Evaluation of the Academy Class Program in Bedouin schools in the Negev Desert: Perspectives from student teachers, supervising teachers and principals

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Abstract:

Israel introduced the Academy Class Program in 2016 to increase the clinical experience of student teachers during training. The program aimed to reduce the ratio of student teachers to supervisor teachers to two to one in the teaching practicum. Bedouin schools in the Negev Desert use this program widely. This study evaluated the program from the perspectives of Bedouin principals, 34 supervising teachers and 60 student teachers. The student teachers completed practicums in elementary sciences and kindergarten. Researchers used questionnaires and interviews. They made quantitative and qualitative comparisons between four established schools and four new schools. They also compared elementary science and kindergarten practicums. All interviewees considered the program beneficial and recommended its use in all teaching practicums. Supervising teachers from established settlements and the science stream reported higher satisfaction and perceived greater benefits than those from new settlements and kindergartens. Student teachers from new settlements expressed more satisfaction with the program than those from established settlements. Student teachers from established schools and the science stream

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perceived the program to be more beneficial than student teachers from new schools and the kindergarten stream.

Keywords: Academy Class Program, student teachers, supervising teachers, Bedouin schools.

1. Introduction

To receive a teaching certificate (B.Ed.) in Israel, the student must complete a training program, that is, in a teaching practicum, to gain teaching experience in a classroom with a supervising teacher. Great importance has been attributed to the training program as the teaching practicum is the basis for applying theoretical studies to classroom teaching (Ulvik et al., 2018; Wiese et al., 2024). In addition, many student teachers consider the practicum as the most important component of their education (Clarke, Triggs, & Nielsen, 2014; Hoffman et al., 2015). In the teaching practicum, student teachers are exposed to situations that they would encounter in teaching and school management. They observe lessons, prepare lesson plans, teach and receive an evaluation of their lessons (Khalil & Asadi, 2005). They also observe activities in the training schools and then discuss and analyze them. In this way, student teachers acquire work habits, learn to prepare balanced and efficient lesson plans and equip themselves with tools for a teaching career (Beckmann & Ehmke, 2023).

Wiese et al (2024) believed that strong co-operation should be forged between the academic institute where the student teacher is studying and the training school, as this would help close the theory–practice gap, that is, "the gap between the theory learned in on-campus courses and curricula and the school-related practices performed in classrooms that PSTs (pre-service teachers) struggle to bridge." Gangal and Yimaz (2023) concluded that pedagogical documentation "contributed positively to the teachers' planning and programming, behaviour

management, in-class relations, and time management implementations at various levels."

Ariav (2008) described three models that are used to train student teachers. The first is the traditional model, or the apprenticeship model, in which the student teacher is the apprentice of a supervising teacher, and teaches a lesson or part of one. The second is referred to as the professional development school (PDS) and is also based on apprenticeship, but in partnership with the training school. Overall, the PDS model offers a holistic approach to teacher education, integrating theory and practice and fostering strong partnerships between institutions of higher education and local schools and school districts. The purpose of this partnership is not only to train the student teachers, but also to improve the teaching methods of the in-service teachers themselves. The third is the independent teacher model, which is a collaborative effort in which student teachers participate in all aspects related to teaching after training for a whole year, and, in the second year, they teach two different subjects (Arbiv-Elyashiv, Avishar & Barkai, 2016). In general, the supervisor teacher advises(d) up to 5 student teachers concomitantly in any of these programs.

1.1 The Academy Class Program

In 2016, the 'Academy Class Program' was introduced in Israel to increase the student teachers' clinical experience during the training period, and to reduce the ratio of student teachers to supervising teachers to 2:1. This program is based along the lines of the the PDS model. The program is designed to promote meaningful learning in classrooms by integrating two adults working simultaneously in the classroom; to improve the training of student teachers for teaching and professional development; and to develop student teachers not only to become teachers but also to increase the component of pedagogical training experience. These goals could be accomplished by: 1) strengthening the

partnership among the academy (institute of student teacher), the training schools and school districts 2) emphasizing clinical practical training; 3) switching to "pair teaching" in the classrooms; and 4) encouraging encounters and discussions between the two student teachers from the Academy Classroom Program and teachers from the training schools (Ministry of Education, 2014; Ratner and Glickman, 2020). In addition, several sub-objectives of the program were proposed as follows: 1) to reduce the occurrence of new teachers quitting the teaching profession in the first years after graduation; 2) to increase the teaching staff in schools; 3) to reduce the teacher-student ratio in the classroom; 4) to improve student achievements; 5) to open up an additional career path for teachers as supervisor teachers; and 6) to develop teachers professionally and academically in an innovative pedagogical way.

Experts argued that teachers had to be professional and proficient in the field of teaching and not just hold a teaching certificate. Zach and Stromer (2018) pointed out that student teacher training and teaching practice in schools are of importance because this experience enhances professional development in that the practicum and training help teachers become familiar with a school's daily life and atmosphere. However, the benefits of the new Academy Class Program in teacher education or training, on student teachers' professional development is still being evaluated.

