From traditional to clinical approach toward continuing professional development: Academia-field partnership in teacher education

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Abstract

The current study sought to characterize three partnership models in Israeli academic institutions—the traditional, the academia-classroom, and the clinical field-focused models. 42 interviews were conducted with educators (teacher educators; mentor teachers; program heads) at 14 Israeli colleges and universities where the programs take place. Differences between the models were found in relation to the role definition of the mentor teacher, the relationship between the pre-service teacher and the mentor teacher, the contribution of the practicum to the pre-service teacher, and the connection between theoretical and practical knowledge. Furthermore, the contribution of each of the three models is reflected in the scope of the experiential-clinical component of the practicum; school-academia partnerships; and the role of the principal of the training school. The study highlights the value-added meanings and contributions of the experiential-clinical component in teacher education programs in general and in the practicum in particular.
INTRODUCTION

In recent years, academia-field partnerships have strengthened in various fields, including teacher education (Straub & Ehmke, 2021; White et al., 2022). Studies show that how pre-service teachers (student teachers) learn in the field is critical to their future success (Goldrick et al., 2012; Inbar-Lourie & Haim, 2023). There are different models of partnership between the colleges and universities that train teachers in the field (i.e., schools and kindergartens) (Ingersoll et al., 2014; Leventhal et al., 2020; Zhang et al., 2023). Where and how pre-service teachers perform their practicum significantly impact their success (Carver & Feiman-Nemser, 2009). The study shows that good mentoring programs affect several factors, including the new teachers' commitment to the system, integration into school, student achievements and ultimately, teacher retention (Ingersoll et al., 2014). Studies show that trainees who benefit from an effective academia-field partnership are positively influenced as future teachers (Ingersoll & Strong, 2011).

In Israel, the Ministry of Education (MOE) has been encouraging academia-field relationships in teacher training. Thus, for example, its policy document for the start of the 2019–2020 academic year states: “We believe that only through close partnership between the various entities involved in training students for education and teaching, and in the absorption of graduates into the education system, will we be able to create a synergy that will advance both the system and all teaching staff” (MOE, 2019). Since the level of academia-field partnership is crucial for the success of teacher training, it is important to examine the various models in use and elicit the characteristics that affect the provision of effective training to future teachers.

The goal of the present study is to characterize the three partnership models—traditional, academia-classroom, and the clinical field-focused, and define how do the different partnership models strengthen the practicum and the ongoing professional development by examining the perceptions of educators in academia and in the field.

Against the background of the education crisis expressed in the shortage of teachers, the contribution of the current study is the importance given to the practicum as the central component of integrating teachers into the field in a manner that will enable optimal placement in the education system and chances of success in future teaching work. The research enables an in-depth examination of the various models of practicum, with an emphasis on the importance of the connection created between academia and the field, for the benefit of both systems.

LITERATURE REVIEW

2.1 The practicum as connecting the theory and the practice

Many countries are undergoing change and improvement in their teacher training curricula, on the understanding of the impact teacher training has on the quality of teaching and on student learning outcomes (Flores, 2016). Important issues address the connection between theory and practice; collaborations between institutions of higher education and the schools in which the practicum is performed; the amount of time that should be devoted to the practicum compared to academic and pedagogical studies in an institution of higher education (Adu-Yeboah & Kwaah, 2018; Jackson & Burch, 2016).

Yeigh and Lynch (2017) addressed the necessary reforms in teacher education, where it is important that the programs include close collaboration between schools and universities; the possibility of narrowing the gap.
between theoretical and practical knowledge; addressing trainee teachers' beliefs and attitudes about teaching prior to their practicum experience; and using mentor teachers in the practicum who help the trainees link theory and practice. The importance of programs that support the partnership academia-field is supported by other studies (Sanders et al., 2020).

Additional studies present a wide range of creative solutions for the practicum during the pandemic, which have also expanded the tools and processes that can be applied and integrated into teacher training, such as online practicum (Page & Jones, 2018), and the flipped classroom model, (Gomez-Carrasco et al., 2020; Ozudogru, 2020). In all these processes, emphasis is placed on very active learning of the teacher trainees; encouragement of reflective thinking, critical thinking and analytical skills; and the importance of a peer group. Thus, practicum can be applied in a variety of formats while maintaining key principles of learner activity and the importance of the training site.

