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The character of teaching practices in a teacher education institution: Findings from observation checklist

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This study was conducted to characterise the teaching practices in a teacher education institution so as to inform us the existing practices which could then be compared with the aspired practices, uncovering the pedagogical shortfall. This study employed a form of implementation study using classroom observation. A total of 20 lessons drawn from Early Childhood Education, Mathematics, Science, Secondary School TESL (Teaching of English as a Second Language), History, Physical and Health Education, and Moral Education taught by lecturers in one Teacher Education Institution were observed over a one-semester period. A psychometrically-supported Observation Checklist comprising 50 items or indicators that spread across six principles was utilised in the observation whereby observers checked in terms of presence or absence of each indicator during the classroom observations. This study provides the characterisation of evidenced-based practices, uncovering the pedagogical gap which could be subsequently addressed by various means such as the providence of continuous in-service courses. Empowering lecturers pedagogically will produce quality teachers which in turn, produce quality students.

Keywords: Teaching practices, teacher education, classroom observation, observation checklist

Introduction

Teacher Education Institutions around the world are striving to enhance their respective education programs so as to produce graduates who are competent and effective teachers (Gore, Griffith, & Ladwig, 2004; Paronjodi, Jusoh, & Abdullah, 2017; Ratnavadivel et al., 2014). Goh and Wong (2015) emphatically state that every student teacher "must" (p. 44) be given the right teacher education preparation so that he/she is able to meet the high teaching standards demanded of him/her. Critiques of teaching quality and teacher effectiveness consistently point a finger at teacher education, arguing that if only teacher preparation was improved, then better and effective teaching would be ubiquitous. While teacher educators are right in identifying a range of external factors such as poor funding and large class sizes which

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pose a threat to the effectiveness of their teacher education programs, they are quite acceptable of the weaknesses and spaces for reform within their teacher education programs (Darling-Hammond, 1997; Ramsey, 2000; The Scottish Executive, 2001).

Reform initiatives in transforming teacher education seem to be the current focus given the awareness that the effectiveness of teachers is the key to school improvement (Roberts-Hull, Jensen, & Cooper, 2015). The ways in which pre-service teachers are prepared to be teachers have a critical influence on what teachers can do and what their students learn. Many teacher education programs, as evaluated by Roberts-Hull et al. (2015), have shown serious problems with the initial teacher education (ITE), which include "a lack of evidence-based content; inadequate training in subject knowledge; an insufficient focus on data collection and analysis skills for clinical teaching practice; and limited integration of theory and practice" (p. 6).

It is disheartening for the Teacher Education Ministerial Advisory Group (TEMAG, 2014) in Australia to discover that many teacher education programs were teaching practices that were not up-to-date, not based on research, or not properly understood by those who were teaching them. Meanwhile, with regard to the problem of inadequate training in subject knowledge, Thanheiser et al. (2014) found that one of the biggest deficiencies among primary teachers is in teaching mathematics where these teachers lack the necessary procedural understanding of the mathematical or scientific concepts they are required to teach, which in turn, creates anxiety when teaching these subjects. Research shows that such mathematics teaching anxiety may have a negative impact on female student achievement (Beilock, Gunderson, Ramirez, & Levine, 2010). Yet another problem, very few teacher education programs are equipping beginning teachers with the skills and ability of continually analysing and developing their own practices (Griffin et al., 2013; Hattie, 2009).

Contemporary teacher education research indicates the importance of teachers collecting and analysing data on their students' learning (including both formative and summative assessments) and then target their teaching to increase each student's learning (Griffin & Care, 2014). With regard to problem of limited integration of theory and practice, research has indicated that the application of educational theory into classroom practice is an essential part of a beginning teacher's development (Barber & Mourshed, 2007) whereby new teachers continually report that their practical experience in a school is the most useful part of their teacher preparation. This is supported by high performing systems such as Singapore and Japan which integrate a substantial practical component within their initial teacher education to develop classroom management skills and link pedagogical theory and practice (Jensen, Hunter, Sonnemann, & Burns, 2012).

In step with the current reform in teacher education, Malaysia, spearheaded by Sultan Idris Education University, is developing the Malaysian Teacher Education Model in her quest to prepare quality teachers for the future. In the early stages of the model development, Guiding Principles for Teaching and Learning were identified by means of document analysis of existing theories and pertinent policies, and interview with key informants (who are generally policy makers) and experts (who are generally teacher education experts). A Teaching & Learning Instrument was then developed around the Guiding Principles for Teaching and Learning, piloted, and validated through an exploratory factor analysis, supporting the existence of six dimensions/principles (Mazlini, Azwani, Nor'ain, & Nurulhuda, 2015) while retaining 50 out of the initial 67 items across the six dimension/principles (Noraini Idris et al., 2014) for the observation checklist on aspired teaching practices in the preparation of quality future teachers.

