Building global teaching capacity among pre-service teachers: Epistemological and positional framing in an internationally paired, authentic practicum

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Abstract

Building the capacity of pre-service teachers to work in globalised cross-cultural environments is essential to cope with the challenges of the 21st Century. This study establishes the value of internationally paired, authentically collaborative practicums with strong epistemological and positional framing in pursuing such capacity development. It was conducted among 90 pre-service teachers from three different universities in Australia and India who participated in a three-week paired practicum in three schools in India. The practicum included the collaborative production of an integrated Australian and Indian combined theme presented in a whole school forum. Mixed methods and a design-based research approach yielded data affirming that such a model did indeed provide pre-service teachers with the confidence to teach in increasingly diverse classrooms and contexts, while also identifying which aspects of this practicum model were most influential in this regard.

Keywords: Epistemological and positioning framework; Cross-cultural teaching competence; International paired practicum; Australian and Indian preservice teachers

Introduction

Education in a globalised environment is accepted as a common practice and many universities are conducting international practicums. Collaboration with and exposure to different educational systems are the main successful components of these practicums (Jacobs, Lamb & Philipp, 2010). Future teachers need perspectives beyond their local and national environments

and team teaching in a different country using a different curriculum can provide valuable experiences through many dimensions. Current research seconds this idea and argues for a practicum experience that includes authentic international collaboration and epistemological and positional framing (Goodwin, 2010). The Peer Alliance for Productive Professional Experience (PAPPET) program aimed at achieving these goals. . Overseas practicums are sometimes viewed as *cultural tourism* and could be the source of cultural conflict and may only provide a minimal exposure to systems and practices, and Cruickshank & Westbrook, (2013) challenged these perceptions of overseas practicum as *cultural tourism.* The challenges of an international practicum are associated with dissimilar perceptions or even contradictory perceptions of sociocultural contexts, educational systems and curricula, and are also linked to practices when teaching in different countries.

 An international practicum could influence PSTs in terms of their professional knowledge bases and cultural awareness. This could lead to a considerable, sustained, and positive professional growth (Biraimah & Jotia, 2013). Further these practicum experiences could expose Pre-Service Teachers (PSTs) to experiential learning pedagogy and offer the opportunity for developing their global competencies and agency (Byker & Putman, 2019). Teacher educator-researchers (Smith & Flores, 2019) have pointed out that teacher education institutions across the world are initiating and supporting international intercultural teaching practicums to better prepare PSTs to work effectively in diverse settings, arguing that such experiences have the possibility to guide PSTs towards newer and deeper explorations of epistemologies, thus increasing their intercultural competencies (Lang, Cacciattollo & Kidman, 2017; Thomas & Talbot, 2021).

The term 'multicultural' has been used in this article to indicate a society or a context that contains people from several ethnic groups or cultural traditions. The terms intercultural and cross cultural are used to specify interactions between, among and across cultural/ethnic groups

for example effective communication, collaborations and understanding that can be developed through education. However, it is important to point define these terms have different meanings and perspectives (Guilherme & Diets, 2015) but we use these terms is to determine the aspects, communication and education. Albert and Traiandis (1985) explained that children in multicultural societies could benefit from undertaking effective intercultural education.

Globalised Cross-Cultural Professional Experience for Building Confidence in Teaching

Teacher preparation needs to build teachers' competence to deal with challenging scenarios of diverse contexts (Hagan & McGlynn, 2004). Actualization of building cross-cultural competencies lies in developing global perspectives, and this is highly possible through authentic practicum models (Doston, 2013). It is observed from different international practicums that globally minded teaching emerges from passionate pedagogy, community cultural engagement, teamwork, and collaboration with mentors (Alfaro & Quezada, 2010; Major & Santoro, 2016). Successful capacity building of teachers to deal with the globalised environment of teaching and learning happens through culturally proficient schools, culturally competent educators and culturally responsible teaching (Irvine, 2003). In this context, the authors argue that the PSTs' epistemological and positional framing of aspects of the practicum plays a vital role in building capacity to teach in a global cross-cultural environment. The epistemological framing generally has context dependence and flexibility of process (Hammer, Elby, Scherr, & Redish, 2005), whereas positional framing is situated within the individual, group, and cultural aspects of a program (Hand, Punuel, & Gutierrez, 2012). In an international practicum, the latter develops from new cultural and curricular perspectives, hence PSTs' capacity to deal with epistemological and positional aspects, showing flexibility and cross-cultural awareness, respectively, play a key to success.

Globalised teacher education should facilitate transcultural collaborations, collegiality, and critical perspectives (Howe & Xu, 2013) providing opportunities for transformational learning fostering empathy, global citizenship, and social justice. In the 21st century, rather than considering internationalisation as one set of practices that have been taken up globally, it is better to accept different forms of internationalisation in teacher education that are influenced by both global and local contexts. In this respect, researchers are moving towards a more nuanced and complex understanding of how teacher education institutions across diverse settings are being internationalised using partnerships of cross-national collaborations in practicum experiences (Larsen, 2016).

