# Professional Development of University Teacher Trainers through Organizational Reconstruction: An Action Research Study

**Rivka Glaubman, Ettie Ornan, and Hananyah Glaubman,** School of Education, Bar-Ilan University, Israel.

## ABSTRACT

The present study examined the effectiveness of organizational restructuring of a teachers' training department at Bar Ilan university, Israel, to improve teacher trainers' professionalism. The study was initiated as a response to a deep dissatisfaction expressed by the department's staff. A six steps Action Research, continuing three years was conducted, applying a program of restructuring the department. Qualitative and quantitative measurements were triangulated to evaluate the effectiveness of the change. At the end of each step the data was summed up, reflected upon, discussed by all participants and the program was modified, based on the lessons learnt from the data. A principal of collaborative work at all stages of planning and executing, in which each participant had an equal share, was adhered to along the entire study. The results showed a marked improvement in personal professionalism, proficiency of teaching and satisfaction. Thus, the claim that organizational restructuring applied in an Action Research paradigm is an effective vehicle to improve teachers' professionalism was substantiated.

**Key-words:** Professional development, teacher-trainers, teacher-education, restructuring, action-research.

## Introduction

The present work describes a three-year action research at the Teacher-Training Department, the School of Education, Bar-Ilan University, Israel, aimed to improve staff's professional development and teaching effectiveness. A plan of restructuring the department's program was designed and implemented to attain these objectives.

When referring to teachers' professionalism, researchers distinguish between the concepts of professionalism in teaching as compared to the traditional professions and claims for special characteristics of teaching as a profession (Barrow & Milburn, 1990; Gordon, Perkin, Sockett, & Hoyle, 1985; Holly & McLoughlin 1989; Price & Weatherby, 2018; Rowan, 1994).

Marczely (1996) argued: "The goal of professional development is usually pursued through a single recipe intended to satisfy all participants and all needs with one approach". In disagreement with

this statement he suggested eight ways "in which a program of individualized professional development can be designed to function within the existing public school administrative and contractual structure". Price & Weatherby (2018) claim that the strongest domain traits that correlate with feeling valued as a teacher are: Teachers' satisfaction with their working conditions, involvement in school decision making, and the chance to be recognized for good work.

Research shows that teachers' professionalism develops through learning and reflection related to their teaching in areas such as: Matching teaching objectives to learners' needs; matching teachers' expectations with students' performance and deliberating on the implications such as correspondence or discrepancies for future planning of teaching (Manen, 1995; Schon, 1988; Tapilouw et al., 2017; Zeichner, 2002). Although reflection is usually considered to be mainly a personal, inner process, it is also influenced by contextual characteristics of the institute at which it takes place (Jay & Johnson, 2002; Schon, 1988; Westerman, 1991). Marzano (2003) validates this claim by showing that professionalism together with teachers' collegiality and experience, are factors which explain nearly 50% of students' achievements. Professional development, therefore, depends on one hand upon the teacher and on the other hand upon his/her affiliated institution (Tack et al., 2018). Thus, there is a need for joint investments in both partners: The teacher, who needs to acquire various types of knowledge that is necessary for teaching improvement (Price & Weatherby, 2018; Shulman, 1987; Zeichner & Liston, 1996), and the teacher's institution for structuring and devising organizational and pedagogical programs that would enhance staff development and institutional improvement (Anagnostopoulos et al., 2018; Kula & Glaubman, 1994; Hopkins, 1987). Sparks & Hirsh (1997) assert that staff professional development, and in-service education are interactive components in affecting the knowledge, attitudes and practices of individual teachers, administrators, and other educational functionaries, and hence, alter the culture and structure of the organization. Goelman (1995), emphasized the connections between emotional aspects of interrelated informal networks within the organization, and the well-being and better functioning of its members. This claim leads to the conclusion that the consequences of introducing changes should be expected to be also emotional. Goelman specifies three types of such informal networks, which benefit both individuals and inner institutional harmony in collaborative organizations: communication, expertise and trust.

Following these considerations, the question of this study was whether restructuring and changing the ways of governance and practice in the department would enhance professional development of the teacher trainers, and their awareness and proficiency in attaining the aims of students' training.

Thus, a program for restructuring of the Teachers Training Department as a vehicle to improve staff's professional development and teaching effectiveness was designed and examined.

Teachers' professional development is described in the literature as a continuum of developmental stages that start off in basic pre-service training phase, continues in a short initiation period of classroom teaching, then in accumulation of schooling experience and in-service training and advanced professional training, and finally in either serene retirement or disappointment, depending on the nature of the teacher's course of development (Huberman, 1988, 1992; Marzano, 2003; Tack et al., 2018). Reflections upon teaching practices play an important role all along this continuum, and since the aim of teacher training is to prepare the student teachers for their future task, these experiences teach them to become reflective classroom teachers (Anagnostopoulos et al., 2018; Darling-Hammond & McLaughlin, 1995; Kelchtermans & Ballet, 2002).

Following this reasoning, the aim of the project was twofold: (a) Raising the participants' awareness, both theoretically and practically, to these objectives, and (b) Improving their proficiency in training strategies, beyond mere content and pedagogical training (Manen, 1995; Shulman, 1987).

**The study**

The program included 50 faculty teacher trainers of 760 students, specializing in 16 disciplines. Initial group meetings and personal interviews with staff revealed a strong feeling of dissatisfaction; they expressed mainly two types of feelings: They felt that they were not able to actualize their potential. Furthermore, they felt loneliness at work, and hesitation to collaborate with colleagues in fear it might jeopardize their academic freedom. The general agreement was that something should be done to bring about a change, and a continuous collaborative action research, was considered to be the most suitable method for it. (Brody & Hadar, 2018; Cohen, Manion & Morrison, 2002; Darling-Hammond, 1998; Hibert, Gallimore & Stigler, 2002; Renyi, 1998; Sagor, 1997; Zeichner, 2002).

