ENHANCING CLASSROOM INTERACTION: A STUDY ON PRE-SERVICE TEACHER COMMUNICATION TRAINING

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ABSTRACT

The successful classroom interaction is the constituent part of the high-quality teaching and learning, and communicative competence is what pre-service teachers need to achieve as they continue their journey between theory and practice. This research article is focused on exploring the effects of structured communication training on live interaction in the classroom in the practice component in the use of qualitative methodology, which is based on the artifacts of teaching, mentor reporting, and videoed analysis of 110 pre-service instructors of three institutions. By focusing on four main areas of communication including question techniques, giving feedback, making non-verbal communication and clarity using instructional language, the study shows that most of the participants incorporated asking open ended questions (67.27%), giving positive feedback (62.73), non-verbal communication signals (73.64%) and clarity and structure in language instructions (69.09%). In as much as there are these strengths still there are certain areas of inconsistencies, mostly evident in the closed questioning and language ambiguity. The results outline the significance of performance-based, context-based assessment, and indicate that more emphasis must be placed.

Keywords: Pre-service teachers, communication training, classroom interaction, qualitative analysis, questioning techniques, feedback delivery.

1. INTRODUCTION

All successful teaching and learning processes are associated with efficient communication. The best teaching consists not only in importing knowledge but in helping develop understanding, involvement and contact in classroom situations. Paying attention to pre-service teachers, communicative competence development is especially important today because the teachers are who need to develop their professional manner and way of teaching. This faculty

influences the participation of the students, climate in the classroom, and the learning process in general in direct proportion to how well they organize discourse, implement proper questioning strategies, feedback, non-verbal communication, and language accommodation to references to different student needs.

In most teacher education programmes, communication training is notionally provided during theoretical modules (usually as general pedagogical lectures or foundation courses in educational psychology). The emphasis on this training is however being met with a concern that without favourable contextualization or practice reinforcement, such training becomes abstract and virtually unrelated to the classroom circumstance. The process of training theoretical knowledge in the profession is not always easy and cannot be neglected in adaptive and varied classroom conditions where instant assessment and interpersonal awareness are paramount.

One of the dominant approaches to the issue conducted by existing research has provided self-perceptions of teachers as to the level of their communication skills, on the basis of surveys or structured interviews. Although these studies give important information, they might not exhaust the perspectives of communicative behaviour, as performed in real classrooms. The performative evaluation of communication training outcomes is necessary, leaving the perception behind.

2. LITERATURE REVIEW

Alrajeh (2021) investigated the project-based learning (PBL) as the method helpful to improve instructional capacity of pre-service teachers in science teaching. The paper has identified that PBL helped promote better lesson planning, innovation in the design of the lesson, and more responsive to content and pedagogy. Based on the idea to make pre-service teachers design, implement, and discuss real-life projects, the training model enhanced their problem-solving skills and capacity to organize classroom communication better and address the needs of various learners. The results highlighted the possible role of project-based design in encouraging the development of communication-intensive, inquiry-centred classroom settings where interaction is naturally incorporated into the teacher practice.

Bamrungsin and Khampirat (2022) Concentrated on an on-line, work-integrated professional development in pre-service teachers. In their quasi-experimental study, they focused on making a combination of digitalized learning environments and exposure to the

reality of teaching. The findings revealed that the participants had considerable improvement in clarity of instructions, delivery of feedback, and communication in the classroom. The scholars noted that pre-service educators became more able to transfer theoretical knowledge to practical classroom strategies when they learned to work in real-case teaching situations as well as organized mentoring, even in online versions of the system. Through this research, the message that flexible technology-empowered training can be as effective as the face-to-face interaction in developing communicative proficiency was strengthened.