A report by the Centre for Educational Research and Innovation (OECD, 2010) , found that inequality emerges from social and cultural diversity, however the diversity itself can be a generative and creative resource for educators and for society as a whole. These OECD findings identified the urgent need for improvement in the preparation of teachers to teach in diverse classrooms. Different elements of professional learning, such as teamwork, observations, cultural perspectives, classroom management and meaningful professional learning could lead to capacity building in globalised teaching and learning environments (Simme, Paor, Listion, & O'Shea, 2017). Teacher professional learning strongly depend on multiple cultural contexts and a collective capacity of shared learning goals where a globalised scenario plays a vital role (Opfer & Pedder, 2011). Diversity of teacher dynamics, mitigated with efficient ways to incorporate cultural and linguistic aspects of curricula and teamwork, also play a vital role. It would be helpful to become familiar with different issues and perspectives of teacher dynamics involved in the epistemic dominance of globalism and teaching in globalised environment (Sellar & Lingard, 2013). Teachers and PSTs are confronted with many challenges in multicultural classrooms because competency for teaching in such classrooms does not come easily and requires experience of developing the special skills needed (Teekens, 2003) and

international intercultural teaching practicums can provide required knowledge and skills for teaching diverse students in contemporary classrooms (Tambyah, 2018). Studying innovative international teaching placements that included peer mentorship, Gillard et al. (2020) recommend for extending research that explores international teaching placements with innovative approaches. Responding to these calls we planned, developed, implemented, and evaluated the following international placement model.

The Peer Alliance for Productive Professional Experience in Teaching (PAPPET) Model

The PAPPET model enables a two-way relationship benefiting PSTs from Australia and India. This international practicum was formulated and organised by three universities with participating schools and planned to run for three years. The model has been refined based on the feedback received during the first year program. This program is strengthened through elements like planning a unit of work together with a peer, integrating disciplines, using teamwork, and developing curricular and cultural understandings, which took place through teaching a unit,, with reflection on the outcome. Each of these elements contributed to the overall success of the program in building confidence, competence, and skills for teachers' teaching in a globalised classroom environment.

The five key elements associated with this model are peer group teams from Australia and India (*teamwork*), pre-planning for three months (*planning*), the common production of a fusion product with preservice teacher teams and mentor teachers (*product*), developing an understanding of different classroom practices (*diversity*), and forming an association of teacher educators from two countries through a university and school partnership (*collaboration*). Effective intertwining of these elements is expected to build capacity with confidence and competence in teaching in a globalised environment. It may look as though incoming preservice teaches would gain more benefit from the process, however it has also

provided local PSTs with equal benefits in terms of diversity and planning. Overall, the PAPPET model intended to provide PSTs from Australia and India with a capacity, the confidence, and the competence to work in a globalised teaching and learning environment. This model was carefully and collaboratively designed with consideration given to PSTs to the students they engage , and to meet the expectation of the schools involved (see Döring et al, 2010).

Conceptual Framework

In building a solid classroom teaching and learning scenario, PSTs are attuned to coordinate and mobilize around the broader narratives of multicultural and multilingual aspects through the frames they engage in moments of interaction. To situate learning opportunities within and across different components of multilevel systems, a distinction is proposed between framing within a classroom or learning environment and framing access to educational processes, collaborations, teamwork, preparations, and partnerships of institutions. The confidence and competence of PSTs teaching in cross cultural and globalised scenario will build from this program using an epistemological (in the context of flexibility) and positional (in the context of cross cultural) perspectives associated with the PAPPET program.

Epistemology is context dependent, and the flexibility of the context ideally leads to building a globalised teaching capacity. How a future teacher frames a global teaching experience may be an important factor to consider for future practice and building professional competence (Elby & Hammer, 2010). Educational researchers have suggested that epistemological framing likely drives much of what happens during interactions in school and in a classroom; epistemological framing is how a participant thinks about knowledge as it relates to teaching and learning (Levin, Hammer, & Coffey, 2009).

Positional framing is situated with individual, group, and cultural aspects of PAPPET program (Hand et al, 2012). At present it is essential that PSTs develop increased international knowledge and experience that could be applied in classroom practice, given the increasing multicultural orientations worldwide (Cushner & Mahon, 2002). In this project, PSTs developed a strong element of multiculturalism and multilingualism although teaching is in English. This blending should be viewed from a positional framework for building confidence and competence to teach with cross-cultural awareness globally.

In this research, the confidence and competence building cross cultural and globalised teaching capacity is viewed from epistemological and positional framework and Figure 1, outline elements and aspects connected and their relationships in the conceptual framework.