Following the claim of Sparks & Hirsh (1997), that "High quality staff development is essential if all students are to achieve high levels", and adopting the assumption that teachers' professional development is similar at all levels of schooling (Marzano, 2003), it seemed that implementing the principles of staff professional development in teacher training would contribute to the achievement of these objectives (Eliahoo, 2017; Tack et al., 2018). Thus, the project of restructuring the department was planned and implemented. A basic asset of the program was that the participants will be full partners of the effort, taking part in each stage of deliberation, decision making, implementation and evaluation of the praxis (Anagnostopoulos et al., 2018; Jones & Harvey 2017; Malen & Ogawa, 1992).

A three year project was initiated. In the first year, a new organizational structure was introduced in the department. This structure focused on mutual collaborative learning and re-

examination of all the existing units and activities relating to the student teachers' short and long-term needs (Gentle & Forman, 2014). Collegial learning and re-evaluation continued during the second and third years, using six cycles of action research. The process was documented from the beginning and evaluated in its second and third years.

The program consisted of four components: vision, equilibrium, professional development, and governance and practice (Anagnostopoulos et al., 2018; Cobb, McClain, Lamberg de Silva & Dean, 2003; Darling-Hammond, 1998; Gentle & Forman, 2014; Hibert, Gallimore & Stigler, 2002; Jones & Harvey 2017; Marzano, 2003; Newmann, King & Youngs, 2000; Rachimi, 1995; Renyi, 1998; Zeichner, 2002).

| Aspects | Contents | Practice | Expected implications |
|---|---|---|---|
| **1**<br><br>**The vision aspect:** **Establishment of an educational philosophy** | - collaborative discussions of clear vision policies<br>- educational ideology and theories | - articulating aims as stemmed from the vision<br>- vision implications grounded in actual practice | - a clear vision of value system is formed as an infrastructure for course teaching, field training, and pluralistic learning teams' collaboration<br>- clarified attitudes form a basis for sharing interests |
| **2**<br><br>**The equilibrium aspect:** **Balancing needs, in respect to rationale and practice** | - structuring means and frames of implementation<br>- balance preferences: of individuals (teachers, students), institution, and community<br>- support & respect to teachers' voices, expertise and critique | - constructing interactive vertical and horizontal teachers' teams<br>- expert teams devise program coherence, content, materials & syllabi, instrumentation, aids and methods<br>- establishing a continuum of training stages<br>- encouraging teachers' critique<br>- monitoring processes based on continuous feedback | - improved effective structural functioning<br>- affording for each member's voice<br>- gaining high level of whole staff satisfaction and involvement<br>- enhanced teacher's expertise & sense of self-efficacy<br>- |
| **3**<br><br>**The professional development aspect:** **Developing individuals within a collaborative community** | - developing professional community<br>- developing intellectual capital of teachers around problems of practice<br>- balanced division of labor<br>- searching for the best mechanism for verification and improvement<br>- aiming for continual improvement of present & future students' learning | - developing decision making and knowledge production strategies, concerning: training, contents, teaching methods, monitoring, evaluation, coordination and communication (pedagogical knowledge)<br>- professional development is given substantial time, and is integrated in aspects of the change process<br>- discussions focus on current problem solving of curriculum, teaching | - both hierarchical authority and democratic cooperation is afforded<br>- participants' strive for mutual contribution, consensus and satisfaction for all players<br>- teachers become professionals in all respects: intellectual, verbal, social, etc.<br>- readiness to share |

76

| | | | |
|---|---|---|---|
| | - continual learning by staff<br>- monitoring action research through the whole process | and student leaning<br>- emphasizing accuracy, verifiability, and continual improvement | responsibility with students |
| **4**<br><br><u>The governance & practice aspect</u>:<br>**Actual performance** | - building a collaborative community as network cohesion<br>- structuring communication channels<br>- sharing the curriculum<br>- voluntary participation<br>- principal's leadership as advice centrality | - establishing formal and informal communication channels<br>- sharing, communicating and examining curriculum & teaching<br>- establishing rituals and routines in groups, by maintaining meetings, conferences, time tables and correspondence<br>- availability of technical resources<br>- setting teams of common interests to deal with: aims, contents, materials, teaching methods, evaluation schemes etc | - developed social relations, friendships and mutual references<br>- open, free relationships of give and take |

**Figure 1: The four aspects recommended for staff professional development**

Evaluation was based on the assumption that manifestation of components from all above four aspects will indicate the existence of a self-renewing, holistic system of teacher training. Improving such a system is hierarchical and cooperative at the same time, coherent in its vertical and horizontal sub-structures and management procedures, and is directed to self-restructuring through self-learning, evaluation, and adaptation procedures (Lane & Epps, 1992).

The study assumed that initiating a process of change should imply steps in the fashion of institutional problem-solving cycles as follows: Identify needs, learn, and devise policy, choose suitable applications, implement, evaluate, make adjustments and re-implement the modified program. (Oja & Smulyan, 1989; Sagor, 1997; Zeichner, 2002). Thus, the restructuring program was applied in an action research paradigm (Hibert et al., 2002; Zeichner, 2002; Zuber-Skerritt, 1996), and the conclusions drawn from the data collected and analyzed at each step directed the actions taken in the next steps. Various methods for data collection were used, strengthening validity through the triangulation of measurements of combined levels, investigators, and methodology (Cohen, Manion & Morrison, 2002; Hudson-Ross ,2001).

To evaluate the program, the following procedure was applied:

At the start, needs were identified (Tapilouw et al., 2017) by means of two methods: First, all the participants filled out a general written *Needs Assessment Questionnaire* (Cohen et al., 2002), specially designed for this purpose; Second, within the newly established working teams, the needs were expressed, discussed orally, and documented. These two methods were aimed at guiding the organizational restructuring and teacher training program in general and within teams, aimed to suit each team's specific needs.

