

Tefer Courses (Theory And Practice) As A Lever For Connecting Theory And Practice In Teacher Students' Clinical Training

Dr. Seham Hamza^{1*}, Dr. Tareq Murad², Dr. Muhammad Ibdah³

^{1*,2,3}Sakhnin Academic College for Teacher Education, ISRAEL 2024

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ARTICLE INFO ABSTRACT

This study investigated the contribution of teacher (theory and practice) TEFER courses to improving the clinical training of student teachers through close integration of theory and practice has been examined across various dimensions: linking theory to practice, promoting research-based practice learning, fostering pedagogical reflective discourse, enhancing teaching quality, learning and assessment, increasing partnership between academia and schools, and fostering both individual and collective engagement. The participants of the study consisted of (36) female students in the bachelor's degree. A multi-item questionnaire was developed for research purposes examining the perceptions and attitudes of teacher students regarding the contribution of TEFER courses to integrating theory and practice in clinical training. A multi-item questionnaire was developed for research purposes examining the perceptions and attitudes of teacher students regarding the contribution of TEFER courses to improving teaching. The students were asked to provide personal feedback to open-ended questions. The findings revealed that teaching students have high perceptions and attitudes towards professional development through participation in the Theory and Practice course. Results indicate a significant bridging of the gap between theory and practice, with a high level of practice-based learning and reflective pedagogical dialogue. Participants believe the course encourages research and problem-solving skills, enhances students' feelings and behaviors, and improves academic achievement and modern educational skills. Furthermore, the study shows increased partnership between the academy and the school, with students understanding and dealing with the educational system more effectively, strengthening the partnership between colleges and schools, and promoting communication among lecturers, principals, teachers, and students. The course fosters personal and collective responsibility in students, contributing to a high overall partnership between the academy and school, as well as integrating students into various school topics and building a bond of friendship and acquaintance.

Keywords : TEFER courses, Theory and Practice, Teacher, Students , Clinical Trainin

Introduction

The experience in teaching, with all its characteristics and nuances, in a guided and supervised clinical process, constitutes the highlight of teacher training, as it combines elements of study from the fields of discipline, education, and pedagogy between the theoretical course content and clinical training in the field. During the practicum, the teacher students will learn and be involved in educational activities in kindergarten and school. They will engage in reflective observation of teaching and learning by exploring various issues that arise during their work in the training field (Council for Higher Education, 2020).

The main goal of TEFER courses (Teacher Education Program) is to bridge the gap between theory and practice in teacher training, in order to enhance the relevance of the training and develop pedagogy that is adapted to the process. The ways to achieve this goal include expanding the scope of field experience for students, integrating experiential components into traditional theoretical courses, and developing pedagogical-planning principles to create an appropriate framework. One of the possibilities in TEFER courses is to create active and

experiential learning based on the constructivist approach; It is suitable for teaching multiple disciplines and allows for interdisciplinary teaching. The model enables lecturers and students to partake in a fulfilling intellectual adventure. Students acquire lifelong learning tools that help them function in their future personal and professional lives (Vidergor & Sela, 2017).

The academic institution responsible for training, in collaboration with the school principal, is accountable for developing a shared vision between the academy and the school for continuous learning throughout professional lives. This learning is research-based, aligned with the school's needs, and aimed at promoting high-quality teacher training (F. Janssen et al, 2015). The shared learning space enables and encourages school principals to engage academic experts as part of professional development and to foster a research-oriented culture within their institution. Research is a leading principle for the growth of teachers (Zeichner, 2010). The professional development of teachers in schools is based on their continuous learning in the workplace. This learning is based on the investigation of practice (Maria & Evangelina, 2014) through case studies, data collection, posing questions, analysis and critique, change and adaptation. This process, in which teachers engage collaboratively with their colleagues, leads to a deep familiarity with their students and the context in which they operate, experiments with new teaching approaches and patterns, and most importantly, rethinking and questioning their assumptions, views, and practices.

Ongoing reflective discourse in experiential frameworks enables the handling of teaching dilemmas. The intensive experience of students in reflective feedback conversations is intended to enhance their inquiry processes, which are key conditions for assessment for learning (Kurland & Shachaf- Barzilay, 2013). This experience will also help students deal with dilemmas (Onn, 2017). In their future careers in general, and during their internship year in particular, (Archer, 2012) sees the reflective process as a moral imperative of higher education institutions, arguing that it is essential in a rapidly changing postmodern world where the future cannot be predicted. One way to link theory to practice is to integrate inquiry skills into learning and use evidence-based information and research data (Gummer & Mandinach, 2006). Learners also need to base their claims on field evidence and data and disseminate them widely. Educators and learners must be "data literate." The concept of data literacy expresses the need to combine inquiry skills with proficiency in two sources of knowledge: content knowledge and pedagogical knowledge learned in training (Gummer & Mandinach, 2016).

In teacher training colleges, the responsibility for the practical training of student teachers is paramount, making them a very important figure in the entire training process. Their role develops from accompanying students during their academic studies and creating a connection between the theory taught in the colleges and the practices in schools (Zeichner, 2010). The pedagogical supervisors are required to build new learning environments, work collaboratively, and undergo a transformative process in which they simultaneously learn and teach. The change in their role demands significant active engagement in learning and teaching within the environments in which they operate (Hutchings & Huber, 2004).

Professional and personal development opportunities through diverse learning experiences contribute to the construction of substantive and practical knowledge, as well as the improvement of teaching methods (Timperley, 2008; Talbert & McLaughlin, 2006). Research literature indicates that teachers learn best when their learning is contextualized within their learning environment, is continuous, allows collaboration with peers within and outside the school, promotes reflection, and develops cognitive knowledge and skills necessary for enhancing teaching (Talbert & McLaughlin, 2006).

Strengthening clinical experiences with an emphasis on connection and simultaneity with theoretical courses taught within teacher training programs is one of the key strategies for enhancing the abilities of new teachers and the entire teaching force (Burns, 2020). This involves creating a vision and curriculum plan that are manifested in courses and simultaneous experiences, developing tasks and opportunities that link theory to practice, establishing partnerships with schools to support exemplary teaching in diverse classrooms, strategically integrating assessments of beginning teachers' capabilities, and providing continuous feedback to training programs to enhance them ((Killian & Wilkins, 2009).

Research context

In the academic year of 2023, Sakhnin College implemented a model for TEFER courses titled "Theory and Practice." In these courses, students learn practice through a closer integration of theory and practice within the framework of teaching experience. The course, originally theoretical (either pedagogical or disciplinary), is structured as a connection between theory and practice. Multiple courses are integrated into a single experiential learning context, fostering significant interaction between lecturers and students. It employs constructivist-teaching methods where students are actively engaged in their learning.

In the current research, 15 student teachers participated, coming from various disciplines including mathematics, sciences, and English language. All students participated in three TEFER courses: Techno pedagogy, Qualitative Research, and Social Emotional Learning. The study focuses on the Social Emotional Learning course, where students engaged in blended, experiential learning that was enjoyable and not burdensome. A significant contribution for them was the opportunity to analyze dilemmas and issues related to the course content through practice-based inquiry.