Boye and Agyei (2023) evaluated the usefulness of problem-based learning (PBL) in equipping pre-service mathematics teachers in Ghana. Their study revealed that PBL encompassed more than conceptual mastery, further revealing that questioning strategies, peer collaboration as well as responsiveness in real time, all considered vital elements of interaction in the classroom were found to improve extensively as a result of PBL. This learner-centered approach fostered critical thinking as well as conversations between teachers and students. Placing education in the situational context of problem solving, the study showed the direct correlation of pedagogical innovation to effective classroom communication and interactional patterns.

Damnet (2021) presented a Thai university case study concerning the effects brought by structured teacher training on pre-service EFL teachers classroom performance. In the study, it was mentioned that the transformations in various components of communicative competence were evident, such as the body language, instructional language utilization, as well as classroom discourse strategies. The participants expressed the fact that they had gained deeper understanding in regard to the art of enabling the learners to learn using both verbal and non-verbal communication. These results underlined the significance of feedback, teaching demonstration, and reflective exercise in developing interactions with future teachers in regard to communicative awareness of the self and confidence in terms of interaction.

3. METHODOLOGY

This is because the research will use descriptive and evaluative qualitative research design to examine how structured communication training process impacts on the interaction practices in classrooms by pre-service teachers. The strategy focuses on context-related evidence collected in teaching practicum and lacks using self-reported or survey-based information.

Rather, it targets real, documented teaching demonstrations and mentor advisors to evaluate the usage of communication skills in the real classroom settings.

a. Research Design

The study adheres to the qualitative, document-based research approach that is based on the interpretive analysis. It is descriptive because it is used to draw patterns of communicative behaviours and it is evaluative in that it is used to determine the success of training interventions. Qualitative orientation enables sensitive interpretation of teacher behaviour, quality of interaction and variations of communication context.

b. Sample Design

The sample of the study includes 110 pre-service teachers who are pursuing the Bachelor of Education (B.Ed.) degree in three affiliated institutions offering teacher education programme in the urban district. The sample of such students was taken among those students who complete their teaching practicum in the final semester. This standardised module of communication training within the professional training curriculum maintains a theoretically based training, as well as practical workshop sessions in the areas related to classroom discourse and feedback approaches and engagement strategies.

c. Analytical Framework

In analysing the observed data in classrooms, the study takes a thematic content analysis framework coupled with frequency-based coding. The communication behaviour was disaggregated into major dimensions based on the goals of the training module, i.e.:

- Application of questioning styles (open and closed)
- Feedback administration (constructive delivery as opposed to generic feedback)
- Non-verb communication (gestures, the use of eyes, body expressions)
- The clarity of language and the order of command of instructions

These themes have been obtained through the institutional rubrics and other literature on pedagogical communication. Video recordings, lesson plans and observation logs were coded manually on the presence, frequency and quality of such behaviours. The analysis of coded data was then categorized and tabulated to determine prevailing patterns and determine consistency in training results within the sample using descriptive statistics (frequencies and %ages).

4. RESULT AND DISCUSSION

In this section, the results of the study are presented on the basis of the extensive research of 110 teaching sessions reported by pre-service teachers during the practicum period. The analysis concentrated on four primary aspects of communication in the classroom which were stressed on during their training modules as namely: effective questioning strategies, feedback strategies, non-verbal communication and clarity of instructional language. All the domains have been assessed via the qualitative observations and institutional rubrics and quantified in terms of frequency and percentages a way to convey the trend in behavioural patterns through the sample.

a. Use of Effective Questioning Techniques

Questioning is an idea of interactive teaching. It encourages participation among the learners, evokes critical thinkers, and encourages a further lively classroom situation. It is analysed on the grounds of 110 documented classroom observations and evaluation sheets. Table 1 shows the frequency of open-ended questions, closed questions and a session in which no steady questioning pattern was observed as three questioned strategies found in the observation of pre service teachers along with their percentage distribution.