At the end of each step three measures were taken: (1) Content analysis was applied to the questionnaires' responses, and to the written free verbal responses; (2) an additional evaluation questionnaire was filled out by the participants, to evaluate all organizational and in-service activities. The questionnaire also gave room for additional notes of those who wished to add their comments; (3) a random sample of six participants were interviewed personally, using an open interview method (Gee, 1990; Kvale, 1996; Wolcott, 1995). All these were aimed at evaluating the program and guiding its further modifications. Based upon this feedback, modifications were introduced to the program and applied in the next step. The same procedure was applied at the end of each year, as an overall reflection, with one change, that at the end of each year 9 stuff members were interviewed.

The study at the first year consisted of two steps:

Step 1. At the beginning of the first semester, the initial program was offered to the staff and after discussions that lead to amendments, was implemented as a joint decision of the staff. This guideline of democratic decision-making was adhered to during the entire period and in all stages of the study, and the work was done as a cooperative effort. During the semester, the activities were monitored and recorded, and constant meetings were held in which the material was reflected upon and some modifications were introduced. At the end of step 1 the data collected was analyzed and the teams reflected on the data. Suggestions were discussed, and modifications were chosen to be applied at the second step.

Step 2 Started at the beginning of the second semester. The modified program was implemented, and the same procedures were applied. By the end of this step, which was the end of the year, the data was reflected upon and a modified program was prepared to be implemented in the next year. Since the program at the first year had just been introduced, activities were dispersed and focused only on most urgent issues. In addition, the measuring tools were finally shaped and upgraded along the year based upon what was learnt from the application of the plan. As a result, the partial data that was collected and analyzed, was used for modifying the program, but as for research inferences was left to be combined with the second year's data for overall summation, analysis, and reflection.

Step 3 started off at the beginning of the first semester of the second year. The modified program was implemented and the same procedures as in steps 1 and 2 were applied. By the end of the semester the data collected was analyzed, reflected upon, and the program was modified accordingly. This procedure was repeated at step 4, which started at the beginning of the second semester and ended by the end of the year.

## Results

Most of the results were of qualitative nature. The quantitative data will be presented graphically and in written form, according to the type of information. The results are presented in the sequence of the evaluation, starting with first and second year results, followed by those of third year. Each presentation will be in an order that follows the four aspects that were examined: Vision, equilibrium, professional development, and governance and practice.

## Evaluation of steps 1, 2, 3 and 4

At the end of step 4, which coincided with the end of the second year of the study, the data of all previous steps: 1, 2, 3 and 4, were analyzed. Content analyses of the written records were applied, following Holsti's (1969) and Weber's (1990) guidelines, and the data from the interviews were analyzed according to Anfara, Brown & Mangione's (2002) guidelines. All measuring tools were aimed at examining both effectiveness of the program and satisfaction from it.

Figure 2 presents the results of the content analysis of the data of stages 1, 2, 3, and 4, at the end of the second year.



**Figure 2: Content analysis of 1st and 2nd years' accumulated documentation**

From Figure 2 we learn that half of the records relating to the meetings and the management of all teachers' training activity, dealt with equilibrium, relating to organizational guidelines. The other half of the records dealt with the other three aspects equally.

Figure 3 presents the results of the evaluation questionnaire filled out by staff members, to evaluate all organizational and in-service activities.
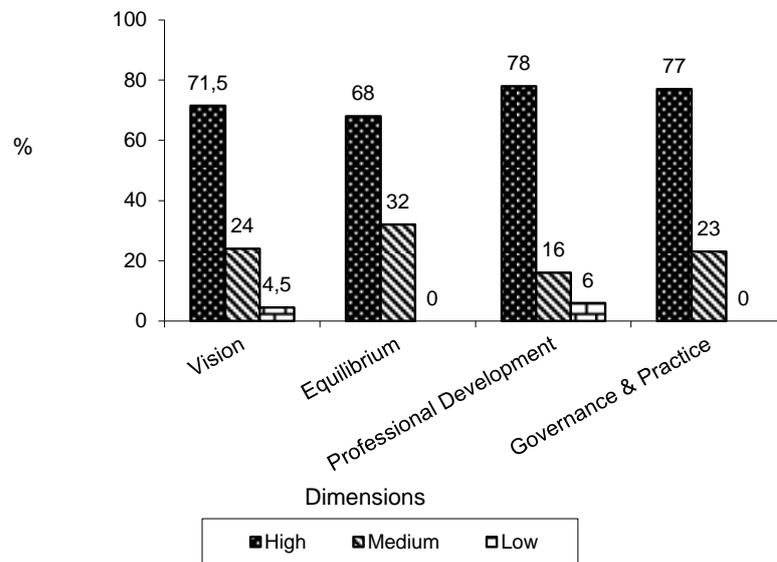


**Figure 3**: **Teacher trainers' evaluation of 1ˢᵗ and 2ⁿᵈ years' acts**

Figure 3 indicates different results as compared to Figure 2. Here, it seems, that participants saw more equal balance between all four aspects. The participants expressed a relatively positive opinion of all the actions that were taken as related to each aspect, along the first and second years of the program's implementation. The recorded data concentrated mostly on the organizational aspect and reflected the other aspects much less.

As mentioned earlier, the questionnaires also gave room for additional comments. These data, and the data gathered from the interviews, were analyzed again relating to the four aspects. The data offered some specific information that was useful for further action in the third year. These are presented, in the following section.

**Statements at the end of stage one:**

**1. The vision aspect:  Establishment of an educational philosophy.**

People expressed satisfaction with the opportunity to exchange opinions with their colleagues and discuss matters of teaching and training, especially matters relating to basic principles, as shown in comments such as: "Materials that colleagues offered helped me a lot in thinking and in planning", or "This experience contributed to formation and consolidation of my views on training".