Although the Guiding Principles embody the aspired and ideal teaching practices in teacher education institutions, the actual implemented teaching practices, nevertheless, have yet to be ascertained and characterised. Such characterisation of actual teaching practices is

very crucial because it informs us the existing practices which could then be compared with the aspired practices, uncovering the pedagogical shortfall which could then be subsequently remediated through appropriate in-service professional development. Accordingly, this research aims to illuminate the following research question.
What are the characters of teaching practices in a Teacher Education Institution as gauged from classroom observations using an observation checklist?

Characterisation of teaching practices: A review

There is a wide range of legitimate methods in characterising current teaching practices in teacher education institutions. Among these methods is the use of observation. Nevertheless, Washer (2006) argues that generally, lecturers dislike being observed while teaching and find the process threatening, time-consuming and often see it as a paper exercise simply carried out for research or even for quality review purposes. Yet if observation is handled sensitively, Washer (2006) concretises that the time invested in the process of observing teaching and being observed can help improve teaching experiences, share best practices, build academic links and foster innovation.

Observation can be a powerful learning tool (O'Leary, 2015; Wajnryb, 1992) for teachers as well as researchers in the preliminary model development stages. There are many forms of observation in qualitative research and the choice a researcher takes is dependent on "the involvement of the researcher" (Gay & Airasian, 2001, p.211). However, Babbie (2002) argues that the role for and involvement of the researcher depend on the situation, and hence "there are no clear guidelines for making this choice" (p.285). In the quest to make a decision on the form of observation to adopt, the quote by Bogdan and Biklan (1998) gives some enlightenment:

> *Becoming a researcher means internalising the research goal while collecting data in the field. .... You conduct research ... always from the purpose of promoting your research goals. You carry with you an imaginary sign that you hang over each subject and on every wall and tree. The sign says, 'my primary purpose in being here is to collect data. How does what I am doing relate to that goal?' (p.82).*

Observation generally invokes in our minds a qualitative description of certain behaviour which we would like to characterise (Ong & Ruthven, 2010). However, observation in the form of checklist is equally valid in evaluative research to determine the extent to which certain behaviours or teaching practices are observed throughout a lesson (Jarzabkowski & Bone, 1998).

Observation checklist can be used to facilitate useful observation in a variety of ways. In this research, observation checklist was used to explore the extent to which the psychometrically-supported Guiding Principles for Teaching and Learning have been exemplified. Equally, the observation checklist could also be used to identify certain good teaching practices which, although being observed, were not listed in the checklist, thus providing additional good-practice items to the checklist. Other uses of checklist range from observation by coach or partner (e.g., with another immersion teacher) are to provide valuable feedback over the course of an academic year (Belisle, 1999), to observation by immersion administrators or curriculum and instructional assistants to assist the observation of individual teachers or to work overtime with grade-level teams. While we are aware that targeting several checklist categories is more valuable than tackling all the categories, the observation in this research targeted all the guiding principles which may be cross checked by recording of the teaching and learning in the classrooms.

This paper reports a section of a wider study that aims to develop a teacher education model in the Malaysian context. Specifically, it focuses on the character of the teaching practices in a Teacher Education Institution, gauged from classrooms observations using the teaching and learning observation checklist.

Methodology

Research design

A form of implementation study using classroom observation was employed (Ong, 2004; Ong & Ruthven, 2010). Given the intent of our research question, overt non-participant observation procedure was deemed appropriate. Pragmatically, it would be more objective to focus our attention on the specified issues (i.e., teaching practices adopted) instead of participating and taking detailed field notes simultaneously. The observation checklist, of which the items are categorised within six principles or themes as documented in the Teaching and Learning Guiding Principles developed, validated and reported elsewhere (e.g., Mazlini, Azwani, Nor'ain, & Nurulhuda, 2015; Noraini et al., 2014), entails the observers to check in terms of presence or absence of each indicator in his/her classroom observation. To further cross-check the observation, the lesson taught in each classroom observation was videotaped by a research assistant while two observers (research team members) checked against the list of 50 indicators/items. Should there be any disagreement in a checked observation, the observers would discuss until a mutual agreement was reached. In certain doubtful instances, the observers reviewed the relevant video recordings for empirical evidences.