1.2 Purpose of the study and methods:

Bedouin students in schools in the Negev are in the process of advancing in terms of knowledge and exposure to new teaching methods, as well as to various intervention programs. The Academic Class Program was implemented in Bedouin schools in the Negev and has been operating for several years, but there is still no assessment of the quality of the program. The reports presented so far are general, and therefore more in-depth, specific and quantitative data are

required in order to evaluate the benefits of the program. In addition, most of the reports evaluating the program to date have been made in the Jewish sector, but very little is known about the Bedouin population in the Negev. This study aims to fill this important gap and evaluate the program through the perspectives of Bedouin principals, teachers and student teachers in elementary sciences and kindergartens.

1.3 Education of Negev Bedouin

Today, there are approximately 330,000 Bedouin residing in the Negev. Close to 70% live in government authorized settlements, while 30% live in spontaneous, non-authorized settlements. Initially, seven settlements (old settlements) were established – the first one at Tel Sheva in 1968. Subsequently, 11 smaller settlements (new settlements) were established and two more are in the planning stages.

In 1948, formal education was considered unimportant among the Negev Bedouin and only a few boys from wealthy families attended school, usually till grade four or five (Bernstein-Tarrow, 1980). “The traditional Muslim schools called Kuttab that usually functioned in a tent around the Sheikh’s residence” were the place of study at this time and “classes usually included about 20 boys, roughly between the ages of 5 and 12, who were taught to memorize the whole Quran by sheer repetition.” (Abu-Saad, Horowitz & Abu-Saad, 2007). In 1949, the Compulsory Education Act was passed in Israel, making education mandatory and providing free elementary schooling for every child aged six to thirteen (Bernstein-Tarrow, 1980; Abu-Saad, Horowitz & Abu-Saad, 2007). However, in 1950–51, there were only 360 students – all boys, in nine schools, with 11 teachers and 27 classes.

Girls started attending school in the 1960s, and their proportion of the total number of students has been increasing steadily. By the late 1960s, elementary

schools had been established in all major tribal settlements (Abu-Rabiyya, al-Athauna & al-Bador, 1996) and by the early 1990s all authorized settlements had high schools (Negev Bedouin Statistical Data Book, 2010).

In 1972, free compulsory education was extended to include the ninth and tenth grades, ages fourteen and fifteen (Abu-Saad, Horowitz & Abu-Saad, 2007). Most teachers in Bedouin schools came from northern Arab villages and from East Jerusalem. Out of 276 teachers in the Bedouin school system in 1978, about a third were Bedouin from the Negev and, of these, two-thirds were non-certified (Meir & Barnea, 1987). The Bedouin Education Authority (BEA) was established in 1981 to increase female enrolment, to handle student registration, to plan, build and maintain schools, and to assure appropriate and adequate teaching material. By 1997–98, 46% of the 35,124 Bedouin pupils from kindergarten to grade 12 were girls, although in grade 12, only 39% were girls. At this time there were 51 schools, of which eight were high schools, and 1,700 teachers, of whom 60% were Negev Bedouin (Abu-Rabia, 2001). However, according to Abu-Saad (non-dated document), 23% of the teachers lacked professional qualifications.

The dropout rate from high schools among the Bedouin has been declining; however, it is still the highest among students in Israel, especially so for females. Abu-Rabia-Queder (2005) concluded that the high rate for girls was due to ‘a clash between Bedouin tradition and modern education’. It is believed that Bedouin females travelling alone and interacting with males could bring dishonour to the family (Abu-Rabia-Queder, 2006; Abu-Saad et al., 2007). Furthermore, it was more important for males to be educated than females and financial considerations also prevented some females from studying. In addition to the high dropout rate, Bedouin students have been receiving lower grades than the Israeli average in national examinations, in particular matriculation examinations (bagrut), which are prerequisite requirements for a high school

diploma and application for higher education. Bedouin students also have been receiving lower grades than Jewish students on an aptitude test (psychometric examination), one of the measures used for acceptance into higher education (Abu-Saad, 2005).

However, there is an increasing trend of Bedouin students attending school and matriculating from secondary school. In 2006-07, 40% of Bedouin were eligible for matriculation and 28% fulfilled university entry level requirements as opposed to 57% and 45%, respectively, for all students in Israel (Negev Bedouin Statistical Data Book, 2010). In addition, the number of Bedouin students, especially females, in higher education has been increasing steadily over the years. For example, at Ben-Gurion University, the number of students increased from 244 in 1999–00 to 472 in 2010–11. and the percentage of females of the Bedouin students increased from 42.6% to 63.1% (Negev Bedouin Statistical Data Book, 2010). The increase in female students is also apparent in the Gulf Arab States, where over 75% of higher education students are women (Mazawi, 2007).