Some comments suggested that further improvements were needed. People were not content with the regular short meetings. They wished for a full day workshop aimed at clarifying standpoints and values. They also suggested widening the forum to include inter-university discussion aimed at colleagues' exchange of opinions, ideas, and information. By this they expected to form wider groups of professionals that together would be able to cope with future educational challenges.

**2. The equilibrium aspect: Balancing needs in respect to rationale and practice.**

In this aspect, members expressed their satisfaction with the organizational restructuring that organized the work in a framework of mutual interest groups; they were pleased with the idea of uniting discipline trainers into a central governing forum which set the policy, rules and strategies of decision making, and established priorities for teacher education. That was demonstrated in statements such as: "Meetings were very important, especially for encouraging mutual contribution", or "in the first year, the formation of concepts and planning was of utmost importance to me, nonetheless in the second year I found it more important to exchange feedback with my colleagues, and think about necessary steps aimed at future improvement".

Participants were also critical and referred to matters which were not satisfactory for them and offered suggestions for improvement. They suggested enhancing staff learning by inviting experts from other institutions, such as schools, educational projects, ministry policy makers, and even experts from abroad. They felt that such action would contribute to broaden the horizon and extend the range of knowledge.

**3. The professional development aspect: Developing individuals within a collaborative community.**

Satisfaction was expressed as relating to the joint planning policy; to the devising and exchanging instrumentation of teaching aids; and to the developing ways for mutual coordination. They were mostly satisfied with the opportunity for mutual interrelations. The participants expressed their gratification from finding themselves acting in working groups and sharing thoughts and worries with colleagues. The opportunity of meeting various people who share common interests, each from a different angle, afforded mutual professional enrichment and support. As some said: "I found it very positive taking part in workshops of mutual interest groups, scrutinizing theory, and practice," or "it is important to enhance communication, and it was very helpful to open channels for intensive interrelations".

Here too, suggestions were added to increase the number of team meetings for enhanced vertical cooperation; and for the creation of opportunities for interdisciplinary planning. They also suggested

to have teachers' workshops; to distribute additional need assessment questionnaires and to prepare a list of experts and possible contributions for mutual benefits.

**4.      The governance & practice aspect: Actual performance.**

Here we could find expressions of satisfaction from the itinerary of meetings; from the collaboration with colleagues in matters of procedure; and of the spreading of meetings' reports among the participants. Most emphasized were remarks about the widening opportunities for creating informal relations between colleagues. Some expressed their satisfaction with the groups' efforts outcome using expressions such as: "We have now a new form for planning lessons" or "we are nearing completion of a form for student evaluation that has long been needed", and a simple statement of: "My voice can be heard now". Others also said: "It is rather important for me to collaborate with colleagues in all sorts of forums", or "I personally learn mainly from friends" and "I developed professionally and enjoyed the mutual exposure we had as colleagues". Some simply said: "I am not alone anymore" or "nobody needs to be alone anymore, you always have an opportunity to make meaningful friends".

Participants also referred to things that they felt were lacking. They expressed a wish for more discussions focused on the improvement of contents and materials, and they felt that lists of relevant publications were needed. They also suggested to start a regular newsletter for the enhancement of mutual communication.

Summing up the data at the end of the second year and its implications, and reflecting upon the data analysis, lead to the following suggestions that served to direct modifying the third year's program:

1. The vision aspect: Full day meetings should be planned, aimed at re-examining teacher education: discussing ideology and basic values leading to outline a policy for developing core curriculum, its planning and implementation.

2. The equilibrium aspect: To gain a better balance in respect to rationale and practice, and to foster collaboration in thinking and in practice, it was recommended to elect team leaders and set procedures for their day to day functioning and to refashion clusters of sectional and cross-sectional teams (Jones & Harvey 2017).

3. The professional development aspect: Developing individuals within a collaborative community: Establish procedures for the functioning of teams within the disciplines, in vertical and horizontal cooperation.

4. The governance and practice aspect:  Devising more opportunities for social meetings to encourage further collaboration and arrange professional meetings with outside experts.

Among the changes that were introduced in the third year, was a full day workshop, where the entire staff participated in discussions on basic values for teacher education and a portrayal of teacher education aspirations and ideology was drafted. Guidelines for a core curriculum plan were discussed in work groups of participants who shared the same content material. These activities were summed up in joint operational conclusions: (1) Teams of participants sharing close disciplines were formed. Participants who were experts in the field were appointed to lead these horizontal teams. (2) Courses of the same discipline were formed in vertical groups to design their long term curricula; (3) Teams that teach general, parallel, courses within the different disciplines – e.g., computer studies, educational psychology, pedagogy and didactics were formed to develop curricula, instruments and learning aids; (4) An itinerary was set for further meetings for the entire staff, aimed at joint learning and discussions relating to matters of common interest.

Step 5 and Step 6

Steps 5, which started at the beginning of the first semester of the third year and 6, which started at the beginning of the second semester of the third year, repeated the same procedures as stages 3 and 4.

**Evaluation of step 5 and step 6**

At the end of steps 5 and 6, which was at the end of the third year, and the end of the study, the data was analyzed.