Research Question

The PAPPET model provided an authentic international practicum teaching experience as peer group in school and has formulated a strong background of research connecting epistemological and positioning frames leading to building capacity to teach in a cross cultural and globalised environment. The research addressed the following question:

How do epistemological and positional framing of the elements of the PAPPET model of a paired practicum enable PSTs from Australia and India to build capacity in teaching globally?

Research Method

Participants

This study was conducted over two years among 90 PSTs from Australia and India who participated in a three-week paired practicum in three schools in Bangalore, India,. The PSTs involved were from three different universities and worked together as teams in three schools.

This study used a mixed method, design-based research setting (DBRC, 2003) in a design partnership model.

Data Collection and Analysis

Data were collected quantitatively using a standardised questionnaire and qualitatively from the reflections of PSTs, interviews with mentor teachers and parents, and researcher observations. The qualitative responses were coded to match with the quantitative responses. Aspects identified as useful for the ***position framing*** are *teamwork, integration of curriculum, and intercultural elements;* while for the ***epistemological framing***, *the overall opportunity based on this program, flexibility in approach, and dependence on collaboration.* The relationship of positional and epistemological framing was analysed by triangulating data in terms confidence and competence in dealing with a globalised teaching environment and using a Structural Equation Modelling (PLS-SEM approach).

The study was conducted in the following four steps appropriate to the methodology:

Step 1. Conceptualising and implementing the PAPPET program.

Step 2. Formulating the research strategy, developing the data collection instruments.,

Step 3. The three-week practicum experience included orientation programs, the pairing of PSTs, and the online exchange of ideas between them for two months before the program.

Step 4. The research data collection and analysis

Instrument Screen and Design

Cronbach's α was used to estimate the internal consistency of data collected from 19 participants and the results was shown in table 1. The items finally selected based on their reliability and validity was in table 2. These questionnaire items were grouped based on Epistemological, Positional and Capacity building criteria. The questionnaire was now

formulated with only those items whose reliability was found to be more than 0.7 using Cronbach's α.

Findings and Discussion

Results (Quantitative)

The Table 2 describes the questionnaire items and findings from the analysis providing the details of all elements in the questionnaire related to epistemological, positioning, general, plan, project, and team. The element 'General' (in Table 2) is connected to ranking based on five aspects, and ranked the final presentation first followed by influence of peer group (2), orientation (3), teaching (4) and with team beyond the program. Most of the elements associated with epistemology, positioning and confidence and competence were found to be with higher (<4.0) mean score.   Only very few aspects associated with curriculum, planning and implementing in schools found to have low mean score. This is obvious and realistic considering the very short period to effectively teach in a highly content and examination-oriented system.

The quantitative analysis based on the response from the questionnaire was analysed using Structural Equation Modelling (SEM) to find the relationship between the epistemological and the position framing of the program to build confidence in teaching based on the PAPPET program. The sample of 90 PSTs is adequate to formulate the inter-relationship between the variables. The details of the analysis using covariance-based SEM with a conceptual model is provided in Figure 2, including all aspects and items in the questionnaire. Figure 3 provides the results and Figure 4 provides the modified model based on the results.

The results in detail are provided in Figures 2, 3, and 4, respectively. Figure 2 provides details of the conceptual model connecting epistemological and positioning frameworks leading to

confidence in teaching in the global scenario. Figure 3 provides the results of the conceptual model from the quantitative responses to the questionnaire data. Figure 4 provides the modified conceptual model to formulate the relationships between epistemological and positioning framing for building confidence in teaching. Table 3 summarises the results.

Measurement Model (Outer Model)

Reflective constructs in PLS analysis need to be evaluated with respect to their internal consistency reliability, indicator reliability, convergent validity, and discriminant validity (Hair et al., 2011).

Table 3 presents the results summary from the modified model, showing the composite reliability (CR) for only "Positional" latent variables as above 0.7, but not the other two. Only in "Positional" is Cronbach´s alpha very close to 0.6.

All the indicator reliability values are close to or above 0.4, as shown in Table 3, and the literature suggests eliminating indicators only rigorously if their loadings are lower than 0.4 (Hair et al., 2011). As indicated in Table 3, all indicators were significant on "Positional" at least a 5% level of significance (two-tailed t-test), however indicators on "Epistemological" and "Confidence and Competence" were not significant.

Convergent validity. An established rule of thumb is that a latent variable should explain a substantial part of each indicator's variance, usually at least 50% (Bagozzi & Yi, 1988). Table 3, indicated that only the "Epistemological" and "Positional" Average Variance Extracted (AVE) values are greater than the acceptable threshold of 0.5, but not "Confidence and Competence." Convergent validity is not well established. This indicated that measurement items relate to the "Confidence and Competence" might not be well established.