In a survey taken in 2005, it was reported that almost all female graduates worked in the education sector (Abu-Bader & Gottlieb, 2008). Most females were concentrated in elementary schools, while all kindergarten teachers were females (Abu-Saad et al., 1998). There is still a large need for Bedouin teachers in the Negev and it is likely that many of the Bedouin who study for teaching diplomas do so because they are assured of employment with a teaching certificate. Furthermore, Negev Bedouin women are limited in their choice of study in that they are constrained in their movement (Abu-Gweder 2022; Abu-Gweder and Gribiea 2026). Education is convenient in that studies are usually close by and job opportunities are often available within their community (Abu-Gweder, 2024). Limitations on Muslim women's education have been reported elsewhere in the Middle East. In Saudi Arabia, "women are generally not allowed to

disciplinary fields which are either associated with Saudi Arabia's industry and technology or with the production of religious knowledge" (Mazawi, 2007). In the United Arab Emirates, Findlow (2007) reported that there has been an increase in the number of women in higher education over the years, but that the fields of study "are fairly limited and circumscribed."

Three options are open to students continuing studies after grade 12 matriculation: 1) university; 2) teaching college, where they can receive a teaching certificate and a bachelor's degree; and 3) technical colleges. In 2014, about 20% of the Bedouin students were enrolled in Kay and Achva Academic colleges – 10% in each college. Both Kay and Achva Academic Colleges offer tracks in which Bedouin have separate classes and study together (El-Meccawi & Degen, 2016).

2. Methods

There are 27 institutes, mainly colleges, but also universities and teaching seminaries, 1800 student teachers and 350 training schools participating in the Academy Class Program in Israel. In the current study, all student teachers were enrolled in Achva Academic College, where there are 1000 students in the Faculty of Education, with 150 students studying to teach science in elementary school and 270 students studying to teach kindergarten. The acquisition of a teaching certificate (B.Ed.) entails a 4-year program, in which a teaching practicum is required in the 2nd and 3rd years. In the year of the current study, 2022, (2022-23) there were 90 students in the science stream and 180 students in the kindergarten stream in the 2nd and 3rd years at Achva Academic College, and all participated in the Academy Class Program. Of these students, 95% (257) were women of whom 98% (252) were Bedouin who resided in the Negev.

In the Academy Class Program, a lecturer is appointed by the college to act as a pedagogical supervisor and selects the training schools and supervising teachers. The pedagogical supervisor overseas approximately 15 student teachers in the program, and advises the student teachers and evaluates their performances. The supervising teachers are employed by the Ministry of Education and receive an additional NIS 6000 per student per year from the college for their supervision. Prior to their participation in the Academy Class Program, supervising teachers undergo training for their role by attending an annual course on how to supervise student teachers. The course of 30 hours per year for two years is presented by the pedagogical supervisor and continues during the years of supervision for professional development of the supervisor. The principal of the school and the pedagogical director choose a liaison person, a teacher from the school, who facilitates communication and collaboration between the school and the college, and is in charge of administration. This person receives an additional NIS 500 per student teacher per year.

The schools in which the supervisor students and principals were employed were located in three relatively old settlements (Tel Sheva, Segev Shalom and Kseife) that were established between 1968 and 1982, and in two relatively new settlements (Al-Atrash and Tel Kasif), established after 2003. School principals and supervising teachers from two specializations, namely, elementary sciences and kindergarten (0-6 years), were surveyed. We examined the degree of cooperation between student teachers and supervisor teachers/principals, and the student teachers' benefits and their satisfaction with the program from the perspective of the student teachers, supervisor teachers, and principals.

2.1 Data processing and statistical analyses

This study was quantitative-oriented and the data collected were based on questionnaires and in-depth interviews. The questionnaires included perceived relationships among the interviewees, development in the profession, the advantages and disadvantages of the program and personal evaluation of the program by the interviewees (for further details on the questionnaires, see Tables 2-6). among In total 8 principals, 40 supervisor teachers and 75 student teachers, all Negev Bedouin in the Academy Class Program, were approached and asked to participate in the study. Answers to the questions were ranked from 0 to 5. All the participants in the study, student teachers, supervising teachers and principals, were interviewed.

Responses to the questionnaires were compared between old and new settlements, and between the science and kindergarten streams. An analysis of variance (ANOVA) compared means and a Tukey's Honest Significant Difference (HSD) was used to separate means where significance was detected. A level of $P < 0.05$ was accepted as significant. Data are presented as means + standard deviation. The data from the in-depth interviews were processed and analyzed based on a version of grounded theory for data analysis (Tie et al., 2019) in which an established theory begins with inductive inquiry and the key points in the discussion are encoded and then grouped into categories. The method requires that the researcher have as few early ideas as possible, using prior knowledge to interpret the analysis rather than direct it (Charmaz, 2014). After constructing the categories in this study, each interview was reviewed by the authors to determine how many of the categories were mentioned by each interviewee. This section was to strengthen our understanding of the questionnaires

3. Results and Discussion

In the present study, all 8 principals (100%), 34 supervising teachers (75%), and 60 student teachers (80%) responded to the questionnaires. Initially, in 2016, student teachers taught for three days per week in the Academy Class Program, but within two years, by 2018, it was reduced to two days per week. In the past two years, since 2022, there have been reports of Academy Class Program student teachers participating in only one day per week as part of a study and research group. Most student teachers taught in their field of expertise, that is, sciences or kindergarten in the present study, and only a few student teachers taught in other subjects. Within the framework of the program, there was close cooperation between student teachers and supervising teachers, including weekly work meetings between them, and in many cases, these meetings were built into the curriculum of the class.