These steps in which mutual agreement was reached and that the observers reviewed the videos recordings by the research assistants when in doubts or in disagreement were taken to ensure the validity of the checked observations (O'Leary, 2014). Besides, Croll (1986) argues that the main way in checking the reliability of observational technique is through replication as "it (replication) is more feasible in studies involving more-structured observation where procedures are clearly specified and therefore can be fairly easily repeated. One form of replication is involves examining the extent of agreement between two observers of the same behaviour" (p. 71).

Sampling

A total of 20 lessons drawn from Early Childhood Education, Mathematics, Science, Secondary School TESL (Teaching of English as a Second Language), History, Physical and Health Education, and Moral Education taught by 13 lecturers in one Teacher Education Institution were observed over a one-semester period. Table 1 shows the breakdown of observations by programs/subjects and lecturers.

Table 1. The number of observations for each program/course

Teacher Education Institution	Number of Observations	Number of teachers being observed
B. Ed. (Early Childhood Education)	2	1
B. Ed. (Mathematics)	3	2
B. Ed. (Science)	3	2
B. Ed. (Secondary School TESL)	3	2
B. Ed. (History)	2	2
B. Ed. (Physical and Health Education)	1	1
B. Ed (Moral Education)	4	2

University Courses	2	1
Total	20	13

Instrumentation

An Observation Checklist comprising 50 items that are spread across six principles or dimensions was utilised in this research. These six dimensions were psychometrically supported by means of an exploratory factor analysis (Mazlini et al., 2015) with their Cronbach's alpha reliability values for the six dimensions ranging between 0.87 and 0.93 (Noraini et al., 2014). Table 2 shows the six principles and their pertinent items in the 50-item Observation Checklist.

Table 2. Principles and their corresponding items in the 50-item observation checklist

Number	Principle	Items
1	Fostering intellectual excitement	1 – 12
2	Providing quality learning spaces, technology and resources	13 – 19
3	Ensuring constructive instructional alignment	20 – 27
4	Offering diverse learning environment	28 – 32
5	Nurturing a climate of inquiry and critical reflection	33 – 39
6	Nurturing good values, attitudes and behaviours	40 – 50

Data collection and analysis procedures

In each of the eight programmes, two lecturers assigned to teach the first semester students were identified by means of recommendation by the respective faculties. While consent to be observed from these identified lecturers were sought, not all of them consented. However, at least one lecturer from each program consented to be observed. Once the consents had been received, each lecturer was asked to send his/her teaching schedule. An overall observation schedule was drawn up upon consultation with and approval from the lecturers to be observed.

Each lecturer was observed at least once and not more than twice. In each observation, two research team members were assigned as observers while a research assistant was assigned to video tape the teaching. Each observation lasted for the entire lecture session which was either a two- or three-hour lecture. At the end of the session, the two observers reconvened and agreed on the observation, specifically to each of the 50 items in the Observation Checklist. The final Observation Checklist consisting of mutually agreed-upon checked observations was collected by a Research Assistant. Overall, a total of 20 Observation Checklists were received.

The data from 20 Observation Checklists were keyed into SPSS (Statistical Package for the Social Sciences). The data were then analysed descriptively in terms of frequency and percentage by each item within each theme.

Findings

In analysing the data from the classroom observation checklist, the prevalence for each indicator (or item or practice) within a theme was quantified and summarised so that a story could be relayed in terms of how wide-spread each practice is. While there are many ways to define a mastery level such as the use of two-thirds rule which Ong et al. (2013) argue that "it helps to prevent making a decision that a person has "mastered" a certain skill with small majority of correct responses over a large minority of incorrect responses" (p.988), there was, nevertheless, no hard and fast rule to determine the prevalence of a teaching practice. As such,

by taking into considering practices observed over a semester taught by differing lecturers across a range of disciplines, it was therefore valid to argue that should a practice be observed more than 25% in the total observations, it should be regarded as "prevalent" in the overall observation. Accordingly, a "quartile rule" was conceptualised to assist in the analysis of the observation checklist data.

The analysis of the observation checklist data indicates six themes that serve to characterise the teaching and learning observed, namely.