Discriminant validity.

Fornell and Larcker (1981) suggest that the square root of AVE in each latent variable can be used to establish discriminant validity, this value should be larger than other correlation values

among the latent variables. To do this, square root of AVE is manually calculated for "Epistemological" (0.708), "Positional" (0.739) and "Confidence and Competence" (0.577). The latent variable "Epistemological" square root of AVE is 0.708. This number is smaller than the correlation values between the latent variable "Confidence and Competence" (0.809). "Positional" square root of AVE is 0.739, which is larger than the correlation between "Epistemological" (0.319) and "Confidence and Competence" (0.602) respectively.

Structural Model (Inner Model)

This examines the overall explanatory power of the structural model, the amount of variance explained by the independent variables, and the magnitude and strength of its paths, where each of our hypotheses corresponds to a specific structural model path. The R^2 which is used to measure the model's explanatory power was 0.786 for "Confidence and Competence," indicating that 78.6% of the total variance in "Confidence and Competence" was explained by both "Epistemological" and "Positional." Not all the path coefficients were statistically significant based on bootstrapping, "Epistemological" to "Confidence and Competence" is 0.687 (t=1.586), "Positional" to "Confidence and Competence" is 0.383 (t=1.146).

Overall, there is a relationship between Epistemological and Positional frameworks contributing to Confidence and Competence, but their interrelationship seems weak. The interrelationships have no significance in identifying confidence and competence, as the study is focused on contributions from epistemological and positional frameworks towards building confidence and competence and has no significance towards the conceptual framework. Statistical findings here from the Structural Equation Model reveal significance in the contribution of these elements to building confidence and competence in global teaching. Further qualitative aspects suggest that there are strong connections (see below).

Findings (Qualitative)

Qualitative data were collected from three-week practicum in terms of team teaching, feedback from mentor, and the final presentation as outcomes of the project. Over the two years of the program twenty-two mentor teachers, and three coordinators from three schools were involved in this program (Total: 3 coordinating teachers and they continued over two years of the program). Twelve of these teachers were involved in both years of the program.

Analysis has been conducted mainly based on the quotes from academics, academic coordinators, mentoring teachers, participants, parents, and newspaper reports in a national daily paper in India in terms of epistemological, positional and building confidence and competence for cross cultural and globalised teaching scenario. The software NVivo 12 used for identifying these aspects from detailed quotes and newspaper reports. A senior editor from a leading Indian national daily (The Hindu) interviewed and reported on participants and journalists, covering the whole school program in three schools.

Epistemological framing-Flexibility

Qualitative data identified strong indications of flexibility associated with the overall program, as evidenced from participating mentor teachers, some parents and relevant newspaper reports.

The following are some selected quotes from placement host schools.

Regarding the experience of having student teachers in their school the Academic Coordinator of School A stated that:

"Initially I thought the group with Australian and Indian student teachers will create issues and confusions for us among children, teaching and our program. After a week I realised children liked it and engaging with them more than the usual teacher. They worked hard as a team and prepared well and provided with engaging activities. Children liked it as it is different, and children were involved. I was pleased and their final whole school presentations were fantastic work"

This claim demonstrates that school children engaged effectively with student teachers producing valuable learning outcomes showcased at the 'school presentations'.

Providing further evidence of the effectiveness of the program, a mentor teacher from School B mentioned that:

"I thought three weeks my whole program is going to be disturbed and there would be parent complaints about their tests and marks; but the opposite happened, children were happy; parents were pleased, and test results also were fine. Because they worked hard together and as a team and worked with different aspects made this, I can't believe at all!"

This evidence highlights that fact that the whole school community, including the parents of students were satisfied with the gained outcomes of the PAPPET program.

In addition the newspaper coverage highlighted how the lessons were engaging and interesting:

"The program in schools also integrated music and dance in their Lessons".

As indicated in the above quotation, lessons were planned to employ an integrated approach and music and dance were used as disciplinarians to display and share cultural aesthetics and knowledge. This approach introduced by the Australian PSTs was a unique experience for students in the highly academic context where 'serious' subjects like literacy, numeracy and science are taught without mixing with dance or music 'joyful' activities.

These quotes highlight the flexibility of the program leading to the success in final outcomes and were clearly establishing and concurring with quantitative findings (Overall mean 4.13 for eight aspects) connected to epistemological framing of the program. The program provided flexibility and creative approaches. The background of working with a local peer provided for quick action and changes of plans when things were not working. The ranking of the program

on five aspects (*teamwork, planning, product, diversity & collaboration*) also provide clarity to this observation.

Positional framing-Cultural

The strong links with framing aspects were identified mainly from the cultural and cross-cultural elements covered, mostly achieved mainly by the school children involved in the program. This was a mutual benefit scenario where all people involved in this program in one way or another benefitted from this program professionally and culturally. Some parents were closely involved in the final presentations, particularly helping with music and Indian classical dance.