Based on our discussions following the questionnaires with the principals and supervisor teachers, the program, in general, heightened the interest of the staff at the training schools in teaching methods and led to improvements in the physical conditions of the schools. For example, air conditioners were installed in the classrooms, seats were changed to be more comfortable, and audiovisual equipment, a computer and a projector became basic equipment in each classroom. Discussions assessing the student teachers were done openly and cooperatively, and the student teachers felt that they were an integral part of the school system. They also helped with planning the class teaching and activities at school, attended some of the school's staff meetings and some of the parents-teachers meetings, helped the teachers on duty at recess or other breaks, and participated in class trips and after school activities. The level of familiarity of teachers teaching in Arabic-speaking schools with models of teaching in pairs and of non-frontal learning was deemed to be relevant to training in a classroom setting.

Female principals had more ($P < 0.01$) years of experience than male principals (24.0 vs 5.5 years) (Table 1). The student teachers and supervising teachers were very heavily biased towards females and, therefore, gender was not separated as a variable. Only four of the 60 interviewees were males (6.7%) student teachers, and all were in the science stream, and 85% (88%) of the supervising teachers were females. Most teachers in the Bedouin population are females and the proportion has been increasing (El-Meccawi & Degen, 2016). Close to half of the female student teachers were married (48%) and it appears that the proportion of married female student teachers has been increasing over the years. Many of the female teachers had children, and, often, grandmothers took care of the children which enabled the mothers to attend school (personal data).

In the present study, based on our interviews, it was evident that the principals, training teachers, and student teachers were very satisfied with the Academy Class Program, as was also reported by Assadi and Murad (2017) and Murad, Assadi, and Ibdah (2021). Male principals perceived the program to provide more benefits than female principals (average grade 4.72 vs 3.81) and principals from the old settlements perceived the benefits of the program to be greater than principals from the new settlements (Table 2). For example, male principals ranked 'improves the performance of the supervising teachers' (4.75 vs 3.50, $P<0.01$) and 'improves the professional development of supervising teachers' (4.75 vs 3.75, $P<0.01$) higher than female principals, but there was no difference between male and female principals in ranking 'professional development of supervising teachers' (4.25 vs 4.25, NS). These differences should be taken with caution as there were only four principals of each sex and four principals of each type of settlement. Furthermore, all the male principals were from the old settlements, while all the female principals were from new settlements. This could explain why the responses of male principals and old settlements were identical as were female principals and new settlements (Table 2).

3.1 Perceptions of the supervising teachers

In our discussions with the supervising teachers, all teachers expressed high praise for the program and we could not discern a difference between the old and new settlements and the teaching specialties. However, in the questionnaires in general, the level of satisfaction was ranked higher in teachers from the old than the new settlements (overall average 4.29 vs 3.62) and in the sciences than the kindergartens (overall average 4.50 vs 3.61) (Table 3). For example, teachers from the old settlements ranked 'the academy class program in general' (4.23 vs 3.41; $P<0.05$); 'relationship with student teachers' (4.52 vs 3.58, $P<0.01$); 'relationship with the college' (3.88 vs 3.05, $P<0.01$); 'professional development in the field' (4.41 vs 3.47, $P<0.01$); and 'status as a supervisor because of the program' (4.47 vs 3.88, $P<0.01$) higher than teachers from the new settlements. Part of this difference could be related to the longer relationships formed among the staff in old schools compared to new schools. Supervising teachers in science ranked 'the academy class program in general' (4.53 vs 3.38; $P<0.01$); 'relationship with pedagogical director' (4.76 vs 3.76; $P<0.01$); 'relationship with student teachers' (4.76 vs 3.61, $P<0.01$); 'relationship with the college' (4.15 vs 3.04, $P<0.01$); 'professional development in the field' (4.61 vs 3.52, $P<0.01$); and 'teamwork within the school' (4.46 vs 3.61, $P<0.01$) higher than supervising teachers in the kindergartens (Table 3). A similar pattern emerged with questions on the contribution of the Academy Class Program; supervising teachers from the old settlements perceived that the program was contributing more than supervising teachers from the new settlements and supervising teachers from science perceived that the program was contributing more that teachers from kindergartens (Table 4). In addition, in general, supervisor teachers from the old settlements perceived the benefits of the program to be greater than from the new settlements (4.10 vs 3.69) and from the science stream perceived the benefits of the program to be greater than from the kindergarten stream (4.26

vs 3.75) (Table 4). In particular, supervising teachers from the old settlements perceived that the program improves their ability to supervise student teachers (4.41 vs 3.30, P<0.01) and contributes to the development of the student teachers (4.23 vs 3.82 P<0.01) to a greater extent than supervisor teachers from new settlements, while supervising teachers from the sciences perceived that the program contributed to improving the level of the students (4.30 vs 3.33, P<0.01) and the development of student teacher (4.38 vs 3.80) to a greater extent than supervisor teachers from kindergartens.