2.2 | Distinguishing between different practicum models

Theoretical and research literature indicates several distinctions between teacher training models. As stated, we will focus on the distinction relating to the degree of academia-field partnership (Ridley et al., 2005), that is, between all those involved in the practicum: the head of programs and the teacher educators (or pedagogical instructors) from the universities and colleges of education and colleges of education and the mentor teachers from the schools where the trainee teachers practice.

According to a recent literature review (Leventhal et al., 2020), there are three main models of practicum in teacher training in Israel: (1) A traditional model, in which trainees spend one day a week (six hours) teaching in school, with a pedagogical instructor observing their functioning in class several times throughout the year and giving them feedback. Mostly, this involves imitation of the mentor teacher with a few opportunities to actively teach the class. Moreover, there is no close connection between what is taught in academia and the school practicum; (2) The Professional Development School Model (PDS), in which there is close cooperation between the institution of higher education and the school. Here, trainees have opportunities to actively experience teaching in selected schools parallel to their studies; (3) The academia-classroom model, which was developed in 2015–2016, based on the PDS. Third-year trainees work with experienced mentor teachers, teach together with them actively and thus acquire the experience they need as they undergo an intensive practicum three days a week (Blai Hourani & Litz, 2019; Nissim & Neifeald, 2018). This model offers the trainees greater exposure to the school and its various educators.

The academia-field partnership is also strengthened through co-teaching in the mentor teacher's classes, other classes and school activities (Assadi & Murad, 2017). Central to these models is the strengthening of the significance of mentoring. The close accompaniment of a more experienced teacher enables the transmission of messages, practices, perceptions, ideas and values from generation to generation (Schatz-Oppenheimer, 2021). Thus, the importance of support and training for mentor teachers also increases. The connection created between mentor teachers and the trainees constitutes a bridge and partnership between academia and the field.

2.3 | Development of a clinical field-focused practicum

The academia-field partnership that has developed in recent decades in education strengthens the role of the schools in teacher training, with an emphasis on positioning them as an action research site—a fertile and meaningful space for practical experiences, where the clinical emphasis plays a key role comparing to traditional model (Zhang et al., 2023). The use of the term ‘clinical training’ has intensified in recent years in education, with parallels to medical and nursing training, where comprehensive practical training is carried out in hospitals—the "field"
(Becher & Lefstein, 2020; McLean Davies et al., 2015). This growing clinical significance is evident in education in the new guideline for training new teachers (Vadmani-Inbar Committee, 2020), where emphasis is placed on cohesive training programs that integrate the core components of studying a discipline, education, teaching, and clinical training.

The expansion of clinical training is expressed in increased practicum hours, spreading the practicum over several years from the start of the degree studies, and granting an academic fellowship quality standard to teacher training institutions where clinical training is carried out, similar to university hospitals. The proposed guideline is based on theoretical principles that encourage research-informed clinical practice, with high-level reciprocity between theoretical and applied practical knowledge (Burn & Mutton, 2015) through research involving creativity, analysis, synthesis, curiosity and judgement. Additional studies highlight the importance of connecting the types of knowledge as part of the close academia-field cooperation (Darling-Hammond, 2023), while addressing the challenges that exist in this regard (Beshir et al., 2023), and the need for high involvement of trainees in research carried out in the field that integrates theoretical knowledge from academia.

Following the theoretical notion of the clinical aspects in the teaching profession (Becher & Lefstein, 2020), the current study seeks to fill the lacuna in empirical knowledge regarding practicum structure and processes. Thus, based on comprehensive and diverse views of educators in both academia (multiple colleges and universities) and the field (schools), both advantages and disadvantages of different models of practicum will be explored and presented.

The purpose of the current study is to characterize the three existing academia-field partnership models. Thus, the research questions are:

1. What are the characteristics of the different partnership models in teacher training from the perspective of the educators involved?
2. How do the different partnership models strengthen the practicum and ongoing professional development from the perspective of the educators involved?