- Fostering intellectual excitement.
- Providing quality learning spaces, resources and technologies.
- Ensuring constructive instructional alignment.
- Offering diverse learning environment.
- Nurturing a climate of inquiry and critical reflection.
- Nurturing good values, attitudes and behaviours.

Theme 1: Fostering intellectual excitement

Based on 20 classroom observations as shown in Table 3, the observed teaching and learning practices indicate that it was a prevalent practice for students to do small group presentations (#3, frequency, f = 11), to complete a problem solving activity (#1, f = 10), to assign students into small discussion groups (#2, f = 8), and subsequently to present their work in class (#6, f = 10). Additionally, it was observed that the teaching and learning did provide students the opportunity to discuss real-life situations related to the topics at hand (#10, f = 7).

Nevertheless, there was a scarcity from the observed practices which foster critical evaluation such as critically evaluating the work or ideas of their peers (#7, f = 5), challenging the ideas proffered by their lecturers or by their peers (#8, f = 1), and debating on an issue (#4, f =1). It was also rare to observe lecturers using real-life situations as examples (#9, f = 5) in their teaching. Equally, it was observed that lecturers fell short of fostering intellectual excitement in terms of having students to compare theories and concepts which are relevant to the lesson at hand (#11, f = 5) and providing students with the opportunity to ask higher order thinking questions (#12, f = 5). The use of role play and/or simulations (#5, f = 3) was also not prevalent in the observed teaching and learning practices.

Table 3. Teaching practices as checked against indicators for fostering intellectual excitement

Item	Indicator	f	%	
3	Group presentation	11	55	*
1	Problem solving	10	50	*
6	Individual class presentation	10	50	*
2	Small group discussion	8	40	*
10	Use real-life situation as context for student analysis or discussion	7	35	*
7	Evaluate peers' work/idea	5	25	
9	Use real-life situation as examples	5	25	
11	Student compare theories/concepts	5	25	
12	Ask HOT questions	5	25	
5	Role-play or Simulation	3	15	
4	Debate	1	5	
8	Challenge peers' or lecturer's idea	1	5	

* Percentages which met the quartile rule

Theme 2: Providing quality learning spaces, resources and technologies

Based on 20 classroom observations as shown in Table 4, it was heartening to observe a wide-spread judicious use of technological equipment provided in the classroom to enhance the teaching and learning process (#13, f = 16) and that the lessons were conducted in a comfortable and conducive manner (#14, f = 13).

Although lecturers were seen encouraging students to use the technological equipment provided for learning purposes during the lesson (#16, f= 4), web-based resources as part of the materials (#18, f = 5), assigning tasks that include the use of web-based tools (#17, f = 2), assisting students in developing the skills to capitalise on the learning resources (#19, f = 2), and telling students where to get the books and/or course materials needed for the lesson (#15, f = 3), such practices, nonetheless, were not very wide spread as evident in the very low number of times these practices were observed.

Table 4. Teaching practices as checked against indicators for providing quality learning spaces, resources and technologies

Item	Indicator	f	%	
13	Use technological equipment provided.	16	80	*
14	Conduct lesson in a comfortable learning space.	13	65	*
18	Make use of web based resources as part of the materials.	5	25	
16	Encourage students to use the provided technological equipment.	4	20	
15	Inform students where to get the needed books or course materials.	3	15	
17	Assign tasks that include the use of web based tools.	2	10	
19	Assist students in developing the skills to use learning resources.	2	10	

* Percentages which met the quartile rule

Theme 3: Ensuring constructive instructional alignment

Based on 20 classroom observations as shown in Table 5, lecturers were generally seen ensuring constructive instructional alignment whereby they related new content or concept at hand to previously learned content or concept (#20, f = 13), carried out activities which were not only appropriate to the topic/content of the lesson (#21, f = 11) but also appropriate to the achievement of the learning outcomes (#22, f = 12), and assigned tasks which require the students to practise what they have learned in the class (#27, f = 7) by providing appropriate assessment tasks or activities to assess students' learning (#23, f = 9) whereby the assessment methods in the lessons were of different varieties (#24, f = 9).

However, in terms of making links to real-life situation, less than one-quarter of the 20 classroom observations indicated that lecturers did assign tasks which require students to apply what they have learned to real-life situations (#26, f = 3), and they (the lecturers) did ask students to relate the theories or concepts that they have learnt to real-life situations (#25, f = 2).