3.2 Perceptions of student teachers

In studies by Assadi and Murad (2017) and Murad, Assadi, and Ibdah (2021) on how the Academy Class Program influenced professional development, the authors reported that the program improved the student teachers' knowledge, skills and competencies, while being effective and efficient. In addition, they concluded that the program increased the confidence of the student teachers and improved their attitude towards their lecturers, supervising teachers and school students.

The level of satisfaction for student teachers in different areas is presented in Table 5. All student teachers were interested in continuing the program. The highest scores were recorded for the relationship/collaboration with the supervising teacher (overall average 4.18), with no difference between old and new settlements, but a higher score was given by the student teachers from the science than the kindergarten specialty (4.23 vs 4.13; P<0.05), and for professional development (overall average 4.20), with no difference between student teachers from the old and new settlements and from the specialty teachings. The lowest grades were recorded for the relationship with the students (3.96), with no differences between settlements and specialties, and for time allotted for the Academy Class Program (4.01), with the old settlements and

kindergarten specialty stating that more time was needed than the new settlement (4.10 vs 3.93; P<0.05) and science specialty (4.03 vs 3.96; P<0.05). The student teachers in the new settlements perceived that the teamwork in the school (4.26 vs 3.83) and the methods of teaching (4.23 vs 4.06) were better than in the old settlements. In the old settlements, the teachers in the schools were more 'set in their ways', whereas in the new settlements, the teachers were still 'finding their ways' and were more willing to discuss teaching methods. Also, teachers in the old schools tended to teach more in the traditional manner, that is, were more 'teacher-centered', with passive learning by the students; whereas, in the new schools, the teachers tended to be more 'student-centered', with a greater stress on interactive learning by the students and the use of more visual aids. These differences aligned well with what is known in the general teaching methods between old and new school (Kannan, 2023).

The student teachers were pleased with the program with little difference between the student teachers from the old and new settlements and between the science and kindergarten streams (Table 5). In addition, student teachers from the old settlements perceived more benefits from the program than from the new settlements, while there was little difference between student teachers from the sciences and kindergartens (Table 6). The student teachers felt more confident teaching, that they made the right choice in choosing this profession, and were determined to continue teaching in the future. Student teachers with a strong identity and with a positive 'future time perspective (FTP)' about their career as teachers (Eren, 2012) tend to remain as teachers for longer periods (Hanna, Andre & Zee, 2023). This fits in well with the Academy Class Program, as an aim of the program is to reduce the occurrence of new teachers dropping out of the teaching profession shortly after graduation. There is a shortage of teachers in Israel, particularly in the Bedouin sector, and also a shortage worldwide (Barnes et al., 2024). Approximately 30% of teachers, at least in the United

States, leave their profession within five years after graduation (Cunningham, 2019). One of the Sustainable Development Goals put forth by the United Nations in 2015 was to 'substantially increase the supply of qualified teachers' by 2030 (United Nations, 2015). Tickell and Klassen (2023) stated that teachers leaving the profession has "deleterious consequences for students, schools, and the areas/districts they serve (Carver-Thomas & Darling-Hammond, 2019; Sorensen & Ladd, 2020)", and that "governments must start to investigate strategies for teacher retention to redress this situation." Results from the present study indicate that the program could encourage student teachers to remain in the profession. The student teachers rated both the relationship with (overall average 4.08) and the supervision from (overall average 4.11) the supervising teacher as very high (Table 6). Matsko et al. (2023) concluded that supervising teachers consider personal exchanges and productive relationships with their student teachers as most important, while the student teachers considered the teachers' instructional competence and mentoring commitment as more important during early interactions. Both these aspects were rated highly by the student teachers in the current study. Furthermore, constructive supervision (mentoring) of student teachers has been reported to increase their retention rates in the profession (Borman and Dowling, 2008; Carver-Thomas and Darling-Hammond, 2019; Renbarger & Davis, 2019; Maready et al., 2021), and also to improve self-efficacy (Renbarger and Davis, 2019), and teaching effectiveness (Ronfeldt et al., 2018). The school environment (4.09) and status as a teacher (4.09) were also rated high, and both were reported to be important in teacher retention after graduation (Hogg, Elvira & Yates, 2023).