3 | METHODOLOGY

3.1 | Research method

The current study is qualitative in nature (Flick, 2018), addressing the experiences and characteristics of the various types of practicum through the perspective of the educators holding diverse positions: The head programs and the pedagogical instructors in the universities and colleges, and the mentor teachers in the school as the field.

3.2 | Field and sample

The research site was defined as 14 (out of 27) teacher training institutions in Israel—four universities and 10 colleges of education and teaching—which serve both the secular and religious Hebrew-speaking sector and the Arabic-speaking sector, and cover both the centre and the periphery of the country. For each academic institution, three key educators were interviewed: teacher educators and program heads who represent the academia, and mentor teachers who represent school as the field. A total of 42 educators were interviewed, 14 of them in each position (for the full demographic and professional characteristics see Table 1). The study was conducted during 2021. The research was approved by the Institutional Review Board (IRB) of the department of Education of the college of one of the authors. All participants were informed of the risks and benefits of participation in the study and signed the informed consent form.
3.3 | Research tools

The study was based on semi-structured interviews. An interview guideline tailored to the characteristics of each group of interviewees was formulated (Lareau, 2021). Despite the differences between the guidelines, similarities were maintained regarding the main topics in a generic outline covering guiding principles in training, characteristics of the practices employed, relations between the various educators, ideal training models, etc. For example: “What practices characterize the work of pedagogical instructors and mentor teachers responsible for teacher training at your college/university?”; “As you see it, what are the goals of teacher training?”

All interviews were recorded and transcribed. Each transcription was assigned a number, where the first part represents the academic institution (2, 5, 9, 11 for universities and the rest for the colleges). The second number represents the interviewees’ position: (1) Head of the program in the institution; (2) Teacher educators (academic pedagogical instructor); (3) The school mentor teacher. For example, in coding 2.1–2 represents a specific university, and 1 represents the Head of the program.

3.4 | Data analysis

Thematic data analysis was carried out gradually as data collection progressed (Guest et al., 2012). The emphasis in the analysis was on identifying common issues that arose from the interviews of the various educators and organizing them as categories, while comparing the categories. Recurring topics using similar terms (segments) were defined as themes and were based on different statements in which the same unit of meaning is referenced (Corbin & Strauss, 2015). This process revealed characteristics of different training models.

4 | FINDINGS

The findings are presented via the two research questions. Based on the literature review and the initial thematic analysis, three distinct models of partnership could be discerned: (1) a model that can be characterized as “traditional”; (2) a model that can be characterized as “academia-classroom”, and (3) a model we called “clinical field-focused”. In each model, the following four characteristics emerged: (1) role definition of the mentor teacher, (2) relations between trainee and mentor teacher, (3) contribution of the practicum to the trainee, and (4) connections of theoretical and applied knowledge during the practicum (for the full set of categories, themes and segments, see Table 2).

Thus, in the context of the first research question, below we present each of the three partnership models as they relate to the above four characteristics.
4.1 Partnership 1: Traditional model

Role definition of the mentor teacher—to accompany the trainees in a way that allows them to observe the teacher and then deliver a number of lessons, at the end of which they receive feedback. For example, one interviewee said:

I ask everyone to send me a lesson plan. I go through [it], send comments and the lesson is delivered accordingly. I’m present in class, so I’m there and if I need to comment, I do say whatever is necessary in between.

(Interviewee 4.3)

Relationship between trainee and mentor teacher—the trainee is perceived as someone who mainly observes the mentor teacher, teaches only a few lessons during the year, and does not participate in significant teaching processes. One interviewee described it thus:

The practice is usually that the students observe them and then they learn from what they do. And then, in terms of planning, they plan together which lesson to teach, and then usually the student builds a lesson plan and then the teacher observes it.

(Interviewee 3.2)

One can see limited accompaniment that includes focused attention on the actions that the trainee is required to perform, which are mainly aimed at teaching the class accompanied by observation and feedback.