The following are some of the quotes from the national daily newspaper, "The Hindu" and parents involved in the program of whole school final presentation in terms of its program, presentation and planning:

1. Regarding the Program:

The names of the schools are de-identified and mentioned as schools A, B, & C (from the original).

Quote 1: "The Australian teachers, who worked with their Indian peers, taught the students of Schools A, B, and C different concepts and topics, and brought about a significant educational and cultural impact on them and the staff."

Quote 2: "They tried to incorporate the pedagogical practices in Australia, which are largely unconventional methods of assessing students' understanding."

Quote 3: *"With many Australian schools having fewer number of students, there is greater personal attention for students by teachers, and there is a strong focus on activity-based learning."*

Quote 4: "*They got opportunities to understand the educational systems in the two countries and imbibe the best elements.*"

Quote 5: "*Australian participants spoke about smaller numbers of students in classrooms, greater personal attention for each student, emphasis on activity-based learning, multiple methods of assessing students' knowledge etc.*"

2. Regarding Final Presentation:

The following quotes are about the success of final presentations reported in the newspaper articles from three schools.

> "*The Art group, under the guidance of Al, S and J, created collage, oil pastel sketch etc. based on various cultural aspects of the two countries. One pair worked on the history and landscape of Melbourne and Bengaluru with a glass painting of the maps of both the places.*"

"*The roleplay group guided by L, Jo and E, selected four animals from India (elephant, lion, peacock, tiger) and Australia (kangaroo, emu, koala, ostrich) and made masks of these animals, and performed a role play on British colonial rule.*"

"*The Experiments group guided by D and Sua, put up explanatory displays of density, solar energy, ecological conservation, natural disasters, bushfire, etc.*"

"*While the Dance group overseen by Tz, Ts and JC, focused on dance forms of Australia and India, the Rhythmic group, guided by singers G F and Sn Ma, worked on song writing. The popular Australian song, "My Island Home" by singer Christine Anu was selected. After the*

students got familiar with it, they did an Indian adaptation, and came up with "My motherland is great for me".

3. Regarding Planning:

Planning of this program was done by the team of PSTs in all three schools from the first day of the program and willingly supported the student groups for effective completion. Providing evidence for such engagement by the PSTs, one host school highlighted that:

"The preservice teachers organised the morning assembly with the help of students of Grade six on the theme: Australia – animals, birds, landscapes and culture."

The cross-cultural elements covered from the teaching program and final presentations took place concurrently they were formulated during the teaching practicum as a team. This emerged from teamwork of mentor teachers, parents and PSTs covering individual, group and cultural aspects within positional framework. This observation was complimented by the overall mean of 4.27 from seven aspects.

Building Confidence and Competence

The following quotes from newspaper reports and comments from the parents provide insight into how the PSTs teachers developed confidence and competence from this program experience.

The newspaper quotes reported:

"The professional competencies developed during this course were: Team teaching by unfamiliar methods"

Exposure to new and different pedagogical methods are highlighted by Aamaas, Nodeland and Duesund (2019) as important outcomes of international teaching placements. This feedback concerns both parties (Australian and Indian student teachers) and explaining the commitment of Australian PSTs, as the newspaper highlights that:

"They also performed a Bollywood number for the students and learnt a few Bollywood songs from their Indian peers."

This also indicates that peer (cross-cultural) learning occurred as a result of pairing student teachers from Australia and India for this program. This is a unique feature of the PAPPET program and such intercultural learning outcomes were intended to be produced when the project was planned with a 'pairing' component.

Comments by Parents:

A parent of a school student provided the following feedback about their own experience and achievements of the child stating:

"I learned a lot about Australia and first time I heard about Aboriginal people in Australia and my child could understand Aussie accent now…."

Personal enrichment gained encountering foreign cultures from international teaching placement is considered a valuable experience (Aamaas, Nodeland & Duesund, 2019).

Another parent (from a different school) mentioned:

"I am a professional dancer and pleased with involving these Australian girls and teaching them basics of Indian traditional dance and they learn quick as they dance always in their culture. My child really forced me to come to school and every day during lunch time I spend time with them. To my surprise they presented well in the school assembly, they have great

confidence!"

This comment provides valuable evidence of the engagement of the 'whole school community' where parents (with appropriate backgrounds) were involved as experts providing authentic experiences. Parent engagement was also an intended outcome of the PAPPET program design, and it was inspiring to evident such instances during the implementation. Williams, Fitzgerald and Parr (2017) recommend exploring the dimensions of personal and professional learning gained by participants including host communities as a timely action in international professional experience programs.