Most participants in the study recommended that their colleagues participate in the program. The professional abilities of the supervising teachers and principals were highly appreciated, and the student teachers were even kept abreast of the innovations and developments in the field. The contribution of the program to

the students was assessed by all the partners in the program as high, both academically and interpersonally. The program's contribution to student teachers received very high grades among student teachers, supervising teachers and principals. The student teachers worked closely with the supervising teachers and the personal relationship between them was strong. Based on the results, it appears that the program should continue and even expand, in light of the many positive comments made by the student teachers, supervising teachers and principals when evaluating the strengths and contribution of the program in general.

4. Conclusions

This study reported novel data in this field of education among the Bedouin population in the Negev. Student teachers, supervisor teachers and principals perceived that the contribution of the program to student teachers was high and should be continued in all teacher education studies. However, in general, supervising teachers in the old schools and in the science stream perceived that the contribution of the program was greater than supervising teachers from the new schools and kindergarten stream. In addition, student teachers from the new schools were more pleased with the program than teachers from the old schools and student teachers from the old school and science stream perceived the program to contribute to a greater extent that student teachers from new schools and kindergarten stream. In addition, the academy class program contributed to the school environment, and to the self-confidence of student and supervisor teachers.

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Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have influenced this study.

Data availability

All data are presented in the Tables in this paper.

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Table 1: Principals, supervising teachers and student teachers in the academy class program

Principals	Number	Experience (years)		Supervision (years)		Married (%)	Specialty Sciences	Specialty Kindergarten	2nd year	3rd year
Males	4	5.5 ± 0.25	0.0001			100				
Females	4	24.0 ± 2.09				100				
Teachers										
Males	3	30.00 ± 4.08	0.0004	4.5 ± 3.53	0.01	100	3	0		
Females	31	10.55 ± 0.92		5.16 ± 3.32		100	10	21		
Students										
Males	4					1 (25%)	4	0	3	1
Females	56					26 (48%)	26	30	29	27

Significance: * P<0.05; **P<0.01

TABLE 2: Impressions of principals in the academy class program

	Principals			Old and new settlements[1]			
Impressions on their experience in academy class	Males (n = 4)	Females (n = 4)	P	Old (n =4)	New (n = 4)	P	Average
Contributes to learning-teaching processes within the schools	4.50 ± 0.25	3.75 ± 0.21	0.09	4.50 ± 0.25	3.75 ± 0.21	0.09	4.12 ± 0.22
Improves the level of performance of the supervising teachers	4.75 ± 0.21	3.50 ± 0.25	0.01	4.75 ± 0.21	3.50 ± 0.25	0.01	4.12 ± 0.29
Improves the status of the supervising teacher	5.25 ± 0.21	3.75 ± 0.21	5.42	5.25 ± 0.21	3.75 ± 0.21	5.42	4.50 ± 0.32
Improves the supervising ability of the student teachers	5.00 ± 0.35	3.75 ± 0.21	0.04	5.00 ± 0.35	3.75 ± 0.21	0.04	4.37 ± 0.32
Should be incorporated in the entire education system in Israel	5.00 ± 0.35	4.00 ± 0.35	0.13	5.00 ± 0.35	4.00 ± 0.35	0.13	4.50 ± 1.70
Improves the school environment	4.50 ± 0.25	3.50 ± 0.25	0.04	4.50 ± 0.25	3.50 ± 0.25	0.04	4.00 ± 0.26
Strengthens the cooperation among teachers in the school	4.50 ± 0.25	4.00 ± 0.35	0.35	4.50 ± 0.25	4.00 ± 0.35	0.35	4.25 ± 0.24

	Principals			Old and new settlements[1]			
Impressions on their experience in academy class	Males (n = 4)	Females (n = 4)	P	Old (n =4)	New (n = 4)	P	Average
Improves professional development of supervising teachers	4.75 ± 0.41	3.75 ± 0.21	0.01	4.75 ± 0.41	3.75 ± 0.21	0.01	4.25 ± 0.31
Contributes to professional development of student teachers	4.25 ± 0.21	4.25 ± 0.21	1.00	4.25 ± 0.21	4.25 ± 0.21	1.00	4.25 ± 0.16
Overall Mean	4.72	3.81		4.72	3.81		4.32

[1]Old settlements:Tel as-Sabi (Tel Sheva), Shaqib al Salam (Segev Shalom), Kuseife (Kseife); new settlements: Mulada (al Atrash), Tal Kaseef)

TABLE 3: Level of satisfaction of supervising teachers in the academy class program