Contribution of the practicum to the trainee—according to this practicum format does not necessarily help the trainee optimally experience the field. Here’s how one interviewee describes it:

Here it depends on the mentor teacher who trains, because I’ve heard from other students of mine that not all mentor teachers let them into the classroom and do what needs to be done and sit down and build a lesson, and they often tell them, Well, leave it to us, just sit on the side and observe us.

(Interviewee 1.3)
Due to the limited nature of the mentoring, it can be seen that the ‘field’ to which the student is exposed is very dependent on the mentor teacher, which can lead to the trainee being exposed only to very specific aspects of a teacher’s job.

Connection of theoretical and applied knowledge during the practicum—the traditional practicum format does not facilitate the application of theoretical learning in lessons, because in most cases the trainees observe the mentor teachers and on the few occasions they teach, they merely imitate their mentor teacher. For example, interviewee said:

Students learn a lot of things in college, but they don’t learn what is practical in the field ... First of all the material, the content. They learn a lot of things that are at university level and that’s fine, but there’s a gap.

(Interviewee 1.3)

This quote illustrates a key limitation in the traditional model, which is the separation between theoretical and practical knowledge. While the purpose of the practicum is to connect these types of knowledge, in this model they remain separate and there are no regulated mechanisms for creating the necessary connections.

4.2 Partnership 2: Academia-classroom model

Role definition of the mentor teacher—to fully collaborate with the trainee. One interviewee referred to other aspects of teaching that the trainee experiences beyond delivering lessons, as he describes it:

We made sure that our students would be with homeroom teachers to learn from them how a homeroom teacher functions. They also need to know how to be an educator, how to conduct an hour of homeroom education.

(Interviewee 14.2)

This quote can be seen as an extension of the role of the mentor teacher, which includes reference to a variety of roles required of a teacher, with an emphasis on providing a model for the trainee through more in-depth mentoring. In other words, the role of the mentor teacher is not reduced to specific actions but expands to the role of accompaniment in the profound meaning of the essence of teaching and education.

Relationship between trainee and mentor teacher—the trainee is closely connected with the mentor teacher, with whom they co-teach. One interviewee described the advantage of this teamwork as follows:

The students help because they share a full partnership in class life with us. There is also a strong point of [having] two teachers in the classroom. One of this year’s students was involved in almost everything I was responsible for.

(Interviewee 3.3)

The relationship formed and the expansion of the roles of the mentor teacher and the trainee can be seen as the essence of mentoring in creating and transmitting the school’s norms and culture.

Contribution of the practicum to the trainee—trainees can take an active part in teaching and experience studying not only lessons but also all aspects of teaching, such as parent meetings and participation in school activities. Here’s how one interviewee put it:
First of all we try and that’s why we also love the academy-classroom, that they do the maximum of the things related to the school ..., they teach a lot. Sometimes they start switching and there are many that are put into the teaching timetable while they are in the school.

(Interviewee 5.1)

The interviewees’ statements show that the longer the trainees spend at the school, alongside the deeper relationship created with the mentor teacher, the greater the contribution of the practicum, as expressed in the internalization of ‘what it means to be a teacher’ for all aspects of school life.

Connection of theoretical and applied knowledge during the practicum—a connection was found between the theoretical material and its application in the field. Here’s how one interviewee describes it:

The student has two perspectives—there is the lecturer’s perspective on teaching methods and there is the perspective of the instructor and then he can, with his judgment and with the discussion that takes place, build better units of study and lesson plans. And then the teaching methods course also addresses their needs in the practicum.

(Interviewee 3.2)

In contrast to the traditional model, this model can be seen as the attempt to significantly link the types of knowledge. However, it is important to emphasize that it is still a connection made mainly by the mentor teacher and pedagogical instructor who create these links for the trainee.

4.3 | Partnership 3: Clinical field-focused model

Role definition of the mentor teacher—the mentor teachers accompany the trainees through their teaching process, allow them to experience the field and turn the theory they have learned into practice. For example, one interviewee said the following:

We want our staff to meet these students in the field. Problem Based Learning together with the school staff, in an attempt to convey the importance of empirical examination, of the research part, of the teacher and as a student as someone researching their own work, conducting action research and testing them using scientific methods based on knowledge accumulated in the academic world.

