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Preparation for Successful Integration into Higher Education of Arab Students:
Evaluation of a Program to Improve Academic Preparatory Programs

Dalia Ben-Rabi * Ayala Hendin
with Khaled Abu Asbah, Massar Institute
for Research, Planning and Social Consultation

The study was initiated by the Council for Higher Education and funded with its assistance

## RESEARCH REPORT

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## Executive Summary

In this report we present the results of an evaluation study of post-high-school preparatory programs for higher education. Arabs account for over $20 \%$ of Israel's population, yet only $12 \%$ of the students enrolled in higher education in this country are Arabs. Arab students study a limited range of fields; a small percentage are enrolled in sought-after fields, and continue to study for advanced degrees. Similarly, the percentage of Arabs enrolled in preparatory programs for academic studies is also low.

Young adults in the Arab population face a number of challenges to full integration into higher education, including: a lack of information and guidance regarding higher education; difficulty meeting the university threshold criteria - an academic-level matriculation certificate and psychometric exam; gaps in the skills, language and knowledge required for higher education; and insufficient adaptation of the institutions of higher education to the cultural needs of this population. In addition, there are specific barriers that impact on the participation of young Arabs in preparatory programs, including low awareness of the preparatory programs, a negative perception of the programs, and the cost of tuition fees and living expenses.

In light of the above, the Council for Higher Education developed a multiyear plan for the 20102015 academic years to increase accessibility to higher education for the Arab population, which involves a considerable increase in their investments to address this challenge. This includes funding the basic cost of additional numbers of Arab students, as well as a set of support programs to help overcome the barriers to both accessing higher education and succeeding in higher education. An important element was the introduction of a new enriched model for the preparatory program, specially adapted to the needs of Arab students. The program was piloted in the 2011/2012 academic year.

The pilot was conducted in four institutions (two colleges and two universities - one of which offered two programs) and was divided into two types: preparatory programs specifically for Arab students, and mixed preparatory programs in which the Arab students study alongside other students. Both types of program included an adapted pedagogic program, and an enriched support program that included language reinforcement in Hebrew and English, learning skills workshops, preparation for the psychometric exam (at the universities, where a psychometric score is required), social activities, personal and academic mentoring, and counseling. The students in the Arabs-only programs were also eligible for a $90 \%$ reduction of their tuition fees and a living stipend of NIS 700 a month plus travel expenses (as necessary).

Although both programs received similar funding from the CHE, the cost of implementation was said to be a little higher in the Arabs-only programs. In addition, the target population varied, as the Arabs-only programs are in somewhat higher academic-level institutions and the geographic location of the institutions attracts different population groups. Furthermore, the Arabs-only
programs were in institutions with previous experience with the target population that have, over the years, shown commitment to the success of such programs.

Myers-JDC-Brookdale Institute was commissioned by the Council for Higher Education (CHE) to conduct an evaluation study of the pilot that would address both the implementation and outcomes, in terms of enhancing the ability to participate in higher education. Attention was given to the differences between the Arabs-only and mixed programs. The study findings have been used as a basis for improving the existing program and determining future directions for developing and implementing them.

The study included all the Arab students in the five groups of the pilot preparatory programs (97 students). The study utilized in-depth interviews with the program directors; a self-report questionnaire for the students; focus groups with students in the programs; and administrative data provided by the programs.

## Main Findings

## 1. Program Implementation

The CHE defined a set of elements to be included in each program. However, each of the institutions had a great deal of freedom in their implementation and could add additional elements. Indeed, there were some significant differences, particularly between the mixed programs and those for Arabs only. An examination of these differences is important to understanding the differences in the participants' satisfaction with the program, the outcomes and the perceived contribution of the program.
a. Extent of structuring participation and coordinating between the program elements: Some programs required all students to participate in all elements while others distinguished between compulsory core elements and additional elective elements. In general, the Arabs-only programs were more structured and therefore had a higher level of coordination between the different elements and higher participation rates in each element. In contrast, in the mixed program, some of the elements that were defined as elective were not integrated into the core schedule. This created difficulties for the students working this into their schedule and led to a lower uptake of some of the elements.
b. Adaptation to the needs of the students: The flexibility in the adaptation of the program was greater in the Arabs-only programs as needs emerged during the year (e.g., adding an Arabic-speaking teacher).
c. Spread of hours over the academic year: All the programs included the same number of teaching hours, but the hours were distributed differently. In the mixed programs, the hours were spread over two semesters ( 6 months), while the Arabs-only programs spread them over 11 months or offered an optional summer semester.
d. Marketing strategy: The programs differed in the extent to which they invested in reducing the stigma associated with preparatory programs. For example, one of the Arabs-
only programs defined the preparatory course as the first year of a four-year program rather than a separate program prior to higher education.
e. Obtaining additional resources: The Arab-only programs were more successful in raising supplementary resources to strengthen the program.
f. Exposure to Israeli society: The Arabs-only programs faced the challenge of preparing the students for the mixed social environment they would encounter upon entering higher education. To address this, one of the programs introduced a special course on Israeli society, in an attempt to compensate partially for this limitation.