Results of the teachers' questionnaire at the end of the third year are presented in Figure 4.
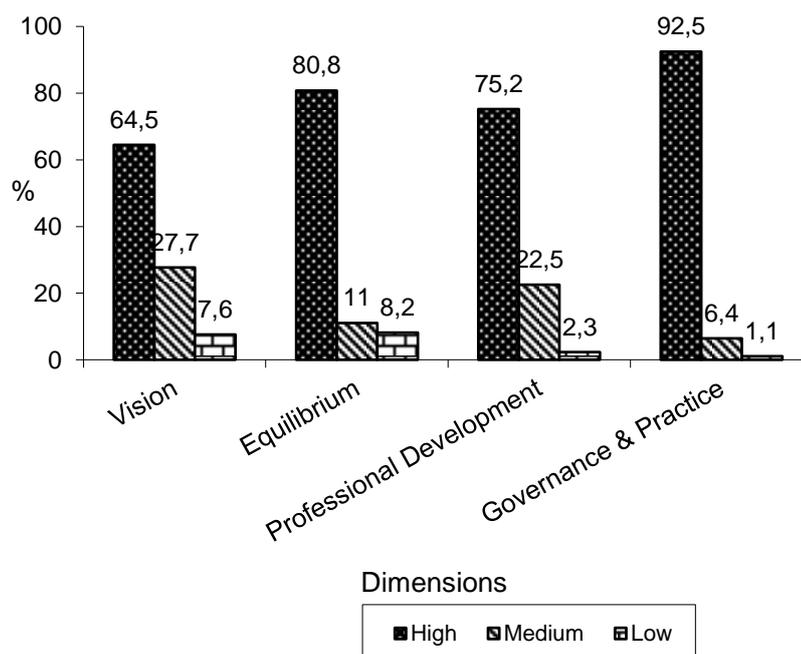
**Figure 4: Teacher trainers' evaluation of 3rd year's acts**

Figure 4 indicates that the staff was highly satisfied with most activities in all four dimensions, although nearly a third of the participants expressed slightly lower regard for the philosophical and the organization dimensions. Only a small minority expressed lower satisfaction with the program, and that was especially related to the first two dimensions, philosophy, and organization.

Additional information was gathered in the interviews and in the open part of the questionnaires. These are presented in Figure 5 and described in detail following the graphical presentation. Figure 5 shows the proportional number of statements in the teachers' interviews, as related to each dimension.
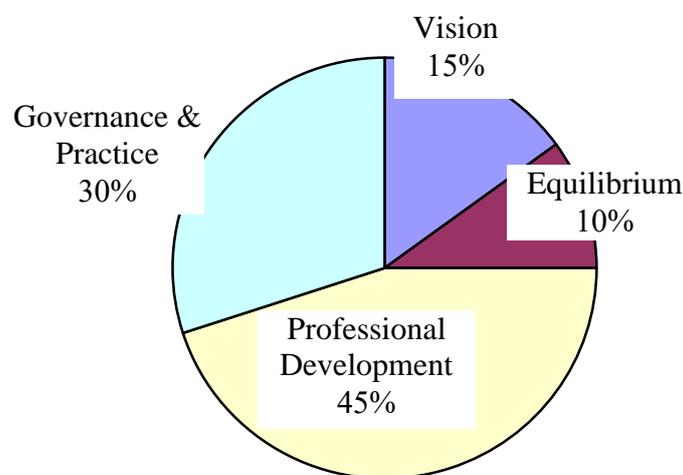


**Figure 5: Content analysis of teacher trainers' interviews at the end of third year**

Figure 5 indicates that the interviewees were concerned mostly with the third and fourth dimensions, namely the implementation of the organizational system of teacher education. In dimension 3 they referred to coordination, to vertical and horizontal sub-structures, to the fact that teams were formed, and mostly to the construction of contents and teaching methods (45%); and in dimension 4 they referred to meetings, to interchange of ideas and collaboration, rewards, ceremonies, and mostly (nearly 60%) to interpersonal relations and cooperative atmosphere. The following statements may demonstrate the nature of the responses.

**Statements at the end of the third year**

1. **The vision aspect: Establishment of an educational philosophy.**

As in previous steps, participants were encouraged to be alert to the process of the project and observe anything that needed correction or improvement. A typical example is an expression such as this: "We have worked upon values and philosophy, but not enough. It needs much more work". An

important part of the criticism referred to the gap between vision and practice. They expressed their wish for greater emphasis on education for values, for additional full day workshops, for work more specifically focused on defining aims and objectives, for involving more experts in learning and research, and for working more deeply with an ideological rather than a technological aspect of their work. This awareness of needs and definitions of objectives, coming from people who at the beginning of the project were in despair and now show eagerness, may be considered evidence of progress in developing professionalism, and is surely an additional beneficial outcome of the program.

**2. The equilibrium aspect: Balancing needs in respect to rationale and practice.**

Here participants referred to the efforts demanded from them, efforts that were considered as worthwhile, and fruitful: "I am grateful for the opportunity I had to develop and actualize my personal potential". "To preserve its achievements, it is important to see to it that this new organized system will carry on working and not diminish".

Participants were concerned with the difficulty of transferring one's learning to the students. Some members wished to get help in conducting qualitative research; some indicated the lack of systematic control on performance.

**3. The professional development aspect: Developing individuals within a collaborative community.**

Satisfaction was expressed as relating to team work and collaborating professionally in the areas of teaching, expertise and of interdisciplinary studies. The participants were pleased with the contribution of the program to thinking, restructuring views on teaching, and encouraging inter-personal working relations: "We are now more open to educational innovations", "my vocabulary of educational terminology is more accurate and relevant now", "things have changed in the system's approach, and people do not keep things to themselves. There is openness now and involvement". "I feel that I belong now, my affiliation to the institution has strengthened".

Aspirations were expressed for strengthening staff connections of intra and inter-domains; for the addition of more meetings aimed at methodological clarifications, and for the involvement of students with the working teams, in thinking and in data collection.

**4. The governance & practice aspect: Actual performance**.

Participants felt that collaborative staff work contributed to their teaching performance. The workshops and regular meetings helped them to follow and keep up with the current developments: "It was important for me to receive minutes of the meetings". "When compared to my other places of work, there is no latent competition. Here, nobody hides anything from each other".