(Interviewee 11.1)

This statement indicates a change in the role definition of the mentor teachers in the sense that they work together with the academic staff, creating a shared knowledge infrastructure that also includes research on topics related to teaching and education in general, and not necessarily to the content that should be taught in the classroom. The emphasis on the fact that the mentor teacher is also oriented to the trainees’ exploration of themselves in the teaching they must perform strengthens the connection between them and later leads to the link between the required types of knowledge.

Relationship between trainee and mentor teacher—the trainees’ approach to teaching is as a clinical intern. In other words, their practical training and theoretical studies are both carried out within the school. As one interviewee put it:

First of all, we want to strengthen the connection between the mentor teacher and the student. We also expect students to be much more proactive and mentor teachers to take a more significant role in their training. We try to teach the students on-the-job.

(Interviewee 11.1)
The process described in this statement highlights a systemic approach that links academia to the field, linking the types of knowledge acquired in both institutions. In addition, the connections are described as incorporating research practices.

**Contribution of the practicum to the trainee**—the contribution is expressed in the fact that the students are exposed to a variety of position holders in academia and in the field; they also learn to perform teaching tasks and to examine themselves and their performance of these tasks through self-research and action research. The product of this process creates an extension of the training as described by the following interviewee:

First of all, of course, to produce teachers who are more accurate and better and more flexible and suitable for today’s world and for the world that may exist perhaps ten years from now.

(Interviewee 4.1)

**Connection of theoretical and applied knowledge during the practicum**—this connection is expressed in the theory applied in the school itself and carried out in practice. For example:

I don't just show her how to teach. We explore together the process we are performing. We check whether with the process we thought of the content was internalized better. Could we have taught it otherwise? It is accompanied by an exploration of what we do, and the students are also exposed to it.

(Interviewee 11.3)

Table 3 presents the summary of the three partnership models found, with descriptions of the characteristics in each of the partnership models.

In addition to the four criteria characterizing the three models, the second research question focused on how the different partnership models strengthen the practicum and continuous professional development from the perspective of the educators involved.

Three main themes emerged from the interviews indicating the contribution of each of the three models: (1) the scope of the experiential-clinical component of the practicum, and (2) the connections between the field and the training institution. (3) the role of the principal of the training school.

### 4.4 | Theme 1: Scope of the experiential-clinical component of the practicum

This theme relates to the duration, scope and frequency of trainees' actual teaching experience during their pre-service training. The duration ranges from once a week in the traditional model to three times a week in the clinical field-focused model. The latter duration was presented as a point of strength, as one interviewee described it: I see in it the very, very good parts where the guideline aims at a lot of hours of experience and is oriented toward breaking regularities. (Interviewee 11.4).

In contrast, in the traditional model, the limited practicum time is perceived as a weakness, according to one interviewee:

The matter of hours is critical. I think that if it were possible, the name of the program doesn't really matter at the moment, but if it were possible to increase the number of student hours within a school, that's the main story.

(Interviewee 4.1)
TABLE 3  The three models of academy-field partnership; characteristics of each model.