Literature Review

The teaching practicum allows for the learning of theory through real-life cases in the field. It offers the opportunity to deal with curriculum planning and its practical implementation, educational and ethical dilemmas, learning management, personalized attention according to the unique needs of the student (personalization of learning), teamwork, group work, attention to social-emotional aspects in both individual and group settings, meetings with parents and the community, and more.

According to the teacher-training model in Israel, the curriculum is required to provide the best possible training for prospective teachers to prepare them for their roles as educators and to meet the standards justifying the awarding of an academic degree. The training inherently includes both theoretical and practical aspects, and the integration of these reaches its peak during the practicum. Despite the extensive thought given to the integration, it is often lacking, raising the following questions: What is the central component in teacher training—theory or practice—and what balances are needed between these two components? Research in the field of teacher training in Israel and around the world indicates the gap and lack of continuity in traditional teacher training between theoretical studies and practical training (Ord & Nutta, 2016; Wage & Hage Lukan, 2013). In response, new models of teacher training have developed in Israel, including "Academia-Classroom," "Academia-Classroom Community," "Academia Fellows," and in recent years, the "TEFER Courses" model.

This model focuses on creating a meaningful connection between theoretical courses taught at various training institutions and the components of clinical practice. A TEFER course is originally a theoretical course (pedagogical, disciplinary, or integrated) that has been redesigned to connect theory with practice (Rowan et al., 2015). This connection is reflected in teaching, learning, and assessment. The transition from theory to practice cannot occur on its own; it requires gradual, explicit practice and feedback. To ensure the quality of training, we must provide planned and guided processes, as the necessary skills are particularly complex and it is important to cultivate them.

They will be asked to learn, and where, to formulate in advance and in an operative manner the updated objectives of the course as a TEFER, to break down the existing course content into small units, and through a process of "backward design," to examine which content units will serve the new objectives. One of the clear conclusions is that the implementation of TEFER courses requires meticulous planning and coordination among various stakeholders in the training institution. The planning should include both a content dimension—breaking down the course content and reassembling it to reflect a balance between theory and practice—and logistical planning. Regarding the planning of course content, it is advisable to consider from the early stages the three aspects—teaching, learning, and assessment. Which assessment tasks will best reflect the course objectives? How will we teach the content in preparation for these tasks? This involves changing the teaching method that has been common in most courses at training institutions until now. The process of changing teaching, learning, and assessment methods is not simple and requires support and assistance for the faculty. (Zeichner, K. 2014). Often, the solution includes the use of various digital tools to create synchronous and asynchronous tasks and to create a shared space, even when the course participants are not all in the same physical location.

In programs at the University of Wisconsin-Madison and other institutions, there is significant participation in teaching courses on campus in teacher training programs and in supervising students during their field internships. The disconnect between campus-based and field-based teacher training has been a perennial problem (Vick, 2006). It has been clearly documented for many years (Labaree, 2004) that there are few incentives for distinguished faculty to invest time in coordinating between campus-based and field-based components of teacher training and in closely advising and monitoring the work of field instructors. Sometimes institutions have turned to the use of clinical faculty teams (for example, recently retired teachers) to carry out the supervision of students during their school internships. However, these dedicated and skilled instructors often lack the authority to participate in decisions about teacher training programs and are not closely connected with the campus-based components of the programs (Bullough et al., 2004).

Possible models and frameworks for integrate theory and practice (TEFER) courses

1. The instructor is responsible for students on their practicum day. The students are dispersed across various educational institutions. The instructor occasionally visits schools or kindergartens as part of course delivery, according to a predetermined schedule.
2. The instructor relies on existing practicum days (but is not responsible for them). She does not visit the field but collaborates with academic supervisors and pedagogical leaders.
3. The instructor is responsible for the students on the practicum day. The entire course is taught at the school with the instructor present consistently. All students arrive at the same educational institution.

From the data collected by the MOFET Institute in 2023, it appears that each of the models has an expression in teacher training institutions. At Sakhnin College, as in the country at large, there is a focus on shared learning from Model 1. This model may lead to an increase in the scope of experience through TEFER courses. It does not require unique logistical conditions but rather a new, broad, and deep preparation from the training institution. Conditions in the field indicate that this should be the case.

The connection between theory and practice in TEFER courses

Clinical training enhances learning in teacher training by anchoring it in the practice field. It allows for a connection between knowledge drawn from theories and research studied analytically in training programs, and the clinical experience occurring in schools (Burn & Mutton, 2015). This connection is one of the ongoing challenges of professional training in various fields, including education.

In traditional teacher training programs sponsored by colleges and universities, a persistent challenge has been the disconnection between coursework held on university campuses and field experiences. While many university-based teacher training programs now incorporate multiple field experiences, often in collaboration with schools (such as professional development schools or peer schools), there remains a notable gap between what students learn in campus-based courses and their ability to implement these practices during school placements, including within professional development and peer school settings (Zeichner, 2010).

A TEFER course is one in which there is a reversal in the ratio between the theoretical and practical components compared to a theoretical course. The desired components of a Practicum course include a theoretical component (about 20% of the course) - including learning sessions with the instructor, at the training institution or online. An experiential component (about 80% of the course) - used for practicing and performing applied tasks related to the course, under the guidance and responsibility of the instructor from the training institution. As part of this, the instructor is required to visit the educational institution where students participating in the course are practicing every week. The innovation in Practicum courses lies in enabling instructors and students to leave campus environments and reach the natural environment of teaching practice in schools and kindergartens.

This model allows interaction between theoretical knowledge and practical knowledge (Janssen, Grossman, & Westbroek, 2015) and prepares future teachers for the realities encountered by young teachers in the field after their training. The Practicum course model is relatively new, and most training institutions are at the beginning stages of implementing it. The model is applied across all tracks and diverse fields of knowledge including research methods, English literature, literature didactics, educational instruction, and special education. Practicum courses cultivate active learning and collaboration requiring the use of partnership skills. Group work fosters awareness of others and a sense of mutual responsibility, developing tools and outcomes for refining training, analyzing dilemmas and challenges from the field, and providing ways to cope (Hammond, 2020).

Cooperation with educational institutions (schools and kindergartens)

Teacher training institutions, through pedagogical instructors, must develop curricula, tools, and appropriate skills to help students acquire a wide range of essential foundations—skills that are used in meaningful learning and socio-cultural relationships. This contributes to their professional development throughout their lives." (Gledson & Dawson, 2017).

Schools provide teaching students with opportunities for clinical practice and joint encounters with experts: teachers with practical knowledge and experience, as well as researchers and theorists. (Burn & Mutton, 2015; Willemse, 2016) The teaching practice field allows the student to engage in research processes, such as searching for, interpreting, and constructing the meaning of specific student needs, designing and implementing pedagogical actions, evaluating results, and more. Research processes allow, in addition to the practice and refinement of skills, engagement in in-depth processes of interpretation and professional identity formation (Taylor, 2017). Intervention and evaluation are based on various sources of knowledge, research evidence, as well as learner data.