Wishes were expressed for concentration of efforts to deal with a single subject every year, to get deeper into high school needs. Heads of discipline teams requested more help in inter-personal coordination, organization and accommodating for expectations.

It may be seen that most statements were, for a large extent, similar to the ones given in the previous steps.

The qualitative data analyzed at this stage indicates a marked progress in professional development, as compared to the second year's data: The data showed higher aspirations, better usage of professional terminology, awareness to a wide range of needs and suggestion for ways to cope with them, and wider horizons in viewing the possibilities for development. The participants strove to deepen their thoughts on teaching and base them more on sound philosophy. They expressed need and readiness to improve personally and showed a greater preference for collaborative work, which will include students as well.

**Discussion**

A program of restructuring the Department of Teachers Training, at Bar-Ilan School of Education was initiated as an attempt to deal with an unsatisfactory situation. It was felt that staff professional development (Beck & Kosnick, 2001; Price & Weatherby, 2018) will be a suitable way to deal with the problem. The program was devised and implemented and was examined in an action research paradigm. The purpose of the study was to evaluate the effectiveness of the program. The data showed that the program achieved its purpose to a large extent. The teachers' professionalism improved, and strong motivation for further improvement was instigated, a higher standard of teaching was attained, and satisfaction raised considerably both by teachers as well as students. In addition, the systematic monitoring and reflection on the program along its steps, offered a critical examination of the program, and provided useful guidelines for its improvement, particularly in establishing a philosophical vision, as recommended by Anagnostopoulos et al., (2018).

An imminent problem of the program was that it created ambivalence. On one hand academic freedom was valued highly and considered indispensable for the participants, and they were concerned that the restructuring might infringe upon it. Yet, at the same time, they repeated expressing their wish for ideological unity (Hayhoe, 2001). The design of the program as a collaborative effort, in which the participants were full and equal partners in planning and execution, reduced this concern considerably (Brody & Hadar, 2018; Gentle & Forman, 2014), but not entirely. It was demonstrated in the first dimension, the aspect of vision. The analysis of teachers' responses revealed that when they referred to their interactions with colleagues, they were searching more for technical and professional collaboration than for ideological consent. The third year opened with a full day workshop, dedicated mainly to this aspect, and was highly appreciated by all the participants. Nevertheless, it remained doubtful whether such a desired unity of philosophical vision is feasible at all in a university environment in which academic freedom is one of the most valued principles, more

so when the institution exists in an extremely heterogeneous society which is ideologically deeply divided.

As for the other dimensions, satisfaction was much higher, and showed professional development which increased as the program continued.

Some of these developments indicated the beginning of growth for lasting innovation effects. Gordon (1996) detailed four strategies that foster such an effect: (1) The constructing of new local social structures; (2) the evolving of new norms for the execution of certain acts; (3) the developing of new educational terminology and language; and (4) enlarging the range of change to wider circles beyond the initial framework. These strategies resemble Zeichner's (2002) five necessary specified conditions for professional development: (1) Culture of inquiry with respect to teachers' voices, expertise and critique; (2) investment in intellectual capital of teachers: Decision making, and data collection and analysis; (3) intellectual challenge on actual practice;  (4) substantial period of time given to the process, with support, and establishing rituals and routines in groups that build a community; (5) participating is voluntary. Observing the present program reveals that it adheres to these guidelines, and indeed their aims were attained to a large extent. It is also in agreement with Coburn's (2003) dimensions of lasting change scale: 1) Depth – teachers' beliefs, norms of social interactions, and underlying pedagogical principles; 2) Sustainability; 3) Spread; and 4) Shift in reform ownership.


Not just the staff which participated in the project continued to maintain their improved professionalism, new staff members as well, in new teaching areas were mentored by veterans as to the ongoing professional development.

Critical remarks and wishes for further improvement also represent improvement of professional development (Eliahoo, 2017; Tack et al., 2018). They reflect the growth of awareness and sharpening of sensitivity, and deeper involvement in the task of education. Needs were expressed for more focusing, and deeper methodological discussions, for systematic controls on implementation of decisions, for widening the scope of learning and for involving more experts in their learning.  All of these indicate an improvement in professionalism (Price & Weatherby, 2018).

It is considered generally that teacher training is aimed at preparing student-teachers for their future needs as classroom teachers, easing their way through the difficulties of the induction stage (Kelchtermans & Ballet, 2002). The criteria of such achievement are the acquisition of content knowledge, pedagogical knowledge, and content-pedagogical knowledge (Shulman, 1987), as well as adopting strategies that will enable them to reflect critically on their practices (Darling-Hammond & McLaughlin, 1995; Jay & Johnson, 2002). Accordingly, the participants' awareness of the difficulty in transferring their own learning to their students, which was enhanced by the program, indicated in addition to their personal professional development (Hall & Hord, 1987; Tack et al., 2018).

A careful analysis of the participants' open replies to the questionnaires and responses at the interviews, showed that they generally referred very little to students' needs. The awareness to students' needs emerged only toward the end of year three, when they expressed needs to improve personally and in collaborative work, and to also involve students in this development as recommended by Cobb et al., (2003). Thus, in this respect the effect of the program was rather limited. This is in accord with Hall & Hord's (1987) model of the course of change in teachers when implementing an innovation. Hall & Hord (1987) claim that during personal change, concerns about effects on students' needs develop only at the fifth, out of seven stages of the change process. Only after overcoming their concerns when facing the innovation, their dealing with their worries and personal challenges, and mastering the practical management of the innovation, they are free to cope with this aspect of improving the students' learning. Thus, the results of the present study in which the awareness to students' needs emerged only toward the end of year three, are in accord with Hall & Hord 's claim, and we may conclude that restructuring succeeded partially, improving certain aspects of professionalism of both teacher trainers and students. Anagnostopoulos et al., (2018) suggest that when a change is introduced in teachers' training program, working with the institute's staff is not sufficient, it is necessary to involve school teachers as well. Brody & Hadar (2018) and de Boer, Fahrenwald, & Spies, (2018) even widen the scope and the latter suggest involving interorganizational cooperation between schools, universities, education authorities, and extracurricular agencies in the professional developing of teacher education. A similar desire was expressed frequently by the participants of the present study.