Overall, the qualitative data complemented the strong capacity building among participating PSTs. The success of the participants in achieving confidence in a global teaching environment derived from competencies gained through the epistemological and positional framing of this program.

Findings from Qualitative and Quantitative Combinations

The quantitative data provided an overall picture of this model with indicators and key aspects and their interrelations. Each element of this program contributed to achieving confidence in a globalised teaching environment. The quantitative aspects were collected from participants alone and based on their self-reporting. The major finding from this data using the structural equation model is that Epistemological and Positional frameworks contribute to Confidence and Competence.

The qualitative data provides a complement to the findings of confidence building from this PAPPET program based on epistemological and positional frames. It is important to highlight that the findings of this research specifically describe the benefits gained by the placement hosts in India because as Jin, Parr and Hui (2020) point out limited attention has been paid to the experiences and benefits of non-western practicum partners.

Limitations

The sample involved only 90 PSTs'; however in such an international programs it will be difficult to find large samples. The data consists of a very heterogeneous group who worked in a common program, and academics involved from three universities who observed the coherence of this program and had been provided with orientation programs. This made for coherence in their approach and delivery, and that has surprised both schools and teachers. However, much care should be taken in generalising these findings.

Conclusions

The importance of global teaching and understanding cross cultural elements has become a reality during the present crisis of COVID19. Teaching involves countless variables, contexts and multiple perspectives within a classroom, and to formulate a learning outcome needs a globalised worldview and multi-cultural understanding (Opfer & Pedder, 2011). There should be a clear vision in preparing teachers for a multicultural and diverse society, and building confidence, skills, and competence among PSTs needs a coherent approach (Village & Lucas, 2002).

An international practicum experience covering linguistic, multicultural, and different curriculum seems to be a real and challenging experience for PSTs. Team-based participation and preparation for a highly structured program like PAPPET could be a model for an international practicum. Epistemic dominance with flexibility, and positional aspects with cultural elements, finally evoked confidence building in a globalised scenario (Sellar & Lingard, 2013). The PAPPET experience of learning and performing in a paired practicum placement could translate elsewhere and generate innovation and efficiency in PSTs' future careers (Schwartz, Bransford, & Sears, 2005). Teacher educators also play a vital role in formulating

the program, and it is important to highlight their influence and experience in formulating programs like PAPPET (Williams, 2019). Such approaches, reflections, contextualisation, and formulation of programs could generate frameworks that have benefits far beyond teaching and learning (Kahn & Agnew, 2017).

Overall, the following aspects from this study could be formulated for building confidence, competence, and skills for teaching in a global multicultural scenario:

- Experience in a team consisting of those familiar with local conditions and curriculum plays a vital role in team teaching

- Coherence and planning before the program make a significant contribution to confidence building

- Cross cultural infusions in approaches and strategies play a vital role in making a rich experience for students

- Aligning with the normal school program, adaptability and flexibility are key achievements

- Effective planning made a win-win situation for the school program, the students in school, and the PSTs' practicum experience.

This study has delineated an effective international practicum developed for achieving confidence in teaching in a global scenario, irrespective of the curriculum used and the cultural and linguistic barriers among PSTs. The diligent, cooperative, and systematic planning with all stakeholders involved and framing of this program with achievable intended outcomes has provided the epistemological and positional framing to build PSTs' confidence (Talbot & Thomas 2021; Tudball & Phillips 2017). There is no perfect model designed for an international practicum (Kim, Yun & Sol, 2020). However, the PAPPET program has achieved a range of benefits for all stake holders such as PSTs (from Australia and India), students in

schools and their parents, participating schools, and mentor teachers. Therefore, the PAPPET model can be recommended as a functional framework that can be adapted for future international teaching placements.

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Tables and Figures

Table 1.

Results of Cronbach's α analysis for formulating the reliability of the instrument.

	Item	Cronbach's α Initial	Cronbach's α Final
1	PAPPET General (PG)	0.689 (n=10)	0.809 (n=5)
2	Confidence & Competence (CC)	0.582 (n=15)	0.778 (n=10)
3	Program (APE)	0.482 (n=10)	0.807 (n=5)
4	Planning (APP)	0.345 (n=10)	0.607 (n=5)

Table 2.

Final questionnaire items.