Table 5. Teaching practices as checked against indicators for ensuring constructivist alignment

Item	Indicator	f	%	
20	Relate new content to previously-learned content.	13	65	*
22	Carry out appropriate activities to achieve learning outcomes.	12	60	*
21	Carry out appropriate content-related activities.	11	55	*
23	Provide appropriate assessment tasks/activities.	9	45	*

Item	Indicator	f	%	
24	Use a variety of assessment methods.	9	45	*
27	Assign tasks that require the practice of what was learned.	7	35	*
25	Ask students to relate theories/concepts to real-life situations.	2	10	
26	Assign tasks that apply what was learned to real-life situations.	3	15	

* Percentages which met the quartile rule

Theme 4: Offering diverse learning environment

Based on 20 classroom observations as shown in Table 6, the overall picture indicates that lecturers were not thoughtfully seen in offering an international and culturally learning environment to their students. Specifically, lecturers were seldom seen to form heterogeneous groups in terms of ethnicity (#28, f = 5), use examples which are relevant to different cultures when explaining a topic in class (#29, f = 5), give tasks or assignments that encourage students to draw from their own experiences (#30, f = 3), encourage students to share their views and ideas from their own cultural perspectives (#31, f = 3), and use books and/or materials produced by authors from different countries on the lessons (#32, f =3).

Table 6. Teaching practices as checked against indicators for offering diverse learning environment

Item	Indicator	f	%
28	Form heterogeneous groups in terms of cultural backgrounds.	5	25
29	Use culturally relevant examples.	5	25
30	Give tasks or assignments that encourage students to draw from their own experiences.	3	15
31	Encourage sharing of different cultural views/ ideas.	3	15
32	Use books/materials produced by writers from different countries.	3	15

Theme 5: Nurturing a climate of inquiry and critical reflection

Based on 20 classroom observations as shown in Table 7, the overall picture indicates that generally, lecturers fell short of nurturing a climate of inquiry and critical reflection. While it was prevalent to see lecturers included a question that requires students to reflect on what they have learned and to suggest ways for improvement in the assignments (#33, f = 11), the practices of encouraging students to ask questions (#37, f = 5) which are open and reflective in nature (#38, f = 5) were less prevalent.

Additionally, teachers generally failed to provide students the opportunity to do a critical reflection on their own experiences (#34, f = 4), give investigative tasks to the students (#35, f = 2), inculcate an attitude in demonstrating a willingness to revise his/her own views and admit error made (#36, f = 4), and provide opportunities to critically evaluate and contribute to the scholarly discourse on practice (#39, f = 2).

Table 7. Teaching practices as checked against indicators for nurturing a climate of inquiry and critical reflection

Item	Indicator	f	%	
33	Include assignment that requires students to reflect their learning and to suggest ways for improvement.	11	55	*
37	Encourage students to ask questions.	5	25	
38	Ask questions which are open and reflective in nature.	5	25	

Item	Indicator	f	%
34	Ask students to do a critical reflection on their own experiences.	4	20
36	Demonstrate a willingness to revise own views and admit error, and encourage this attitude among students.	4	20
35	Give investigative tasks.	2	10
39	Provide opportunities for students to critically evaluate and contribute to the scholarly discourse on practice.	2	10

* Percentages which met the quartile rule

Theme 6: Nurturing good values, attitudes and behaviours

Based on 20 classroom observations as shown in Table 8, lecturers were seen nurturing good values, attitudes and behaviours by promoting cooperation among students by getting them to work in pairs or in small group (#40, f = 13), making clear to the students the quality level of work expected and valued (#42, f = 6), and using positive language to encourage the students to improve (#44, f = 9). Lecturers themselves were also seen to model and exemplify good working habits when conducting the lessons (#41, f = 9) in terms of punctuality, work organisation and preparedness, and to show genuine enthusiasm when teaching the topics in the course (#43, f = 8). Lecturers did use, although not rampant, strong deterrent language to make students understand the need to be responsible for all their non-conforming actions (#45, f = 5).

Nevertheless, less than one-fourth of the observations did we observe lecturers encouraging students to fall back on their beliefs when they feel discouraged in their studies (#47, f = 4), encouraging students to take responsibility for their own learning (#49, f = 4), encouraging students to keep up with educational development and best practices around the world (#48, f = 2), and encouraging students to learn not just for the sake of getting good grades but more importantly to serve humanities and/or God (#50, f = 1). In terms of academic plagiarism, none of the lecturers observed had ever reminded or even cautioned students not to plagiarise (#46, f = 0).