## 2. Characteristics of the Students and How They Heard about the Program

a. Most of the participants were female ( $70 \%$ ) and ranged in age from 18 to 27 years (average 20); $15 \%$ were married and $11 \%$ had children.
b. Most of the participants ( $69 \%$ ) had heard about the preparatory programs prior to their application to academic studies, while a significant proportion ( $31 \%$ ) heard about the program only when they applied.

## 3. The Elements of the Program: Utilization and Satisfaction

The rate of utilization varied among the elements. Overall, the satisfaction rates were high but there was variation. The study design did not enable us to assess the specific contribution that each element made to the outcomes of the preparatory programs. However, the perceived contribution by the students in section 5 gives us some insight.

### 3.1 Academic elements:

- Hebrew: Ninety-one percent of the students participated in Hebrew reinforcement classes. The participants expressed a high level of satisfaction with this element: $94 \%$ were highly satisfied with the teachers and $90 \%$ felt that the additional language reinforcement helped them meet the course requirements to a great extent. Seventy-two percent reported that the number of hours met their needs.
- English: Eighty-three percent of the students participated in English reinforcement classes. The participants expressed a somewhat lower level of satisfaction: $73 \%$ were highly satisfied with the teachers and $63 \%$ felt that the English lessons helped them meet the course requirements to a great extent. Sixty percent reported that the number of hours met their needs and $29 \%$ felt it was insufficient.
- Learning skills: Sixty-two percent of the students participated in learning skills workshops. The levels of satisfaction were mixed: $55 \%$ were highly satisfied with the teachers, and $78 \%$ felt that the workshop helped them meet the course requirements. Fifty-seven percent reported that the number of hours was sufficient and $25 \%$ felt it was insufficient.
- Academic tutoring and mentoring: Eighty-nine percent of the students received assistance with courses in the preparatory programs. Among them, $80 \%$ were highly satisfied with the
support. However, $49 \%$ reported that the number of hours was insufficient and that they would have liked additional academic support in the courses they took.
- Preparation for the psychometric exam: This element was provided only in the universitybased programs and 37 students participated ( $38 \%$ of students in the pilot). Among the participants, $65 \%$ reported that the number of hours was insufficient and only $11 \%$ felt that it helped them improve their exam results.


### 3.2. Social elements

Most of the participants were highly, or very highly, satisfied with the social programming (84\%) and workshops $(77 \%)$. The students reported a number of benefits: cooperation among students, opportunity to share difficulties, receiving tools for facing personal and academic challenges, and enhancing confidence.

### 3.3 Counseling:

Most of the pilot participants used the counseling services that were offered ( $87 \%$ ) and contacted the counselors several times ( $80 \%$ ). Most of those who used the service ( $89 \%$ ) felt that it had helped them or helped them very much.

### 3.4 Financial aid:

- Tuition scholarships: The program provided almost full tuition scholarships (90\%) in the Arab-only program, but did not provide scholarships for the mixed-program. However, 88\% of the students in both types of program received a tuition scholarship from some source.
- Living Stipend: Students in the Arabs-only program received a monthly stipend of NIS 700. Eighty-six percent of the recipients reported that their income was sufficient for part (53\%) or most ( $33 \%$ ) of their needs, compared with those who were not receiving any financial aid or who were receiving only a tuition scholarship or travel expenses, who reported their income was sufficient for part ( $23 \%-33 \%$ ) or most ( $13 \%-17 \%$ ) of their needs.
- Travel expenses and access: The issue of matching the route and frequency of transportation to the students' needs was emphasized by the students.


## 4. The Learning Experience in the Preparatory Program

a. Coping with academic assignments: Most of the students in the pilot felt that the academic level of the program was suited to their ability ( $79 \%$ ), and that they were coping well with tasks such as comprehension (83\%), writing and taking notes during class ( $75 \%$ ), and writing papers in Hebrew ( $88 \%$ ).
b. Learning and social environment:

- The students were highly, or very highly, satisfied with various aspects of instruction in the program, including the quality of the teachers, the teaching methods and assistance from the teachers ( $71 \%-85 \%$ ).
- A large proportion of participants ( $82 \%-85 \%$ ) reported to a high, or very high, extent that the atmosphere in the program promoted learning, that the rules were fair and that the level of discipline was appropriate.
- Over $80 \%$ of the participants reported to a high, or very high, extent that the social atmosphere was positive (pleasant surroundings, friendly atmosphere, sense of belonging).


## 5. Students' Assessment of the Contribution of the Program

a. Academic contribution: Between $83 \%$ and $92 \%$ of the participants agreed, or very much agreed, that the preparatory program had contributed to improving their knowledge of the subjects taught, Hebrew, academic writing skills and ability to study independently.
b. Contribution to personal satisfaction and self-confidence: Between $75 \%$ and $89 \%$ of the participants agreed, or very much agreed, that the preparatory program had contributed to their sense of personal satisfaction and self-confidence, to their wish to apply for studies with higher acceptance criteria, to their independence, and to the development of their plans for their academic-employment future.
c. Social contribution: More than two-thirds ( $68 \%-69 \%$ ) of the participants agreed, or very much agreed, that the preparatory program contributed to their social integration and to familiarization with Israeli society.