TEFER courses constitute a significant and challenging topic for strengthening the continuous connection between training institutions and schools and kindergartens. On one hand, it is important for students to gain experience in the schools and kindergartens where they usually practice as part of the TEFER course. On the other hand, it is important to choose educational settings that have a good relationship with the training institution, and are willing to cooperate, which is critical for the success of the initiative (Zeichner, K, 2014). Faculty members teaching the courses on behalf of the university should understand the great importance of full coordination with the school and that the school should benefit from hosting the course. The academic institution will promote quality interaction between itself and the school, as well as validate the knowledge base that will be created because of their mutual relationships. All this is to promote the learning and clinical teaching of students who are future teachers in the education system, which contributes to the branding of the school. In the dominant historical model of 'theory application' in teacher training in the USA, potential teachers are expected to learn theories at the university and then go to schools to practice or apply what they learned on campus (Korthagen & Kessels, 1999; Tom, 1997). Alternatively, some early models of teacher preparation assume that most of what beginning teachers need to learn about teaching can be learned on the job in the midst of practice and that the university's role in the process can be minimized without significant loss (Grossman & Loeb, 2008).

TEFER Course and Practice Research

There is a growing consensus in research and the educational field that professional learning, which includes rich representations of practice, promotes professional learning and knowledge. Anchoring in rich

representations from the field, including, among others, written case studies, learning products, and especially authentic documentation of educational teams at work in the classroom through audio recordings and video footage. The joint investigation of these representations—a process generally referred to as 'practice research'—takes into account the complexity of the act of teaching and mentoring and the importance of the specific context, and encourages observation of representations of documented events from the mentoring field, rather than theoretical discussion of general hypothetical situations (Zeichner, 2010).

These representations allow for the interruption of the flow of events, pausing on key moments and complex interactions, examining them in depth and from different perspectives, and conceptualizing what is happening using professional theoretical terms. In this way, new interpretations and ways of coping can be raised, and their advantages and disadvantages can be considered together. Such joint investigation enables the exposure of what may be hidden to some participants and challenges each other's ideas, examining intuition against theory in the context of authentic occurrences. Pedagogical instructors, who are responsible for leading these processes, deal daily with arising issues and must consider alternative courses of action, weighing their benefits and drawbacks.

Through practice research, and similar to professional learning in other professions (such as medicine), it is somewhat possible to pause the sequence of events, make professional processes public, and consult with colleagues on professional dilemmas. Within professional learning based on practice research (Dinkelman, 2003), one can focus on a professional issue for examination, analyze its causes and implications, and discuss it, taking into account the complexity of the professional situation in the field. As part of the learning processes, we will want to discuss issues and dilemmas that arise from discussions on representations based on events from the teaching environment and reflect the richness of professional interaction—such as student work, tests, and video recordings. Guidance frameworks that support research processes in a structured and sophisticated manner can be utilized.

The research literature defines pedagogical mentoring as an ongoing interpersonal process, during which an experienced individual, the pedagogical mentor, serves as a "guide" for teaching and assists a less experienced individual in developing the behaviors and professional identity of a teacher. Researchers identify three pedagogical mentoring approaches: the knowledge transmission approach, the theory-practice nexus approach, which integrates research and practical knowledge with professional skills; and the collaborative research approach, where pedagogical knowledge is based on actively constructing practical knowledge using tools and concepts derived from the teaching context (Wang & Odell, 2002, in Mena, Hennissen & Loughran, 2017).

Clinical training is essential for the professional development of aspiring educators and practitioners in the field. Practical knowledge gained through mentoring processes, evaluation discussions, and reflection is event-focused, context-based, and geared towards practice research (Furlong, 2013). The working assumption in practice research is that knowledge built on the experiences and practices of teachers or educators differs fundamentally from academic knowledge derived from research. It is personal, practical, and authentic knowledge closely tied to the daily work routines of teachers and educators, and its exploration can generate profound changes in teaching practices (Vedder-Weiss et al., 2018). Learning theoretical material through the lens of research and discovery contributes to understanding the material. With issues researched, field representations, collaborative and experiential learning, learners perform action research on topics learned in the TEFER course.

An alternative to directly integrating teachers into campus-based teacher training activities is to create opportunities for representations of their teaching practices to enter courses. One example of this strategy was to incorporate writing and research by teachers into the campus-based curriculum so that students could examine academic knowledge alongside knowledge generated by professionals related to specific aspects of teaching (Hanson, 2008). In addition to providing insights to teacher candidates about the complexities of specific teaching practices, this strategy also offers models of teachers who are capable of learning within and from their practice over time. The connection between theory and practice has led to reflective applied thinking.

Methodology

This part covers a description of the population and sample of the study, the methodology used in it, as well as the study tool used, the method of its preparation, how it was built and developed, and the extent of its validity and stability. The chapter ends with the statistical treatment that was used to analyze the data and draw conclusions. Below is a detailed description of all these procedures.

Study methodology

The descriptive survey method was used.

Research objectives

The contribution of teacher education courses to improving the clinical training of student teachers through a close integration of theory and practice has been examined across various dimensions: linking theory to practice, promoting research-based practice learning, fostering pedagogical reflective discourse, enhancing

teaching quality, learning and assessment, increasing partnership between academia and schools, and fostering both individual and collective engagement.

Research Questions

1. What is the contribution of teacher education courses TEFER to integrating theory and practice in the clinical training of teacher students?
2. What is the contribution of teacher education courses TEFER to improving teaching quality, learning, and assessment in the clinical training of teacher students?

Research tools

Quantitative part

1. A multi-item questionnaire developed for research purposes examining the perceptions and attitudes of teacher students regarding the contribution of TEFER courses to integrating theory and practice in clinical training.
2. A multi-item questionnaire developed for research purposes examining the perceptions and attitudes of teacher students regarding the contribution of TEFER courses to improving teaching quality, learning, and assessment in clinical training.

Responses to the multi-item questions were based on a Likert scale of five levels: 1 indicating low agreement with the presented possibility, while 5 indicating high agreement.

The qualitative part

The students were asked to provide personal feedback to open-ended questions.

1. They were asked to provide feedback and express their perceptions and attitudes regarding the contribution of teacher education courses to integrating theory and practice in the following six dimensions: bridging theory and practice, research-based practice-oriented learning, reflective pedagogical discourse, improving teaching quality, learning and assessment, enhancing partnership between academia and schools, personal and collective involvement.
2. Personal feedback to open-ended questions regarding the contribution of teacher education courses to improving teaching quality, learning, and assessment in clinical experiences in the following six dimensions: bridging theory and practice, research-based practice-oriented learning, reflective pedagogical discourse, improving teaching quality, learning and assessment, enhancing partnership between academia and schools, personal and collective involvement.

Study population

The study population consists of all students in the (Theory and Practice) course, which serves as a bridge that bridges the gap between theory and practice in the clinical experience of teaching children.

The study sample

The study sample consisted of (36) female students in the bachelor's degree. Table No. (1) shows the distribution of study sample members according to personal variables.

Table No. (1) shows the distribution of study sample members according to personal variables

variable		Frequency	%
Age	18-22 years old	22	61.1
	23- 25 years old	6	16.7
	More than 25 years old	8	22.2
	Total	36	100.0
Scientific Specialization	English Language	22	61.1
	Mathematics	10	27.8
	Sciences	4	11.1
	Total	36	100.0

Table (1) show that:

- 1- The percentage for "Age" highest reached (61.1%) for age category (18-22 years old), but the lowest percentage reached (16.7%) for age categories (23- 25 years old).
- 2- The percentage for "Scientific Specialization" highest reached (61.1%) for (English Language), but the lowest percentage reached (11.1%) for (Sciences).