**Conclusions**

This study examined the hypothesis that restructuring a teacher training system to become both hierarchical and cooperative, coherent in its vertical and horizontal sub-structures and management procedures, and organized for personal development through self-learning, evaluation, and adaptation procedures (Lane & Epps, 1992), will enhance the development of its members professionally (Eliahoo, 2017; Price & Weatherby, 2018). The renewed structure which was formed, followed Jones & Harvey (2017) claim that distributed, collective leadership is essential to enhance effective change in higher education. A change that will involve individual as well as collaborative performance.

The main outcomes of the study, which could also be helpful as guidelines for further studies, were twofold, general, and specific. As a specific outcome, it showed that the specific program which was implemented in this case, proved to be effective and attained its goals. As a general outcome, its findings showed that an organizational reconstruction of a teachers training institute can be an effective method for improving teachers' professionalism, and that a paradigm of action research may

be recommended as a preferable framework. The action research paradigm helped improve the program along its execution and provided valuable data for evaluation of its effectiveness.

The results also indicate that collaboration and sharing responsibility with all participants, including students, is essential. Caution not to threaten academic freedom, and awareness of the fact that it takes a very long time for a change to be accepted, are necessary. Furthermore, this project showed that an extensive and demanding program with a wide range of different instructors and subjects is favored. In addition, it showed that despite the infringement on academic freedom at a university is regarded most undesirable, nevertheless, at the teachers' education department, the staff welcome acts which create a climate of collaboration and networks of communication that ease their loneliness.

Restructuring, based on evaluation, proved again to be a necessary instrument for institutional and personal further development. Thus, we saw that improvement depends on the continuation of self-evaluation, a key feature of action research. From the organizational point of view, it seems that for the initial stages of restructuring a teachers'-training program, it is important to construct a sound organizational structure, based on comprehensive rationale and accompanied by actions in all the above-specified dimensions. To enhance sound governance and practice behavior for furthering development, the organizational emphasis should be gradually decreased and used only as a lever for developing and establishing a philosophical vision, equilibrium, and further professional development.

**References**

Anagnostopoulos, D., Levine, T., Roselle, R., & Lombardi, A. (2018). Learning to Redesign Teacher Education: A Conceptual Framework to Support Program Change. *Teaching Education*, *29* (1), 61-80.

Anfara,jr V.A. Brown K.M. & Mangione T.L. (2002). Qualitative Analysis on Stage: Making the Research Process More Public. *Educational Researher, 31* (7), 28-38.

Barrow, R., & Milburn, G. (1990, 2nd Edn.). *A Critical Dictionary of Educational Concepts*. NY: Teachers College Press, 249-250.

Beck, C. & Kosnik, C. (2001) From cohort to community in a preservice teacher education Program, *Teaching and Teacher Education, 17*, 925-948.

Biesta, G. J. J. & Miedema, S. (2002) Instruction of pedagogy? The need for a transformative conception of education, *Teaching and Teacher Education, 18*, 173-181.

Brody, D. L., & Hadar, L.L. (2018). Critical Moments in the Process of Educational Change: Understanding the Dynamics of Change among Teacher Educators. *International Journal of College and University, 41* (1), 50-65.

Darling-Hammond, L. (1998). Teacher learning that supports student learning. *Educational Leadership, 55* (5), 6-11.

Darling-Hammond, L. & McLaughlin, M. (1995) Policies that support professional development in an era of reform, *Phi Delta Kappan, 76* (8), 597-604.

Cobb, P., McClain, K., Lamberg de Silva, T., & Dean, C. (2003). Situating teachers' instructional practices in the institutional setting of the school and district. *Educational Researcher, 32* (6), 13-24.

Coburn, C.E. (2003). Rethinking scale: Moving beyond numbers to deep and lasting change. *Educational Researcher, 32* (6), 3-12.

Cohen, L., Manion, L. & Morrison K. (2002) *Research methods in education*. (5th Edition). London: Routledge Falmer.

Eliahoo, R. (2017). Teacher Educators: Proposing New Professional Development Models within an English Further Education Context. *Professional Development in Education, 43* (2), 179-193.

Gee, J. P. (1999) *An introduction to discourse analysis: Theory and method*. London: Routledge.

Gentle, P., & Forman, D. (2014). *Engaging Leaders: The Challenge of Inspiring Collective Commitment in Universities*. London: Routledge.

Goelman, D. (1995) *Emotional intelligence*. NY: Bantam Books.

Gordon, D. (1996) *Lasting effects of change in educational systems*. Jerusalem: Official paper of the Ministry of Education, The 30 Settlements Project. (Hebrew).

Gordon, P., Perkin, H., Sockett, H. & Hoyle, E. (1985, 2nd Edn.). *Is Teaching a Profession?* London: Bedford Way Papers, University of London Institute of Education.

Hall, G. E. & Hord, S. M. (1987) *Change in schools: Facilitating the process*. Albany, NY: State University of New York Press.

Hayhoe, R. (2001) Creating a vision for teacher education between east and west: The case of the Hong Kong Institute of Education, *COMPARE A Journal of Comparative Education, 31*(3), 329-345.

de Boer, H., Fahrenwald, C., & Spies, A. (2018). Professionalization in Teacher Education as an Interorganizational Learning Challenge. *Frontiers in Education, 3*, 1.

Hibert, J., Gallimore, R., & Stigler, J.W. (2002). A knowledge base for the teaching profession: What would it look like and how can we get one? *Educational Researcher, 31* (3), 3-15.