## 6. Completion of the Preparatory Program and Admission to Further Studies

Of the participants in the pilot, $93 \%$ reported that they intend to pursue academic studies. The programs reported that $81 \%$ obtained a certificate of completion of the program and $72 \%$ were accepted to academic studies, some of whom had not obtained the program completion certificate. Some of the students who were not accepted to higher education institutions reported that they would re-apply at a later date or that they had decided to change their academic track and had transferred to a different preparatory program. The rates of admission were similar or better in four out of the five pilot programs than the rates over the past decade of all the Arab students completing preparatory programs. The data for the pilot program refer to the continuation of studies immediately after completion of the preparatory program, so that the percentage of those actually furthering their education is likely to increase. According to Central Bureau of Statistics (2012) data, 44\% of the Arab students enrolled in preparatory programs in $2004 / 5$ and $52 \%$ of those in $2007 / 8$ pursued higher education within 3 years of completing the preparatory program. Thus, within one year, the rate is even higher than previous rates within 3 years.

## 7. Comparison of the Two Types of Program in Terms of Outcomes

The findings reveal a number of advantages to the Arabs-only programs, in the measures of program outcomes.
a. Satisfaction and perceived contribution of the preparatory program: In most areas, the rate of satisfaction and perceived contributions of the program were higher in the Arabs-only programs.
b. Participation rate: The participation rates in the different program elements were higher in the Arabs-only programs. In some of the mixed programs, the low participation rate led the institutions to decide to discontinue some of the program elements.
c. Completion of preparatory program and admission to higher education: The percentage of students completing the preparatory programs was much higher among those in the Arabsonly programs ( $88 \%$ ) than in the mixed programs ( $34 \%$ ). So too were the rates of admission to higher education ( $84 \%$ and $45 \%$, respectively). ${ }^{1}$ However, the rates of admission to higher education were similar or better in four out of the five pilot preparatory programs (with the exception of program C) than the rates in the past decade, of all Arab students who completed preparatory programs.
d. Resemblance to higher education studies: The mixed program in which Jews and Arabs studied together resembled more closely the environment found in academic institutions.

Although there were a number of advantages in the outcomes of the Arabs-only program, as noted in the introduction, there were differences in the nature of the institutions and the nature of the Arab students which could explain some of these advantages. Furthermore, as was mentioned, there were a number of differences in the implementation of the programs that are not inherent to the models, which could also help to explain the better outcomes. Thus, this study does not provide a basis for fully establishing the comparative effectiveness of the two models.

## 8. Discussion of the Findings and Future Directions

The study shows that the improved preparatory programs have considerable potential to enhance the chances of Arab students to be admitted to higher education. The findings also indicate that giving attention to the implementation of the programs can contribute both to fuller utilization of the provided interventions and to better outcomes.

The study design did not enable us to assess precisely the specific contribution that each element and each implementation strategy made to the satisfaction levels and the outcomes of the preparatory programs. However, the interviews with the program implementers and the focus groups with the students brought to light a number of directions that could improve the program.

1. Improving the specific elements of the program: As already mentioned, the students are generally satisfied with the program elements. However, the findings suggest a number of possible improvements in some of the elements:
a. Language reinforcement classes: All the reinforcement classes are important, but there is a particular need to improve the English language reinforcement.
b. Preparation for psychometric exam: Consideration should be given to increasing funding for the course so that higher quality courses may be purchased. In addition, there is a need to improve the match between the hours and demands of the psychometric course and the general study schedule.
c. Funding:

- Tuition scholarship: Since most of the students are eligible for a scholarship even without the program, it is recommended that thought be given to reallocating some of these resources to strengthening other elements.
- Transportation: The routes and frequency of available transportation do not always coincide with the students' needs. Thus, there is a need to promote the development of relevant transportation. Another option is to develop more student accommodation or subsidy of rents in the vicinity of the institutions.

2. Balancing the students' workload: Students in preparatory programs experience a heavy workload due to the combination of core elements aimed at improving the students' chances of acceptance to higher education and those designed to improve their ability to cope with the studies themselves. There is a need to give thought to the appropriate balance between the two types of elements, and to consider spreading the program over a longer period of time.
3. Integrating all program elements into the schedule: The additional support elements should be better integrated into the schedule of core program elements.
4. Flexibility: There is a need to assure flexibility in providing the program elements and match them to the needs that arise.
5. Branding: Consideration should be given to positioning the preparatory programs as the first year of the regular curriculum, as was done in some of the institutions.

This study examined only the first year of the pilot program. It is important to examine developments in the program as it becomes more established. The finding of the study may also be useful in reviewing preparatory programs for other disadvantaged groups.

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