Table 8. Teaching practices as checked against indicators for nurturing good values, attitudes and behaviours

Item	Indicator	f	%	
40	Ask students to cooperate through pair or small group work.	13	65	*
41	Model good working habits (e.g. punctual / well prepared).	9	45	*
44	Use positive language to encourage student improvement.	9	45	*
42	Make clear to students the quality expected in their work.	6	30	*
43	Show genuine enthusiasm when teaching.	8	40	*
45	Use strong deterrent language for students' non-conforming actions.	5	25	
47	Encourage students to fall back on their beliefs when discouraged.	4	20	
49	Encourage students to take responsibility for their own learning.	4	20	
48	Encourage students to keep abreast with educational development and best practices around the world.	2	10	
50	Encourage students to learn not just for the sake of getting good grades but more importantly to serve humanities and/or God.	1	5	
46	Remind students not to plagiarise.	0	0	

* Percentages which met the quartile rule

Discussion and implications

The prevalence of practices across the six dimensions shows a mixed outcome within and across dimensions. For example, within the dimension of nurturing a climate of inquiry and critical reflection, one item registered a rather heartening percentage, while the remaining items, nevertheless, did not meet the quartile rule. Meanwhile, analysis across dimensions indicates that many indicators within the dimension of ensuring constructivist alignment were prevalent and met the quartile rule whereas all the indicators within the dimension of offering diverse learning environment failed to meet the quartile rule. Given this mixed outcome, it is therefore difficult to make an objective conclusion to the prevalence of practices in terms of each dimension. In order to provide a more concretised conclusion, the number of items (or, indicators) within each dimension was noted and the percentage calculated. Table 9 summarises the percentages for each dimension in terms of the number of items within the dimension that meets the quartile rule.

Table 9. Percentages across Dimensions in terms of indicators meeting the quartile rule

Item	Indicator	items	#Items > 25%	Percentage
1	Fostering intellectual excitement.	1 – 12	5 (out of 12)	42%
2	Providing quality learning spaces, technology and resources.	13 – 19	2 (out of 7)	29%
3	Ensuring constructive instructional alignment.	20 – 27	6 (out of 8)	75%
4	Offering diverse learning environment.	28 – 32	0 (out of 5)	0%
5	Nurturing a climate of inquiry and critical reflection.	33 – 39	1 (out of 7)	14%
6	Nurturing good values, attitudes and behaviours.	40 – 50	5 (out of 11)	45%

Based on the summary given in Table 9, it is now clear that, in terms of coverage of aspired teaching practices which met the quartile rule, lecturers ensured constructive instructional alignment (75%), nurtured good values, attitudes and behaviours (45%), fostered intellectual excitement (42%), provided quality spaces, technology and resources (29%). Nevertheless, the characterised teaching practices indicated that lecturers barely nurtured a climate of inquiry and critical reflection (14%) and did not offer diverse learning environment (0%).

These findings certainly have some implications for teacher education. These implications could broadly be categorised into two categories, namely (i) the content coverage on pedagogy (or models of teaching) in teacher education, and (ii) the pedagogical coverage of pedagogy. Based on the pedagogical short fall in terms of "offering diverse learning environment" and "nurturing a climate of inquiry and critical reflection", content coverage on pedagogy should give due attention to these two areas. For example, while student teachers are familiarised to the use of group work and cooperative learning (Gillies, 2016), they, however, overlook the use of heterogeneous grouping in terms of ethnicity and cultural background. Additionally, student teachers should be taught the ways in which they are able to ask questions in the quest to promote a climate of inquiry. For example, techniques such as Suchman Inquiry in which his seminal paper was published in Suchman (1964) should be included in the content coverage on pedagogy.

With regard to the pedagogical coverage of pedagogy, there is a maxim by Roverts-Hull et al. (2015) which states that "effective teacher preparation programs should model the practices they expect from their student teachers" (p. 6). As such, if a teacher educator wishes to teach, say the structural approach to cooperative learning (Kagan, 1989), he/she should model to his/her student teachers that particular approach.

Conclusions

This study which characterises the teaching practices in a teacher education institution reveals two major short falls, namely in terms of "offering diverse learning environment" and "nurturing a climate of inquiry and critical reflection". Two implications for teacher education are proffered, particularly in term of content coverage on pedagogy in teacher education, and the pedagogical coverage of pedagogy. These short falls can be successfully addressed through the providence of appropriate and adequate in-service courses which must include learning a particular pedagogy via that particular pedagogy with sufficient time of classroom practice.

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