Study tools scale:

relied on a five-point Likert scale (Subedi, 2016) to answer the questions according to the following score: A score of (1) expresses the answer (Strongly Disagree), a score of (2) expresses the answer (not agree), a score of (3) expresses the answer (I don't know), a score of (4) expresses the answer (Agree), a score of (5) expresses

(Strongly Agree), and to interpret the arithmetic averages of the study sample members' ratings on each item of the study tool, the following equation was used:

Period length = (the upper limit of the alternative - the lower limit of the alternative) / number of levels, $(5-1)/3 = 1.33$, so the levels are as follows:

-Low agreement score of (1-less than 2.33).

-Medium agreement score of (2.33-less than 3.66).

- High agreement score of (3.66-5.00).

Internal construct validity:

To verify the validity of the study tool, correlation coefficients were extracted using the Pearson Correlation between the items of the study tool, the field to which it belongs, and the tool as a whole. Table No. (2) shows this

Table(2) Pearson Correlations between the items of the study tool, the field to which it belongs, and the tool as a whole

Bridging the gap between theory and practice			Practice-based learning		
Correlation coefficient			Correlation coefficient		
No	Domain	Total score	No	Domain	Total score
1	0.978**	0.921**	1	0.883**	0.953**
2	0.955**	0.891**	2	0.919**	0.79*
3	0.934**	0.858**	3	0.943**	0.81**
4	0.968**	0.97**			
5	0.915**	0.97**			
Reflective pedagogical dialogue			Improving the quality of learning, teaching and assessment		
No	Domain	Total score	No	Domain	Total score
1	0.941**	0.921**	1	0.94**	0.906**
2	0.940**	0.912**	2	0.898**	0.856**
			3	0.953**	0.971**
			4	0.953**	0.970**
Increasing the partnership between the academy and the school			Personal and collective responsibility		
No	Domain	Total score	No	Domain	Total score
1	0.861**	0.785*	1	0.932**	0.899**
2	0.846**	0.856**	2	0.954**	0.970**
3	0.827**	0.800**	3	0.975**	0.921**

*Statistically significant at the significance level ($\alpha \leq 0.05$).

**Statistically significant at the significance level ($\alpha \leq 0.01$).

The results shown in Table (2) showed the following:

- 1- The correlation coefficients between the paragraphs of dimension (Bridging the gap between theory and practice) and the domain ranged between (0.915-0.978), the correlation coefficients between the paragraphs and the tool as a whole ranged between (0.858-0.97) all of which are statistically significant values.
- 2- The correlation coefficients between the paragraphs of dimension (Practice-based learning) and the domain ranged between (0.883-0.943), the correlation coefficients between the paragraphs and the tool as a whole ranged between (0.79-0.953) all of which are statistically significant values.
- 3- The correlation coefficients between the paragraphs of dimension (Reflective pedagogical dialogue) and the domain ranged between (0.940-0.941), the correlation coefficients between the paragraphs and the tool as a whole ranged between (0.912-0.921) all of which are statistically significant values.
- 4- The correlation coefficients between the paragraphs of dimension (Improving the quality of learning, teaching and assessment) and the domain ranged between (0.898-0.953), the correlation coefficients between the paragraphs and the tool as a whole ranged between (0.856-0.971) all of which are statistically significant values.
- 5- The correlation coefficients between the paragraphs of dimension (Increasing the partnership between the academy and the school) and the domain ranged between (0.827-0.861), the correlation coefficients between the paragraphs and the tool as a whole ranged between (0.932-0.975) all of which are statistically significant values.
- 6- The correlation coefficients between the paragraphs of dimension (Personal and collective responsibility) and the domain ranged between (0.932-0.975), the correlation coefficients between the paragraphs and the tool as a whole ranged between (0.899-0.970) all of which are statistically significant values.

Tool stability

To verify the stability of the study tool, stability coefficients were extracted using the Cronbach alpha method on the study areas and the tool as a whole. Table (3) shows this.

Table(3) Cronbach alpha on the study areas and the tool as a whole

dimension	Reliability (Cronbach's alpha)
Bridging the gap between theory and practice	0.972
Practice-based learning	0.894
Reflective pedagogical dialogue	0.869
Improving the quality of learning, teaching and assessment	0.950
Increasing the partnership between the academy and the school	0.795
Personal and collective responsibility	0.950
Total	0.986

Table (3) shows that the reliability coefficients according to the Cronbach alpha method were (0.795-0.986), which are high and statistically acceptable values, as studies indicated Reliability coefficients that are (0.70) and above are acceptable coefficients(Subedi,2016).

Results

This part includes the results of the study that aimed to Perceptions and attitudes of teaching students towards their professional development through their participation in the (Theory and Practice) course. The results of the study were presented.

Results related to the questions:

What is the contribution of teacher education courses TEFER to integrating theory and practice in the clinical training of teacher students?

2. What is the contribution of teacher education courses TEFER to improving teaching quality, learning, and assessment in the clinical training of teacher students?

The study questions were answered by extracting the means and standard deviations of the study sample individuals' estimates of the tool areas and the tool as a whole. Table No. (4) shows this.

Table (4) means and standard deviations for Perceptions and attitudes of teaching students towards their professional development through their participation in the (Theory and Practice) course

No	Dimension	Mean	Standard Deviations	Importance
1	Bridging the gap between theory and practice	4.54	0.60	High
2	Practice-based learning	4.48	0.64	High
3	Reflective pedagogical dialogue	4.58	0.58	High
4	Improving the quality of learning, teaching and assessment	4.54	0.61	High
5	Increasing the partnership between the academy and the school	4.50	0.64	High
6	Personal and collective responsibility	4.54	0.58	High
Total		4.53	0.59	High

Table (4) shows that the level of Perceptions and attitudes of teaching students towards their professional development through their participation in the (Theory and Practice) course is high. The Mean of the study sample members' ratings for tool as a whole was (4.48) with a high evaluation score. Table (4) also shows that the Means for the sub-dimensions ranged between (4.50-4.58), The mean of dimension (Reflective pedagogical dialogue) reached (4.58), mean of dimensions (Bridging the gap between theory and practice, Improving the quality of learning, teaching and assessment, Personal and collective responsibility) reached (4.54), mean of dimension (Increasing the partnership between the academy and the school) reached (4.50), mean of dimension (Practice-based learning) reached (4.48).

know the impact of Perceptions and attitudes of teaching students towards their professional development through their participation in the (Theory and Practice) course, the means and standard deviations of the study sample members' estimates for the items of each sub-dimensions were extracted separately, and the results are presented below:

- Bridging the gap between theory and practice:

Table (5) means and standard deviations of the study sample members' answers to the questions related to the dimension (Bridging the gap between theory and practice)

No	item	Mean	Standard Deviations	Importance
1	The course allows me to combine theoretical knowledge with application in the field.	4.56	0.62	High
2	The course allows me to combine theoretical knowledge with practical knowledge.	4.51	0.71	High
3	The course allows me to study the theoretical content of the course and apply it through cases in the field.	4.50	0.62	High
4	The course allows me to create a connection between the theoretical content and the elements of clinical training.	4.61	0.61	High
5	The course contributes to the combination of practical and educational planning.	4.56	0.62	High
Bridging the gap between theory and practice		4.54	0.60	High

Table (5) shows that means range between (4.50– 4.61), being the highest mean for Item(4) " The course allows me to create a connection between the theoretical content and the elements of clinical training ", but the lowest mean was for Item(3) " The course allows me to study the theoretical content of the course and apply it through cases in the field ". The overall mean for level of Bridging the gap between theory and practice (4.54). From the above it is clear that there is a high level of Bridging the gap between theory and practice.