	Old and new settlements[1]			Specialty			
	Old (n = 16)	New (n = 18)	Sig	Science (n = 13)	Kindergarten (n = 21)	Sig	Total
The academy class program in general	4.23 ± 0.24	3.41 ± 0.29	0.05	4.53 ± 0.19	3.38 ± 0.24	0.02	4.82 ± 0.19
My relationship with the teaching staff of academy class program	4.41 ± 0.20	4.00 ± 0.21	0.15	4.61 ± 0.18	3.95 ± 0.17	0.01	4.20 ± 0.13
My relationship with the pedagogical supervisor	4.52 ± 0.20	3.76 ± 0.20	0.007	4.76 ± 0.17	3.76 ± 0.16	0.0004	4.14 ± 0.14
My relationship with student teachers	4.52 ± 0.20	3.58 ± 0.18	0.001	4.76 ± 0.17	3.61 ± 0.16	0.000	4.05 ± 0.15
My relationship with the college	3.88 ± 0.25	3.05 ± 0.07	0.003	4.15 ± 0.26	3.04 ± 0.04	0.000	3.47 ± 0.14
My professional development in the field of teaching.	4.41 ± 0.20	3.47 ± 0.17	0.005	4.61 ± 0.18	3.52 ± 0.14	0.000	3.94 ± 0.14
Teamwork within the school.	4.23 ± 0.23	3.64 ± 0.16	0.03	4.46 ± 0.21	3.61 ± 0.14	0.000	3.94 ± 0.13
Contribution of the college to continuing education	4.52 ± 0.16	4.05 ± 0.18	0.04	4.61 ± 0.18	4.09 ± 0.13	0.02	4.29 ± 0.14

	Old and new settlements[1]			Specialty			
	Old (n = 16)	New (n = 18)	Sig	Science (n = 13)	Kindergarten (n = 21)	Sig	Total
My status as a supervisor because of the academy class program	4.47 ± 0.16	3.88 ± 0.18	0.01	4.53 ± 0.19	3.95 ± 0.13	0.01	4.17 ± 0.12
My opportunity to influence the teacher students	4.05 ± 0.23	3.58 ± 0.18	0.09	4.30 ± 0.20	3.52 ± 0.16	0.06	3.82 ± 0.14
The time I can devote to teacher students	4.11 ± 0.23	3.47 ± 0.21	0.03	4.38 ± 0.21	3.42 ± 0.17	0.02	3.79 ± 0.15
The ACP improves my learning-teaching abilities	4.11 ± 0.21	3.58 ± 0.19	0.05	4.38 ± 0.20	3.52 ± 0.11	0.01	3.85 ± 0.14
Overall Mean	4.29	3.63		4.50	3.61		4.01

[1]Old settlements:Tel as-Sabi (Tel Sheva), Shaqib al Salam (Segev Shalom), Kuseife (Kseife); new settlements: Mulada (al Atrash), Tal Kaseef)

TABLE 4: Contribution of the academy class program according to supervising teachers

	Old and new settlements[1]			Specialty			
	Old (n = 16)	New (n = 18)	Sig	Science (n = 13)	Kindergarten (n = 21)	Sig	Total
Academy class program improves the level of students in school	4.05 ± 0.22	3.4 1± 0.16	0.02	4.30 ± 0.20	3.38 ± 0.16	0.001	3.73 ± 0.14
The ACP improves the student's status in the school	4.11 ± 0.17	3. 64± 0.11	0.02	4.23 ± 0.20	3.66 ± 0.10	0.01	3.88 ± 0.10
The ACP improves the supervision of teacher students	4.41 ± 0.17	3.76± 0.15	0.01	4.46 ± 0.21	3.85 ± 0.14	0.02	4.08 ± 0.12
The ACP should be used in the entire education system in Israel	4.11 ± 0.27	3. 76± 0.15	0.26	4.15 ± 0.33	3.80 ± 0.14	0.29	3.94 ± 0.16
The ACP improves the school environment	4.17 ± 0.20	4. 00 ± 0.14	0.47	4.15 ± 0.24	4.04 ± 0.12	0.67	4.08 ± 0.12
The ACP strengthens the cooperation among teachers at the school	4.17 ± 0.20	3.8 2± 0.18	0.21	4.23 ± 0.23	3.85 ± 0.17	0.19	4.00 ± 0.13

	Old and new settlements[1]			Specialty			
	Old (n = 16)	New (n = 18)	Sig	Science (n = 13)	Kindergarten (n = 21)	Sig	Total
The ACP improves the supervision of the teacher students.	4.00 ± 0.20	3.64 ± 0.11	0.12	4.15 ± 0.22	3.61 ± 0.10	0.02	3.82 ± 0.11
The ACP contributes to the development of teacher students	4.23 ± 0.23	3. 82± 0.18	0.17	4.38 ± 0.24	3.80 ± 0.17	0.05	4.02 ± 0.14
Overall Mean	4.10	3.69		4.26	3.75		3.93

[1]Old settlements:Tel as-Sabi (Tel Sheva), Shaqib al Salam (Segev Shalom), Kuseife (Kseife); new settlements: Mulada (al Atrash), Tal Kaseef)

TABLE 5: The teacher students' perspectives on relationships and school environment