<table>
<thead>
<tr>
<th>Model characteristic</th>
<th>Traditional</th>
<th>Academia-classroom</th>
<th>Clinical field-focused</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Role definition of the mentor teacher</td>
<td>Allowing trainees to observe the teacher. The student gives a number of lessons and receives feedback from the mentor teacher</td>
<td>There is almost full cooperation between trainees and mentor teachers. They share delivery of lessons and aspects beyond teaching, such as parent meetings and more</td>
<td>Full accompaniment of trainees in the teaching process, giving them opportunities to gain experience in the field and put theory into practice</td>
</tr>
<tr>
<td>2 Relationship between trainee and mentor teacher</td>
<td>Trainees, as observers of the mentor teacher, are not involved in significant teaching processes</td>
<td>Trainees team up with their mentor teacher and co-teach</td>
<td>Trainees are perceived as clinical interns. There is full reciprocity with the mentor teacher, including possibilities for joint research and mutual learning</td>
</tr>
<tr>
<td>3 Contribution of the practicum to the trainee</td>
<td>The practicum is relatively limited and does not help trainees to experience the field comprehensively</td>
<td>The practicum enables trainees to take an active part both in teaching and in other aspects related to school activities</td>
<td>Trainees are part of the school staff and as a result are also exposed to the activities of the administration, the teachers and the students, including teaching-learning. Exposure lasts much longer and involves a greater variety of topics such as participation in parent meetings</td>
</tr>
<tr>
<td>4 Connection of theoretical and applied knowledge during the practicum</td>
<td>It is almost impossible to implement theoretical learning in lessons. The practical part of the training is less reflected</td>
<td>Trainees apply the theoretical material in the field during the practicum</td>
<td>The connection between knowledge types is emphasized in research conducted by the new teachers themselves, under the guidance of either academic staff or in collaboration with veteran teachers. The research emphasis leads to deepening knowledge, turning trainees into teachers who research their work</td>
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Similarly, in the academia-classroom model, the interviewees see the hours devoted to practical training as a great advantage, although they can also be supplemented by hours that could contribute to the trainees, as one interviewee noted:

The school experience is great, but sometimes it needs to be more massive. Not that [the trainee] will do a lesson here and here once a week another lesson and two weeks later another lesson. Here, now prepare a set of six lessons and go into it for a whole day from tenth grade to eleventh grade, to twelfth grade, as they say it's practical. It's not easy, so they have to feel that this is not simple.

(Interviewee 9.3)

4.5 | Theme 2: Connections between the field and the training institution

This theme relates to the connections and people who mediate between the school and the academic institution. It was found that the closer the connection between school and academia, the more trainees mainly benefit from the connection between theory and practice.

In the academia-classroom model, this theme yielded a certain complexity, with the connections sometimes perceived as weakness and sometimes as strength, due to the ambiguity regarding the roles of each institution and the partnership between them. Below, an interviewee talks about the weakness in the academia-classroom model and notes that the connection between the field and the training institution is not optimal:

On the one hand, they talk to academia, but at the end of the day, there are two systems here. There is the school system with its own considerations and there is the student system, and sometimes there are 'mishaps' or difficulties within these relationships.

(Interviewee 1.1)

In the clinical field-focused model, however, it appears that the connections between the field and the training institution are also strong, but unlike the traditional model, in which the advantage of the connection stems from the clear boundaries between them, in this model, the advantage of the connections lies precisely in the strong partnership between them. For example:

We want new teachers in the field to engage in research. Self-research of their work, or research they do together with a faculty member from academia—research emphasizing their actions and products; not just a seminar paper to tick off as mandatory submission.

(Interviewee 10.1)

4.6 | Theme 3: The role of the principal of the training school

This theme refers to the dominance or passivity of the principal in everything related to the training process in the school. In the traditional model, principals are found to be involved, although this is mainly expressed in a conversation at the beginning of the year and in watching a test class at the end of the year. The rest of the time their involvement is passive. An interviewee reported this as follows:
I made sure every year that at the very beginning of the year the trainee teacher would meet the middle school principal. To have some kind of opening conversation and according to procedure to have another external figure at the school, you have to get approval for this. The principal wanted to see the people who were actually going to be in the staff room and in the classrooms, so this conversation is very important.

(Interviewee 12.3)

The involvement of the principal is also found to be more significant in light of the time the trainee teachers spend in the school and their involvement in various processes within the school.

Also in the clinical field-focused model, the role of the principal in teacher training can be seen as significant when the principal takes an important part in the training process. However, this can be seen as a step towards further expansion of the role of the principal and the entire school. One interviewee described it thus:

The vision is that principals will be defined as directors of a research institution. In other words, a site at which there is the creation of new knowledge, not just the imparting of knowledge. Let the mentors and students collaborate with faculty members and do research here. Academia should not be an ivory tower. We need data and a research site. But we don’t want to just take without partnership. You want a principal to be a part of it.