Element**	Code*	Description	Mean (SD) n=90
EPE- epistemological		Overall	4.13 (0.25
	PG1	Globalised scenario of planning and teaching	4.82 (0.39)
	PG2	Different university position of teacher education	4.46 (0.60)
	APE1	Overall model	4.49 (0.51)
	APE2	Teamwork	4.23 (0.90)
	APE3	Integration with syllabus and curriculum	2.15 (0.96)
	APE4	Practicum documentation	3.97 (0.74)
	APP1	Planning by host university	4.36 (0.67)
	APP3	Practicum planning	4.59 (0.55)
GEN-General		Overall	3.01 (0.03)
	RK1	Peer group	2.08 (1.09)
	RK2	Orientations	3.23 (0.96)
	RK3	Team teaching	3.87 (1.06)
	RK4	With team beyond the program	4.13 (1.26)
	RK5	Final presentations	1.72 (0.92)
PL- Plan		Overall	4.02 (0.23)
	CC2	Teaching in different curricular perspectives	4.90 (0.31)
	CC3	Effective working and planning in a team	4.46 (0.68)
	CC4	Flexible plans and implementation	2.21 (0.70)
	CC7	Information seeking and improving plans	4.51 (0.76)
PO - Positional		Overall	4.27 (0.31)
	PG3	Challenges of placement in a different country	4.49 (0.64)
	PG4	Different curricular background	4.59 (0.79)
	PG5	Different pedagogical approaches and team teaching	4.38 (0.67)
	APE5	Intercultural elements	5.00 (0.00)

	APP2	Peer group planning	4.49 (0.6)
	APP4	Planning in Indian curriculum	2.49 (1.12)
	APP5	Planning for Indian classroom management	4.44 (0.6)
		Overall	4.53 (0.28)
PR - Project	CC8	Orientation programs for clarity and awareness	4.44 (0.68)
	CC9	Cultural awareness	4.15 (0.90)
	CC10	Ability to teach anywhere in the world	5.00 (0.00)
		Overall	4.09 (0.39)
TM- Team	CC1	Ability to work in a team	4.05 (1.00)
	CC5	Working with strengths and weaknesses of team	3.28 (0.46)
	CC6	Classroom management	4.95 (0.22)

Note. *PG 1- 5 - PAPPET general: CC 1-10 – Confidence and Competence: APE 1-5 – Aspects of Program Element: APP 1-5 – Aspects of Program Planning: RK- Ranking of issues. ** EP- Epistemological: PO - Positional: PL- Plan: PR - Project: TM- Team: & GEN-General

Table 3.

Results summary of the modified model.

Variable	loading	Indicator Reliability	Composite Reliability (CR)	Average Variance Extracted (AVE)	Cronbach's Alpha	R square	T- Statistics
Epistemological			0.033	0.501	-1.213		
APE3	0.831	0.691					1.769
APE 4	-0.663	0.440					1.847
APP3	-0.613	0.376					1.676
PG1	0.706	0.498					1.844
Positional			0.782	0.546	0.598		
APP2	2.401	5.765					2.401
APP4	2.210	4.884					2.210
APP5	2.182	4.761					2.182
Confidence and Competence			0.073	0.333	-0.780	0.786	
CC1	1.311	1.719					1.311
CC2	1.404	1.971					1.404
CC3	1.281	1.641					1.281
CC4	1.276	1.628					1.276
CC5	1.134	1.286					1.134
CC6	1.475	2.176					1.475
CC7	1.180	1.392					1.180

Note. The AVE value of the construct should be greater than 0.5, and Cronbach's alpha should be higher than 0.7, and for composite reliability the value of 0.7 is suggested as "modest".

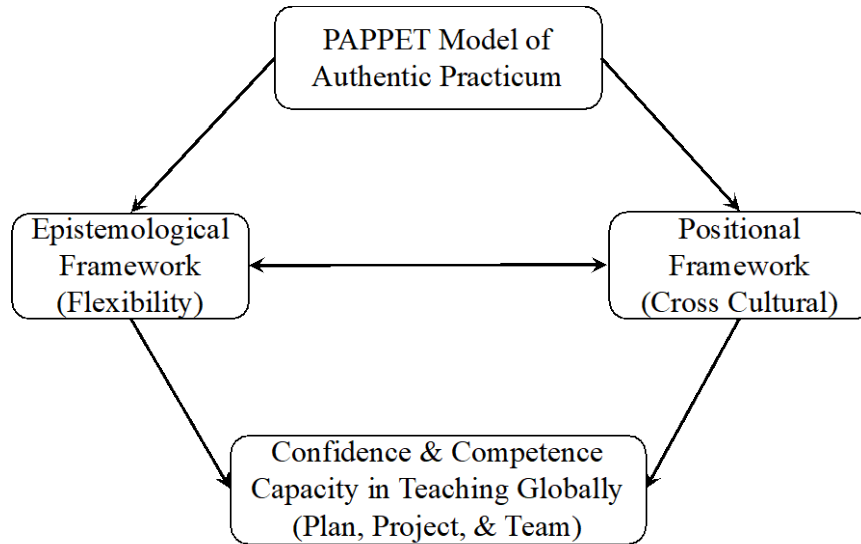**Figure 1.**

The conceptual framework.