The researcher also extracted the frequencies and percentages of the study sample members' answers to the open question regarding bridging the gap between theory and practice. Table (6) shows this.

Table (6) frequencies and percentages of the study sample members' answers to the open question regarding bridging the gap between theory and practice*

Answer	Frequencies	Percentages**
The course contributed to acquiring many skills that contribute to solving real problems. That is, when a theory is received and applied directly, this reflects a deeper understanding of the theory and how to deal with it to achieve it.	2	7.7
The course contributed to developing the skills of dealing with students and how to solve the problems they face.	7	26.9
Identifying the nature of students, dealing with their needs, and linking them to education.	2	7.7
Dealing with educational resources and teaching methods and applying them to students.	2	7.7
The course contributed to linking the application with the school and all the experiences he had with the application.	1	3.8
Improving the educational experiences that students need in the future.	5	19.2
Dealing with scientific theories and their application	2	7.7
Monitoring problems or dilemmas and providing solutions that fit the reality on the ground	3	11.5
Identifying students' educational behaviors and academic dealing with them	2	7.7
Total	26	100.0

*It is possible to choose more than one answer.

**Percentage of total occurrences.

Table (6) The majority of the study sample members believe that the course contributed to developing the skills of dealing with students and how to solve the problems they face, at a rate of (26.9%). There is also a percentage of (19.2%) who believe that the course contributed to developing the educational experiences that they need in the future.

- **Practice-based learning:**

Table (7) means and standard deviations of the study sample members' answers to the questions related to the dimension (Practice-based learning)

No	item	Mean	Standard Deviations	Importance
1	The course allows me to have dialogue and collaborative discussions to improve processes in clinical training.	4.56	0.78	High
2	The course has developed my ability to deal with educational and academic dilemmas.	4.39	0.70	High
3	The course allows me to improve multidisciplinary thinking processes.	4.50	0.62	High
Practice-based learning		4.48	0.64	High

Table (7) shows that means range between (4.39– 4.56), being the highest mean for Item(1) " The course allows me to have dialogue and collaborative discussions to improve processes in clinical training ", but the lowest mean was for Item(2) " The course has developed my ability to deal with educational and academic dilemmas ". The overall mean for level of Practice-based learning (4.48). From the above it is clear that there is a high level of Practice-based learning.

The researcher also extracted the frequencies and percentages of the study sample members' answers to the open question Practice-based learning. Table (8) shows this.

Table (8) frequencies and percentages of the study sample members' answers to the open question Practice-based learning *

Answer	Frequencies	Percentages**
The course contributes to developing skills in identifying the challenges facing students, dealing with them, and finding solutions before they get worse.	4	7.4%
The course contributes to developing skills for deep understanding of concepts and their practical application	4	7.4%
The course encourages research into different issues and problems and working to solve them through the use of problem-solving skills.	10	18.5%
The course helps solve problems that students face and may be an obstacle to their studies.	4	7.4%
The course helps in developing skills for dealing with students' feelings and different behaviors.	10	18.5%
The course encourages positive interaction with the student during the teaching process by discussing issues that occur during school hours.	6	11.1%
The course is trained to deal positively with students and follow proper methods to improve their academic achievement.	8	14.8%
The course is trained on methods of acquiring modern educational skills.	8	14.8%
Total	54	100.0%

*It is possible to choose more than one answer.

**Percentage of total occurrences.

Table (8) shows that the majority of the study sample members believe that the course encourages research into various issues and problems and working to solve them through the use of problem-solving skills. They also believe that the course helps develop the skills of dealing with students' feelings and different behaviors, with a percentage of (18.5%), There is also a percentage (14.8%) who believe that the course contributed to training in dealing positively with students, following appropriate methods to improve their academic achievement, and training in methods of acquiring modern educational skills.

- **Reflective pedagogical dialogue:**

Table (9) means and standard deviations of the study sample members' answers to the questions related to the dimension (Reflective pedagogical dialogue)

No	item	Mean	Standard Deviations	Importance
1	The course allows me to develop the necessary skills and adapt them to students and deal with the educational challenges they face.	4.56	0.62	High

2	The course enhances reflective observation of teaching and learning by investigating the various issues that arise during the experience.	4.61	0.61	High
Reflective pedagogical dialogue		4.58	0.58	High

Table (9) shows that means range between (4.56– 4.61), being the highest mean for Item(2) " The course enhances reflective observation of teaching and learning by investigating the various issues that arise during the experience ", but the lowest mean was for Item(1) " The course allows me to develop the necessary skills and adapt them to students and deal with the educational challenges they face ". The overall mean for level of Reflective pedagogical dialogue (4.58). From the above it is clear that there is a high level of Reflective pedagogical dialogue.

The researcher also extracted the frequencies and percentages of the study sample members' answers to the open question Reflective pedagogical dialogue. Table (10) shows this.

Table (10) frequencies and percentages of the study sample members' answers to the open question Reflective pedagogical dialogue *

Answer	Frequencies	Percentages**
The course contributes to developing the ability to exchange ideas, experiences, and learning by holding discussions and dialogues with teachers with long experience in the field of education on specific issues with the aim of improving educational methods.	14	50.0%
The course allows for various dialogues and discussions that help reach treatment for problems	4	14.3%
The course achieves a radical change in the student	6	21.4%
The course provides the opportunity to discuss difficulties.	4	14.3%
Total	28	100.0%

*It is possible to choose more than one answer.

**Percentage of total occurrences.

Table (10) shows that the majority of the study sample members believe that the course contributes to developing the ability to exchange ideas, experiences, and learning by holding discussions and dialogues with teachers with long experience in the field of education on specific issues with the aim of improving educational methods, with a percentage of (50.0%).

- Improving the quality of learning, teaching and assessment:

Table (11) means and standard deviations of the study sample members' answers to the questions related to the dimension (Improving the quality of learning, teaching and assessment)

No	item	Mean	Standard Deviations	Importance
1	The course allows me to develop educational materials to serve practical training.	4.44	0.70	High
2	The course allows me to continuously improve learning skills.	4.50	0.71	High
3	The course improves the credibility of practical training.	4.62	0.61	High
4	Through the course, learning management and individual therapy are dealt with according to the student's personal needs.	4.61	0.61	High
Improving the quality of learning, teaching and assessment		4.54	0.61	High

Table (11) shows that means range between (4.44– 4.62), being the highest mean for Item(3) " The course improves the credibility of practical training ", but the lowest mean was for Item(1) " The course allows me to develop educational materials to serve practical training ". The overall mean for level of Improving the quality of learning, teaching and assessment (4.54). From the above it is clear that there is a high level of Improving the quality of learning, teaching and assessment.