(Interviewee 4.1)

The statements analysed in relation to the various questions show great diversity in terms of the roles and the manner in which training is perceived in different institutions. The clinical model is addressed primarily at the level of future aspirations or intentions. The most significant change in the clinical model compared to the academia-classroom model is the broad involvement and preparation at the school as a training institution, the length of time the trainees are in school, the creation of bodies of knowledge within the schools as well through research in cooperation with academia, and the deepening of the partnership between the institutions.

5 | DISCUSSION

The present study compares three different models in teaching training, taking into account their characteristics, advantages, and disadvantages, based on the perspectives of different educators in academia and in the field. The findings emerging from the analysis of the interviews are discussed below according to the two research questions.

The first research question yielded four characteristics: (a) the role definition of the mentor teacher; (b) the relations between trainee and mentor teacher; (c) the contribution of the practicum to the trainee; and (d) the connection of theoretical and applied knowledge. These characteristics reveal differentiation between the three practicum models. The traditional model lies at one end of the spectrum, where trainee preparation for teaching is based primarily on observation. The clinical field-focused model, located at the other end of the spectrum, enables in-depth understanding of school processes and meaningful experiences based on extensive time spent in school, and connecting theoretical and applied knowledge through research. The academia-classroom model, which lies mid-way along the spectrum, leads to an improved practicum and enables a more equal division of labour between trainee and mentor teacher.

By comparison, the traditional model can be seen as a more hierarchical system (Lehavi, 2009), in which the roles of trainees and mentor teachers are clearer and more structured, while in the clinical field-focused model, the relationship is far more egalitarian, where trainees are active in such a way that they become a colleague and partner in the teaching process (Lee, 2018; Vadmani-Inbar Committee, 2020). This model is based on the notion that such activity
and partnership will enable trainees to fully experience the meaning of teaching and understand the essence of the profession and school life in the early stages of their training. As a result, knowledge becomes an integral part of training and its application is structured and embedded on an ongoing and dynamic basis (Ronen, 2022).

The academia-classroom model, lying between the traditional and clinical field-focused models, may be seen as a transitional stage. According to the findings of the current study, the academia-classroom model institutionalizes collaborative and egalitarian processes between the trainee and the mentor teacher (Nissim & Neifeald, 2018), with relatively intensive trainee exposure to teaching. In addition, the institutionalization of the role of the mentor teacher as a mentor demonstrates the field's key role in training, where it is not merely limited accommodation for evaluation purposes, but rather substantively includes the assimilation of educational and teaching processes, including research practices that strengthen the connection between theoretical and applied knowledge (Orland-Barak & Wang, 2021; Schatz-Oppenheimer, 2021). In addition, mentoring also includes significant support from the school, such as providing trainees with tools and skills in coping with parents.

Nevertheless, the academia-classroom model does not constitute the complete transition to the field, and the four characteristics of the models found in the present study are not fully utilized in this model. However, as the interviewees presented in the study, the classroom-academia model is indicative of the potential in strengthening the presence of trainee teachers in the field, and the meaning of their presence in making knowledge part of the training and strengthening their active role in the process (Ronen, 2022). Thus, at present, as mentioned, the academia-classroom model is taking another practical turn that has not yet been studied.

Regarding the second research question, we found that the contribution of the clinical field-focused model is significant for the ongoing professional development and academic and field relations from the perspective of the educators involved. As for the differences between the models, it was found that the strength of the three models is relative to the component of the practicum. Thus, it was found that the clinical field-focused model is stronger than the other two models in its experiential-clinical scope of the practicum component. Thus, the emphasis of ongoing action research occupies a significant part of the training, and a high level of reciprocity is created between theoretical and practical applied knowledge, clinically embedded teacher preparation experiences (Burn & Mutton, 2015; Wolkenhauer & Hooser, 2020). Furthermore, In practicum processes, where pre-services teachers participate in planning practices, they were more active in taking up responsibilities for planning lessons earlier in the school year and for longer periods of time (Windschitl et al., 2021).