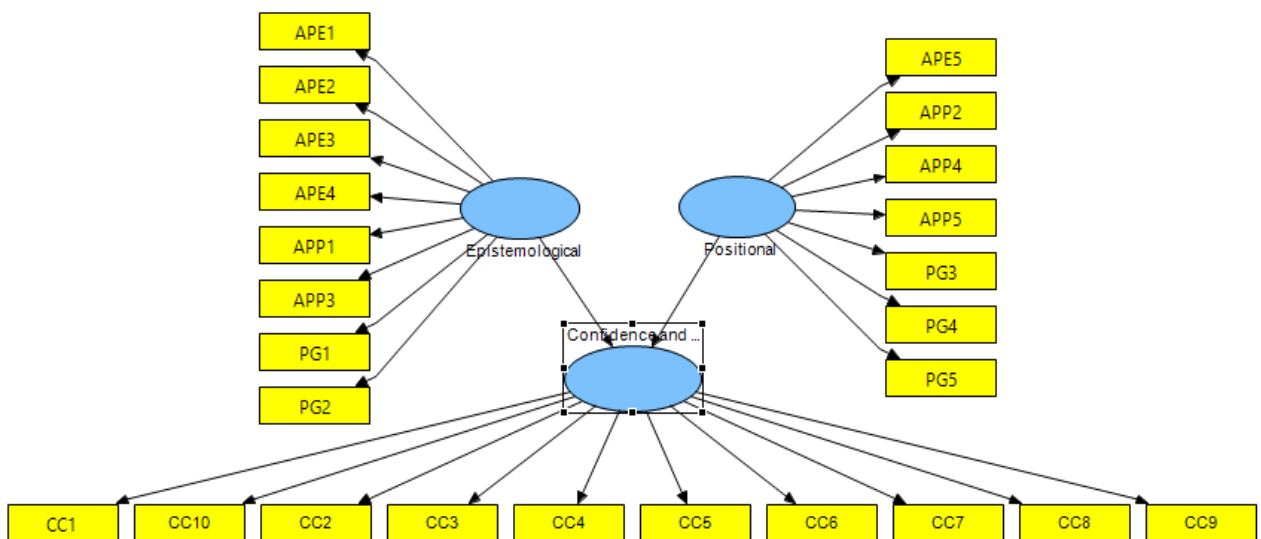**Figure 2.**

The analytic model.

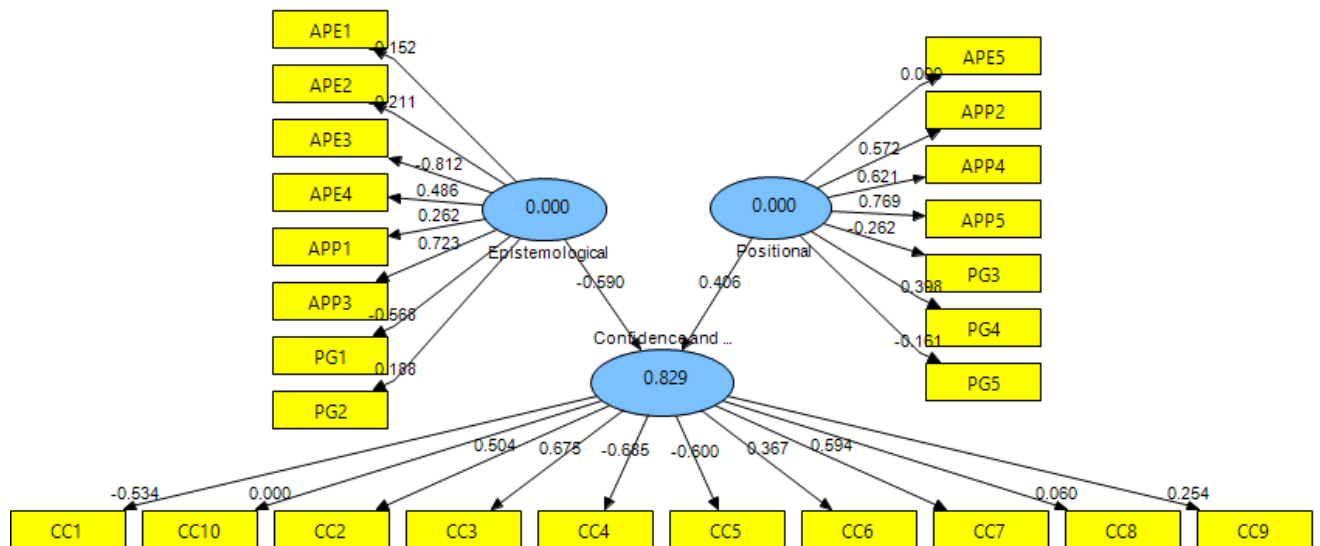**Figure 3.**

The results of conceptual model from quantitative responses.

Figure 4.

The modification of the conceptual model.