The researcher also extracted the frequencies and percentages of the study sample members' answers to the open question Improving the quality of learning, teaching and assessment. Table (12) shows this.

Table (12) frequencies and percentages of the study sample members' answers to the open question Improving the quality of learning, teaching and assessment *

Answer	Frequencies	Percentages**
the course contributes to providing opportunities for assessment according to the student's personal needs. Which contributes to improving skills effectively.	2	5.3%
The course trains on ways to deal with students who suffer from language difficulties individually.	8	21.1%
The course contributes to providing the opportunity to understand students' individual needs and follow up and guide them accordingly.	4	10.5%
The course contributes to developing the ability to deal with strategies according to certain levels and concepts applied to them to help them at least improve their performance.	4	10.5%
The course trains on how to address the students' problem of not listening	2	5.3%
The course trains students to evaluate them in order to follow up with them to find out their personal needs and how to cover them and help them.	2	5.3%
The course teaches how to act in situations.	2	5.3%
The course trains on how to deal with students from a personal, emotional, and educational perspective.	8	21.1%
The course teaches how to deal with and develop educational strategies.	2	5.3%
This course had a different task that was progressed during meetings over the course's time period, and this gave us an opportunity to follow up on the student through the use of various strategies, including education and evaluation.	2	5.3%
The course teaches diversity in teaching methods within the classroom so that the largest number of students participate.	2	5.3%
Total	38	100.0%

*It is possible to choose more than one answer.

**Percentage of total occurrences.

Table (12) shows that the majority of the study sample members believe that The course trains on ways to deal with students who suffer from language difficulties individually, The course trains on how to deal with students from a personal, emotional, and educational perspective, with a percentage of (21.1%).

- Increasing the partnership between the academy and the school:

Table (13) means and standard deviations of the study sample members' answers to the questions related to the dimension (Increasing the partnership between the academy and the school)

No	item	Mean	Standard Deviations	Importance
1	The course increases my connection to what is happening at school.	4.56	0.86	High
2	The course allows me to create supportive relationships at school.	4.50	0.71	High
3	The course greatly enhances the partnership between the college and the school.	4.44	0.70	High
Increasing the partnership between the academy and the school		4.50	0.64	High

Table (13) shows that means range between (4.44– 4.56), being the highest mean for Item(1) " The course increases my connection to what is happening at school ", but the lowest mean was for Item(3) " The course greatly enhances the partnership between the college and the school ". The overall mean for level of Increasing the partnership between the academy and the school (4.50). From the above it is clear that there is a high level of Increasing the partnership between the academy and the school.

The researcher also extracted the frequencies and percentages of the study sample members' answers to the open question Increasing the partnership between the academy and the school. Table (14) shows this.

Table (14) frequencies and percentages of the study sample members' answers to the open question Increasing the partnership between the academy and the school *

Answer	Frequencies	Percentages**
The course helps to understand and deal with students and the educational system in the school	10	21.7%
The course is characterized by its interest in the practical aspect.	4	8.7%
The course helps in training on how to deal with all types of students and how to deal with all types of problems.	8	17.4%
The course strengthens the partnership between the college and the school, and the lecturer coordinates the matter with the school principal and communicates with the teachers and students.	10	21.7%
The course enhances the ability to successfully simulate and address crises and solve problems and difficulties.	2	4.3%
The course is trained to integrate students through the various topics in the application at school and create a bond of friendship, love and acquaintance between them.	10	21.7%
Learning the course at school can make the college and school cooperate better.	2	4.3%
Total	46	100.0%

*It is possible to choose more than one answer.

**Percentage of total occurrences.

Table (14) shows that the majority of the study sample members believe that The course helps to understand and deal with students and the educational system in the school, he course strengthens the partnership between the college and the school, and the lecturer coordinates the matter with the school principal and communicates with the teachers and students, The course is trained to integrate students through the various topics in the application at school and create a bond of friendship, love and acquaintance between them., with a percentage of (21.7%).

- **Personal and collective responsibility:**

Table (15) means and standard deviations of the study sample members' answers to the questions related to the dimension (Personal and collective responsibility)

No	item	Mean	Standard Deviations	Importance
1	The course allows me to participate in the educational and pedagogical activities of the school.	4.44	0.62	High
2	The course increases personal responsibility towards students' learning.	4.61	0.61	High
3	The course greatly improves personal responsibility towards the teaching profession.	4.56	0.62	High
Personal and collective responsibility		4.54	0.58	High

Table (15) shows that means range between (4.44– 4.61), being the highest mean for Item(2) " The course increases personal responsibility towards students' learning ", but the lowest mean was for Item(1) " The course allows me to participate in the educational and pedagogical activities of the school ".The overall mean for level of Increasing the partnership between the academy and the school (4.54). From the above it is clear that there is a high level of Personal and collective responsibility.

Discussion

The present study sought to examine the impact of teacher education courses on enhancing the clinical training of student teachers. This was achieved by closely integrating theoretical knowledge with practical application across multiple dimensions. These dimensions include connecting theory to practice, promoting research-based learning, encouraging reflective discussions on pedagogy, improving teaching quality, enhancing learning and assessment, fostering collaboration between academic institutions and schools, and promoting both individual and collective involvement.

The fact that teaching students have positive attitudes and views of professional development as a result of taking the Theory and Practice course could be attributed to a number of variables. The tool received a high evaluation score overall, with a mean rating of 4.48. The sub-dimensions had a range of 4.50 to 4.58; the mean for reflective pedagogical discourse was 4.58, while the means for improving learning quality, teaching and evaluation, linking the theory and practice, and fostering individual and group responsibility were 4.44 and 4.44, respectively.

The study's results show a high degree of theory-practice bridging, according to the researcher, for a number of reasons. The highest mean for Item (4) is "the course allows me to create a connection between the theoretical content and the elements of clinical training." Item (3), "the course allows me to study the theoretical content and apply it through cases in the field," had the lowest mean for several reasons. The good attitudes and excellent assessment ratings expressed by teaching students towards the Theory and Practice course (TEFER) can be linked to various significant factors (Blazar, & Kraft, 2017). These variables encompass elements of the course's design, implementation, and general educational environment that collectively enhance the course's effectiveness. The integrated curriculum design facilitates the deliberate incorporation of theoretical knowledge and practical application, enabling students to recognize the direct applicability of classroom learning to their clinical training experiences. This design conforms to contemporary educational standards and exemplifies optimal methodologies, guaranteeing that pupils receive pertinent and current learning (Dana, & Yendol, 2009). Furthermore, the course places a strong emphasis on reflective practice through the promotion of reflective pedagogical conversation. This encourages students to engage in critical analysis of their teaching methods and experiences (Butler, & Reddy, 2010). Regular feedback sessions and reflective discussions enable students to get insights into their competencies and areas for enhancement, cultivating a culture of ongoing professional growth. Furthermore, the course promotes a cooperative learning atmosphere by providing peer and mentor assistance, allowing students to interact with their peers and mentors to exchange experiences, address difficulties, and jointly develop solutions. Engaging educational activities, such as collaborative projects, dialogues, and evaluations by peers, also foster student involvement and cooperation, thereby enriching their total learning encounters.