	Old and new settlements[1]			Specialty			
	Old (n = 30)	New (n = 30)	Sig	Science (n = 30)	Kindergarten (n = 30)	Sig	Total
Relationship with teaching staff at school	3.96 ± 0.22	4.16 ± 0.21	0.70	4.10 ± 0.23	4.03 ± 0.21	0.83	4.06 ± 0.15
Relationship/collaboration with supervising teacher	3.96 ± 0.22	4.40 ± 0.20	0.20	4.23 ± 0.21	4.13 ± 0.22	0.74	4.18 ± 0.15
Relationship with the students at the school	3.80 ± 0.25	4.13 ± 0.21	0.28	3.96 ± 0.24	3.96± 0.22	1.00	3.96 ± 0.16
Supervision I received	4.06 ± 0.22	4.20 ± 0.22	0.80	4.16 ± 0.21	4.10 ± 0.23	0.83	4.13 ± 0.16
My professional development in teaching	4.03 ± 0.23	4.36 ± 0.21	0.35	4.20 ± 0.22	4.20 ± 0.22	1.00	4.20 ± 0.15
My knowledge of the studied material	4.00 ± 0.23	4.26 ± 0.20	0.38	4.20 ± 0.21	4.06 ± 0.22	0.67	4.13 ± 0.15
The teamwork within the school	3.83 ± 0.26	4.26 ± 0.22	0.23	4.03 ± 0.25	4.06 ± 0.24	0.92	4.05 ± 0.22
Methods of teaching the students	4.06 ± 0.22	4.23 ± 0.22	0.69	4.10 ± 0.23	4.20 ± 0.22	0.75	4.15 ± 0.16
My status as a teacher student because ACP	4.00 ± 0.23	4.23 ± 0.20	0.45	4.03 ± 0.22	4.20 ± 0.21	0.59	4.11 ± 0.15

	Old and new settlements[1]			Specialty			
	Old (n = 30)	New (n = 30)	Sig	Science (n = 30)	Kindergarten (n = 30)	Sig	Total
My ability to influence the students	3.93 ± 0.21	4.30 ± 0.21	0.21	4.06 ± 0.22	4.16 ± 0.21	0.74	4.11 ± 0.15
Time allotted to ACP	3.93 ± 0.21	4.10 ± 0.18	0.72	4.03 ± 0.18	3.96 ± 0.21	0.81	4.01 ± 0.14
Satisfaction with the school environment	4.16 ± 0.20	4.11 ± 0.18	0.74	4.13 ± 0.17	4.17 ± 0.20	0.88	4.14 ± 0.13
Overall Mean	3.98	4.23		4.10	4.10		4.10

[1]Old settlements:Tel as-Sabi (Tel Sheva), Shaqib al Salam (Segev Shalom), Kuseife (Kseife); new settlements: Mulada (al Atrash), Tal Kaseef

TABLE 6: Benefits of the academy class program according to teacher students

	Old and new settlements[1]			Specialty			
	Old (n = 30)	New (n = 30)	Sig	Science (n = 30)	Kindergarten (n = 30)	Sig	Total
Improves the student's level in school	4.25 ± 0.16	3.93 ± 0.17	0.18	4.10 ± 0.19	4.10 ± 0.16	0.98	4.10 ± 0.12
Improves the status of the teacher student	4.24 ± 0.16	3.83 ± 0.22	0.09	4.16 ± 0.20	3.93 ± 0.21	0.42	4.05 ± 0.14
Improves the supervision of teacher students	4.21 ± 0.19	3.73 ± 0.22	0.06	4.06 ± 0.21	3.89 ± 0.21	0.56	3.98 ± 0.15
Should be extended to the entire education system	4.20 ± 0.17	3.66 ± 0.21	0.01	4.10 ± 0.18	3.80 ± 0.23	0.26	3.95 ± 0.13
Benefits teacher students	3.37 ± 0.24	3.60 ± 0.23	0.72	3.60 ± 0.23	3.43 ± 0.24	0.61	3.51 ± 0.16
Improves the school environment	3.10 ± 0.28	3.26 ± 0.24	0.87	3.43 ± 0.24	3.00 ± 0.28	0.24	3.21 ± 0.18
Strengthens cooperation among teachers at school	4.00 ± 0.23	3.70 ± 0.22	0.19	3.96 ± 0.22	3.75 ± 0.23	0.51	3.86 ± 0.16
Improves supervision of teacher students	4.17 ± 0.22	3.79 ± 0.21	0.16	4.10 ± 0.21	3.89 ± 0.22	0.50	4.00 ± 0.15

	Old and new settlements[1]			Specialty			
	Old (n = 30)	New (n = 30)	Sig	Science (n = 30)	Kindergarten (n = 30)	Sig	Total
ACP contributes to my learning-teaching processes	4.10 ± 0.18	4.07 ± 0.17	0.89	4.16 ± 0.17	4.00 ± 0.16	0.60	4.08 ± 0.12
Overall Mean	3.96	3.73		3.96	3.75		3.85

[1]Old settlements:Tel as-Sabi (Tel Sheva), Shaqib al Salam (Segev Shalom), Kuseife (Kseife); new settlements: Mulada (al Atrash), Tal Kaseef