The clinical field-focused model, presented here primarily as a utopian model to aspire to, similar to clinical professions such as medicine and nursing (Becher & Lefstein, 2020; McLean Davies et al., 2015), should rely on a significant practicum component. Various interviewees spoke of the need for longer exposure of trainees in the field and for strengthening their ongoing presence in schools. In contrast, the scope of the practicum in the traditional model is perceived as insufficient, limited, and fairly isolated. The findings of the current study align with previous studies, in that training cannot take place in academia independently of the field (Conroy et al., 2013; Krichevsky, 2021).

A central theme that emerged from the interviews was the ties between academia and the field. In the traditional model, the two sites remain separate, the ties are somewhat ambiguous, for example, regarding the respective roles of the pedagogical instructor and the mentor teacher. The institution-school partnership is not perceived as significant, and there are no joint meetings or ongoing contact. The success of the training process lies in a strong partnership of knowledge, processes and people, especially the mentor teachers (Ingersoll & Strong, 2011; Orland-Barak & Wang, 2021). In the clinical model, all these take place with an emphasis on the academia-field connection and on the processes that occur between them as a product of full partnership (Beshir et al., 2023; Straub & Ehmke, 2021; White et al., 2022). Furthermore, as for the role of the principal of the training school, it seems that in the clinical field-focused model, the principals need to be in constant contact with the teacher students and constitute a significant figure for them. Thus, the role of the principal is significant in transforming the school into a research arena that is conducted in collaboration with academia and is also responsible for generating new knowledge coming from the field (Bergmark, 2023; Vadmani-Inbar Committee, 2020).
5.1 | Contributions of the study

The current study offers a mapping of the different models. Theoretically, it contributes to the understanding of the different models through a criteria-based comparison, creating a spectrum revealing areas of strength and weakness. The perspectives from which this mapping is constructed are those of educators from teacher training colleges and universities and from schools. Hence, there is a broad view of the significance of the models and their current or future application. The theoretical implication can be the elaboration of the meaning of practicum in term of place, time and responsibilities. Thus, the definitions of the school as a place of practical knowledge, and the academia as a place of theoretical knowledge should be further examined and re-established, alongside the amount of time spent in each place. Finally, the division of responsibilities as well as the connections between educators should become part of the practicum characteristics. For example, the involvement of the principal can be defined as an integral part of the academia arena. This can be part of theoretical meanings of practicum that later on are reflected in practices and procedures.

From a practical perspective, this research advances understanding of the advantages inherent in models that are less traditional, highlighting the need to strengthen the academia-field partnership between, while examining the relative advantages of each of the educators involved. It is important to emphasize that placing schools at the centre of the practical training requires attention to local school needs and their full participation in decision-making related to teacher training (Donitsa-Schmidt & Ramot, 2020), as well as a broader view of the status of teachers, their work in a changing reality, and global social processes that impact training (Ben-Peretz, 2016). It is worth mentioning that the implications of the COVID-19 pandemic on the practicum when schools were closed must be taken into account. These implications certainly also influence perspectives of the practicum in the various models (Donitsa-Schmidt & Ramot, 2020). In addition, in light of developments subsequent to the pandemic, this study may take on additional significance, especially with regard to hybrid models that should be implemented in practical training in the future (Donitsa-Schmidt & Ramot, 2020).

5.2 | Suggestions for future research

Although this study offers the perspectives of different educators, follow-up studies might expand knowledge by examining the perspectives of the teaching trainees themselves. In addition, one might consider action research in the clinical field-focused model, which is relatively new and offers advantages over the other models. It is also important to examine the ability to implement the various models in environments with unique characteristics such as peripheral areas and weak populations. Furthermore, the implications of the COVID-19 pandemic on the practicum should be explored, as other studies have done on the subject (Ellis et al., 2020).

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DATA AVAILABILITY STATEMENT
The data that support the findings of this study are available from the corresponding author upon reasonable request.

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REFERENCES
Ben-Peretz, M. (Ed.). (2016). Embracing the social and the creative new scenarios for teacher education. MOFET Institute [Hebrew].
Ingersoll, R., Merrill, L., & May, H. (2014). What are the effects of teacher education and preparation on beginning teacher attrition? CPRE Research Reports https://repository.upenn.edu/cpre_researchreports/78


