by highly qualified, experienced and motivated immigrant science teachers to the school system, this re-training policy seems to have attained its goals:

- 1. The courses evaluated adequately addressed the components required in such a context.
- 2. As such the trainees were given suitable potential tools to perform well in schools.
- 3. In effect, the high qualifications and experience of the immigrant teachers, as well as their motivation to integrate in the educational system at any level, proved that the aims of professional integration and contribution to the school system were likely to be implemented.
- 4. It is obvious that when immigrants are given the opportunity to find suitable employment, social integration has a fair chance. It is a known fact that employment and professional integration, in turn, foster social absorption.

True, some of the conclusions reached in this study could have been nicely calculated out by the sensible decision-maker. But this is what studies in social sciences and particularly in policy studies are all about: they combine previous knowledge with common sense and intuition, and validate and strengthen assumptions through objectively gathered data (Weimer and Vining, 1989; Bardach, 1996; Geva-May and Wildavsky, 1997). This was the main purpose of this evaluation study. Moreover, the recommendations and conclusions reached in this study can be considered beyond their local context. The model and its components can be adapted, either at the general macro-policy level or at the micro teacher re-training level, according to the socio-political context in which such a re-training programme is needed. Its implications and conclusions can offer a suitable proposition in the case of any country where migration or recession occurs.

Notes

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¹ In other follow-up studies concerned with scientist re-training to teaching, the data obtained showed positive tendencies in this regard (Geva-May, 1993).

Iris Geva-May lectures in the Department of Political Science at the University of Haifa, Mt. Carmel, Haifa, Israel 31905. She is also attached to the Center for Studies in Higher Education and University of California at Berkeley, USA. Tel: 972-4-8253940; Fax: 972-4-8257785; e-mail: gevamay@poli.haifa.ac.il

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