Holly, M.L. & McLoughlin, C. (1989) (Eds**.),** Perspectives on Teacher Professional Development**.** London: The Falmer Press.

Holsti, O. R. (1969) *Content analysis for the social sciences and humanities*. Reading Massachuesetts: Addison-Wesley.

Hopkins, D. (1987) School based review and staff development. In M. F. Wideen & I. Andrews (Eds.), *Staff development for school improvement: A focus on the teacher* (pp. 154-169). New York: The Falmer Press.

Huberman, M. (1988) Teacher careers and school improvement, *Journal of Curriculum Studies, 20*(2), 129-169.

Huberman, M. (1992) Teacher development and instructional mastery, in A. Hargreaves & M. G. Fullan (Eds.) *Understanding teacher development* (pp.122-142). NY: Teachers College Press.

Hudson-Ross, S. (2001). Intertwining opportunities: participants' perceptions of professional growth within a multiple – site teacher education network at secondary level. *Teaching and Teacher Education, 17,* 433-454.

Jay, J. K. & Johnson, K. L. (2002) capturing complexity: A typology of reflective practice for teacher education, *Teaching and Teacher Education, 18*, 73-85.

Jones, S. and Harvey, M. (2017). A distributed leadership change process model for higher education. *Journal of Higher Education Policy and Management, 39* (2), 126–139.

Kelchtermans, G. & Ballet, K. (2002) The micropolitics of teacher induction: A narrative – biographical study on teacher socialization, *Teaching and Teacher Education, 18,* 105-120.

Kula, A. & Glaubman, R. (1994) *How to be a successful principal.* Even Yehuda: Teches Publishing House, Educational Projects, Ltd. (Hebrew).

Kvale, S. (1996) *Interviews: An introduction to qualitative research interviewing.* Thousand Oaks: Sage Publications.

Lane, J. J. & Epps, E. G. (1992) Introduction and overview. In J. J. Lane & E. G. Epps (Eds.), *Restructuring the schools: Problems and prospects* (pp. ix-xvi). Berkeley, CA: McCutchan Pub. Cor.

Malen, B. & Ogawa, R. (1992) Site-based management: Disconcerting policy issues, critical policy choices (pp. 185-206), in J. J. Lane & E. G. Epps (Eds.), *Restructuring the schools: Problems and prospects* (pp. ix-xvi). Berkeley, CA: McCutchan Pub. Cor.

Manen, M. V. (1995) On the epistemology of practice, *Teachers and Teaching: Theory and Practice , 1(1)*, 33-50.

Marczely, B. (1996). *Personalizing professional growth: staff development that works.* CA. Corwin Press.

Marzano, R.J. (2003**)**. *What works in schools: Translating research into action.* Alexandria, VA: Association for Supervision and Curriculum Development.

Newmann, F. M., King, M. B. & Youngs, P. (2000) Professional development that addresses school capacity: Lessons from urban elementary schools, *American Journal of Education, 108(4)*, 259-299.

Oja, S.N., & Smulyan, N. (1989). *Collaborative action research: A developmental approach.* London: The Falmer Press.

Price, H.E. & Weatherby, K. (2018). The global teaching profession: how treating teachers as knowledge workers improves the esteem of the teaching profession. *School Effectiveness & School Improvement, 29* (1), 113-149.

Sagor, R. (1997). Collaborative action research for educational change. In A. Hargreaves (Ed.), *Rethinking educational change with heart and mind* (pp. 169-191). Alexandria, VA: ASCD Yearbook.

Rachimi, Z. (1995) The change process of teacher training system in Israeli teacher training colleges, *Dapim, 21*, 50-67. (Hebrew).

Rowan, B. (1994). Comparing teachers' work with work in other occupations: Notes on the professional status of teaching. *Educational Researcher, 23* (6), 4-17, 21.

Renyi, J. (1998). Building learning into the teaching job. *Educational Leadership, 55 (5),* 70-74.

Schon, D. A. (1988) Coaching reflective teaching, in P. P. Grimmett & G. L. Erickson (Eds.), *Reflection in Teacher Education,* NY & London: Teachers College.

Shulman, L. S. (1987) Knowledge and teaching: Foundation of the new reform, *Harvard Educational Review, 57*, 1-22.

Sparks, D. & Hirsh, S. (1997) *A new vision for staff development,* Alexandria, VA: ASCD. Oxford, Ohio: NSDC.

Tack, H., Valcke, M., et al., (2018). Uncovering a Hidden Professional Agenda for Teacher Educators: A Mixed Method Study on Flemish Teacher Educators and Their Professional Development. *European Journal of Teacher Education, 41* (1), 86-104.

Tapilouw, M. C., Firman, H., Redjeki, S., & Chandra, D. T.  (2017). The Importance of Training Needs' Questionnaire in order to Arrange Science Teacher Training Program. *Journal Pendidikan IPA Indonesia, 6,* 1. doi: https://doi.org/10.15294/jpii.v6i1.9599

Weber, R. P. (1990) *Basic content analysis*. (2nd Edition) Series. Newbury Park: Sage Publications.

Westerman, D. (1991) A study of expert and novice teacher decision making: An integrated approach, *Journal of Teacher Education, 42 (4)*, 292-305.

Wolcott, H. F. (1995) *The art of fieldwork,* Walnut Creek, CA: Altamira Press.

Zeichner, K. (2002). Educational action research. In P. Reason & H. Bradbury (Eds.), *Handbook of action research: Participative inquiry and practice* (pp. 273-283). London: Sage Pub.

Zeichner, K. M. & Liston, D. P. (1996) *Reflective teaching: An introduction*, NJ: Lawrence Erlbaum.

Zuber-Skerritt, O. (Ed.) (1996). *New directions in action research,* London: The Falmer Press.