These findings are consistent with those of previous research (Hadar, Alpert, & Ariav, 2021). The case study examines the response of a college in Israel to the Covid-19 outbreak, focusing on the clinical component of the preservice curriculum. The curriculum shifted towards learner-centered wellbeing and social-emotional learning (SEL) and adaptation of teaching methods. The curriculum was restructured, with some topics omitted or reduced, while others, particularly related to digital instruction, were introduced or expanded. This demonstrates the resilience and agency of teachers during challenging times.

However, the current findings contradict some previous finding (Korthagen, Kessels, Koster, Lagerwerf, and Wubbels, 2001) shown that the realistic approach to teacher education is a new synthesis of various theories and practices developed in the past. It presents a perspective that is not at odds with traditional approaches but a new synthesis of helpful theories and practices. However, the practical consequences for teacher educators may remain concealed. They often have to undergo an intensive change process to work in a realistic way. Teachers often rely on their personal way of working and may not rely too much on explanations. The process of professional development for the implementation of the realistic approach often takes time. Institutional barriers can be difficult to overcome, so training courses should involve the entire institution.

The study's findings suggest a significant degree of integration between theory and practice, as evidenced by the highest average score for Item (4), which states that "the course enables me to establish a link between the theoretical concepts and the practical aspects of clinical training." Conversely, the lowest average score was observed for Item (3), which states that "the course enables me to study the theoretical concepts and apply them in real-world scenarios." In addition, 26.9% of the participants in the survey reported that the course enhanced their abilities in student interaction and problem-solving. Furthermore, 19.2% believed that it played a role in shaping their future educational experiences, with a majority attributing it to their future success. The study also uncovers a significant amount of learning that is based on practical experience, with an average score of 4.48. The highest average score was for Item (1), which promotes dialogue and collaborative discussions to enhance clinical training methods. On the other hand, the lowest average score was for Item (2), which focuses on developing the capability to handle educational and academic challenges. In general, the course offers a thorough and all-encompassing educational experience.

The researcher attributes these results different reasons, the course provides abundant possibilities for practical application through field-based learning, which includes hands-on experiences, case studies, and simulations. This enables students to apply theoretical concepts in real-world teaching situations. The course provides students with the opportunity to enhance their teaching abilities by engaging in practical exercises that simulate real-life situations. Additionally, it places emphasis on the cultivation of practical skills, such as classroom management and problem-solving, which are crucial for effective teaching (Kyriacou, 2018). Moreover, the course promotes research-oriented learning activities, fostering the development of crucial critical thinking and problem-solving abilities that are vital for students' professional advancement. High-quality instruction and well-designed course materials facilitate enhanced teaching quality and evaluation, enabling students to comprehend and implement educational ideas and practices effectively. Utilizing evaluation strategies that yield valuable feedback and precisely gauge student advancement significantly enhance students' favorable opinions of the course (Richardson, 2005).

These findings are consistent with those of previous research (e.g., ; Zeichner, 2010), the paper addresses the disconnect between campus and school-based components in college and university-based pre-service teacher education. Drawing on experiences as a teacher educator and administrator at the University of Wisconsin-Madison, the author discusses the concept of hybridity and "third space" in various programs across the U.S.

This approach aims to deepen the quality of teacher learning and enable graduates to enact desired teaching practices in complex school settings. The paper argues that this shift towards more democratic and inclusive ways of working with schools and communities is necessary for colleges and universities to fulfill their mission in teacher education.

However, the current findings contradict some previous findings (e.g. ; Ord and Nuttall, 2016 the article discusses a study of thirteen newly-qualified teachers and their sense of preparedness to teach. The study found that teachers equated being prepared with being knowledgeable in embodied terms, rather than as knowledge held in the head. The authors argue that the concept of embodiment offers a potential alternative to the long-standing theory/practice divide in teacher education.

The study participants hold the belief that the course fosters research and problem-solving abilities, facilitates the growth of students' emotions and behaviors (18.5%), and adds to favorable student relationships (14.8%). Additionally, there is a belief among participants that the course enhances academic performance and fosters the development of contemporary educational abilities. A considerable number of participants also perceive the course as important in learning these skills. The study demonstrates a significant level of reflective pedagogical dialogue (4.58), with the highest average score for Item (2), which promotes reflective observation of teaching and learning by exploring problems, and the lowest average score for Item (1), which facilitates the acquisition of essential skills and adjustment to students' educational difficulties, is also substantial. Based on the data shown in Table 10, it can be observed that the participants of the study believe that the course improves the interchange of ideas, experiences, and learning through talks with experienced teachers. Specifically, 50.0% of the participants expressed their intention to increase instructional approaches. The study demonstrates a significant increase in the quality of learning, teaching, and evaluation. The item with the highest average score, Item (3) "Improving the credibility of practical training," shows the most improvement. On the other hand, the item with the lowest average score, Item (1) "Enhancing educational materials for practical training," indicates the least change. According to Table 12, the survey sample members think that the course mostly concentrates on individual language challenges, with 21.1% considering it as a holistic approach to student support.

The researcher credits these findings to the course's promotion of robust ties between academic institutions and schools, which fosters teamwork and creates a cohesive and supportive training environment for student teachers. Students benefit from engaging with seasoned professionals and educators, as it offers them valuable perspectives and hands-on expertise, hence enriching their learning experiences. In addition, the course has a strong emphasis on personal and communal responsibility. It promotes individual accountability by encouraging students to take ownership of their learning and professional growth. Furthermore, it fosters collective responsibility through group work and joint projects. This methodology facilitates the acquisition of collaborative skills and fosters mutual assistance in the pursuit of personal development. The course also guarantees a favorable learning environment characterized by a nurturing and inspiring culture, which fosters a sense of worth and motivation among students, so cultivating their overall good dispositions towards the course (Shernoff, 2013). Increased levels of student involvement and active participation in course activities not only enhance the learning experience but also result in favorable perceptions of professional development. The study indicates a significant rise in collaboration between the academic institution and the school, with the item "the course increases my connection to what is happening at school" having the highest average score and the item "the course greatly enhances the partnership between the college and the school" having the lowest average score. The study participants hold the belief that the course facilitates comprehension and management of students and the educational system within schools, enhances collaboration between colleges and schools, and fosters communication among lecturers, principals, teachers, and students. Additionally, it facilitates the integration of pupils across different educational subjects, fostering connections of friendship, affection, and familiarity. The study demonstrates a significant amount of individual and group accountability among the students, with the greatest average indicating an increased sense of responsibility towards their education, and the lowest average indicating little involvement in school activities. The entire collaboration between the academy and school is also strong.

The Theory and Practice course (TEFER) has received favorable evaluations and positive attitudes from teaching students, indicating its complete and multifaceted approach to teacher preparation. The course's success can be credited to a variety of interconnected variables that collectively improve its efficacy in equipping students for their future jobs as instructors. The factors encompassed in this list comprise integrated curriculum design, a strong emphasis on reflective practice, a collaborative learning environment, ample practical application opportunities, a concentrated focus on skill development, improved teaching quality and assessment methods, the promotion of collaboration between institutions, personal and collective responsibility, and the cultivation of a positive learning environment.

The TEFER course's effectiveness lies in its integrated curriculum design, which effortlessly combines theoretical knowledge with practical application. This intentional incorporation enables students to perceive the immediate significance and practicality of classroom instruction in real-life teaching situations. The curriculum is designed to adhere to current educational standards and incorporate best practices. This ensures that students receive instruction that is both relevant and up-to-date, equipping them with the necessary skills and knowledge to navigate the complexity of modern education. The course facilitates the connection between theoretical concepts and clinical training elements, which is crucial for bridging the gap between theory and

practice (Kaufman, 2018). This connection is an essential aspect of teacher education that enhances effectiveness.

The course prioritizes reflective practice, urging students to actively participate in reflective pedagogical conversation. This entails doing a thorough evaluation of their instructional techniques and past experiences, which promotes ongoing enhancement and development in their career. Regular feedback sessions and reflective discussions offer students great insights into their strengths and areas for improvement. The habit of reflecting on one's teaching helps students develop a deeper understanding of themselves and become more flexible instructors. This enables them to analyze and improve their teaching methods with a critical mindset. The TEFER course places great emphasis on fostering a collaborative learning environment. The course promotes peer and mentor assistance, establishing a collaborative network where students may exchange experiences, address difficulties, and collectively discover answers. Interactive learning possibilities, such as collaborative assignments, dialogues, and peer evaluations, also foster engagement and collaboration among students. This cooperative approach not only improves the learning experience but also equips students to function efficiently in educational environments that rely on teamwork.

These findings are consistent with those of previous research (e.g., Mukhalalati and Taylor, 2019) adult learning theories are crucial in healthcare professional education programs. However, there is variation in their use due to a lack of understanding and specific examples. This article synthesizes key learning theories and provides examples in context. A literature review was conducted in 2015 and 2016, identifying relevant literature and their usage in various programs. The summary helps healthcare professionals access a wider range of theories, enhancing instructional strategies and student learning experiences.

However, the current findings contradict some previous findings (e.g. Bullough 2002), the editors of this volume asked the author to explain why they teach teachers, which involves a two-phase response. The first phase begins with a biographical story, highlighting the author's grounding in teacher education. The second phase addresses the principles underpinning their practice and how they know their work makes a difference. The course provides ample possibilities for practical application through field-based learning, case studies, and simulations. These practical experiences enable students to implement theoretical principles in actual teaching situations, aiding them in honing their skills in a controlled yet genuine setting. Through the incorporation of authentic teaching scenarios, the course provides students with opportunities to engage in practical application and improve their pedagogical abilities, so fostering increased effectiveness and confidence in their role as educators. The TEFER course places a significant emphasis on skill development, particularly in practical areas such as classroom management and problem-solving. These abilities are crucial for efficient teaching and are indispensable for handling varied classroom contexts. The course also facilitates research-based learning activities, fostering the development of critical thinking and problem-solving abilities that are essential for students' professional advancement. By prioritizing skill development, students are equipped to effectively navigate the demands of the teaching profession.

The effectiveness of the TEFER course relies on the presence of excellent teaching and carefully crafted course materials these components facilitate students' comprehension and proficient application of educational theories and practices (Marshall, 2016). The course also utilizes efficient evaluation methods that offer significant feedback and precisely gauge student advancement. This method not only improves students' learning experiences but also adds to their favorable views of the course and their general growth in their field. The course fosters robust collaborations between academic institutions and schools, allowing a unified and nurturing training environment for student teachers. Students benefit from engaging with seasoned professionals and educators, as it offers them valuable perspectives and hands-on expertise, hence enriching their learning experiences. These collaborations facilitate the connection between theoretical training and practical application, resulting in a more cohesive and efficient teacher education program (Moolenaar, 2012). The TEFER training places equal importance on individual and group accountability. It fosters individual responsibility by motivating students to assume ownership of their learning and professional growth. At the same time, it promotes a feeling of shared accountability through teamwork and cooperative initiatives, where students acquire the skills to collaborate and encourage one other's development. This dual emphasis enables students to cultivate a comprehensive set of skills and knowledge, allowing them to excel both independently and collaboratively as educators.

An indispensable factor for the success of the TEFER course is the presence of a helpful and encouraging learning environment. An environment of this nature fosters a sense of worth and drive among students, so enhancing their overall favorable dispositions towards the subject. Increased levels of student involvement and active participation in course activities significantly enhance the learning experience, resulting in favorable perceptions of professional development. An setting that promotes positive learning is crucial for cultivating a culture of ongoing development and lifetime learning among aspiring instructors.

Recommendations

1. **Enhance Collaborative Initiatives:** Promote more collaborative efforts between universities and schools to bridge the divide between theoretical understanding and actual implementation. Collaborative efforts, resource sharing, and consistent engagement between teachers and students can facilitate this outcome.

2. Improve Course Content: Regularly update and develop TEFER course content to accurately represent contemporary educational methods and address existing difficulties. By including real-world case studies and examples, the theoretical parts can be made more relevant and applicable.
 3. Enhance Fieldwork possibilities: Broaden the scope of fieldwork possibilities offered in TEFER courses to afford students practical exposure in authentic educational settings. This can facilitate students' comprehension of the practical ramifications of academic principles.
 4. Foster Communication routes: Create and sustain robust communication routes among colleges, schools, and students. Regularly scheduled meetings, interactive feedback sessions, and collaborative platforms can enhance comprehension and foster cooperation among all parties involved.
 5. Foster interdisciplinary learning by incorporating multiple subjects into TEFER courses. This method facilitates students' comprehension of the interrelationships among many disciplines and their collective contribution to a holistic perspective of education.
 6. Facilitate the growth of lecturers, teachers, and school administrators engaged in TEFER courses by offering ongoing professional development opportunities. This can guarantee that they are provided with the most up-to-date pedagogical tactics and technology resources to proficiently instruct and guide students.
 7. Establish a comprehensive monitoring and evaluation system to gauge the influence of TEFER courses on students' comprehension and application of theoretical concepts. Periodic evaluations and constructive criticism can assist in pinpointing areas that need work and showcasing effective tactics.
 8. Foster Student Engagement: Formulate tactics to enhance student involvement and active participation in both the theoretical and practical components of TEFER courses. Utilising interactive teaching approaches, such as group discussions and practical assignments, can enhance the dynamism and engagement of the learning process.
 9. Establish a Supportive Learning Community: Develop a supportive learning community that cultivates a spirit of inclusion and cooperation among students, instructors, and school personnel. This can facilitate the development of more robust relationships and foster a more unified learning environment.
 10. Employ technology to optimise the learning experience in TEFER courses. Online platforms, virtual simulations, and digital materials offer further assistance and adaptability for students to integrate theory and practice.
- By applying these suggestions, TEFER courses can enhance their ability to bridge the gap between theory and practice in education, resulting in better-prepared educators and a more cohesive educational system.

Conclusion

TEFER courses offer a hopeful method for connecting theoretical knowledge and practical application in teacher education. By combining theoretical education with practical application, these courses can greatly improve the clinical training of teacher students, resulting in more proficient and self-assured educators. Sustained research and backing for such endeavors are crucial for the continuous enhancement of teacher education programmes.

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