Table 1: Use of Effective Questioning Techniques

Observation Category	Frequency	percentage (%)
Open-ended questions used	74	67.27%
Closed questions used only	28	25.45%
No clear questioning pattern	8	7.28%
Total	**110**	**100%**

The possible reason according to table 1 is that a large percentage (67.27) of the pre-service used open-ended questions which give the student room to think and answer in detail. A lesser number (25.45%) relied mostly on closed questions and the responses tended to be short and objective. This indicates that minimal planning or inconsistency on engagement approaches takes place. The table aimed to show the proportion of the usage of each of the three categories of questioning techniques among the sample of pre-service teachers whom the researcher observed. It presents a real-time comparative picture of prevalence of various forms of questions.
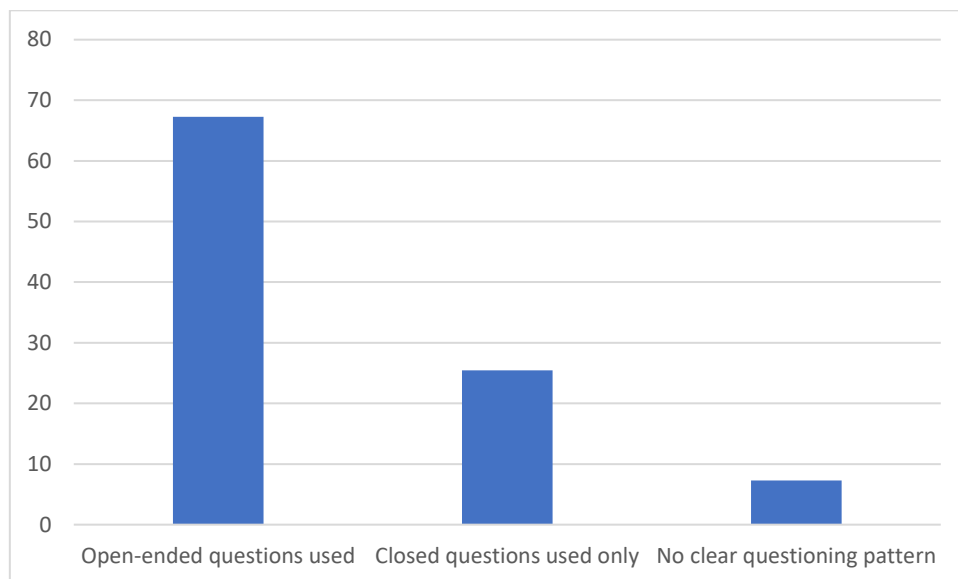
Figure 1: Graphical Representation of the percentage of Use of Effective Questioning Techniques

Figure 1 makes a point that the participants are heavily inclined towards using open-ended questioning, which can be visual confirmation of the research results in Table 1. Resembling the strong correlation between the primary application of open-ended question and the low rates of closed and unstructured questioning method, it could be assumed that overall, an excellent adherence to the principles of learner-centred communication expressed through questioning is implemented.

b. Use of Feedback Strategies

Giving proper and relevant feedback is a very significant communicative skill in teaching, and it assists students to have the awareness of their progress, rectify the wrong concepts and feelings of self-motivation. The analysis is devoted to three lead categories, such as constructive verbal feedback, generic or limited feedback, and lack of any visible feedback. As demonstrated in the table and graph below, the result indicates the distribution of these categories out of 110 recorded observations. Table 2 shows the percentage and number of occurrences of the types of feedback that were noticed in pre-service teachers.

Table 2: Use of Feedback Strategies

Feedback Type	Frequency	percentage (%)
Constructive verbal feedback	69	62.73%

Generic/limited feedback	33	30.00%
No evident feedback	8	7.27%
Total	**110**	**100%**

According to Table 2, the use of constructive verbal feedback was noted in 62.73 % of pre-service teachers, which should be viewed as a positive sign of individual and responsive communication. Nonetheless, 30 % made use of generic or insignificant feedback, which might point to indecisiveness or inexpert formative assessment ability. A minute share (7.27%) failed to present any clear feedback, which indicates the necessity to give more attention to this aspect during training units.

This figure 2 will be a bar chart which will give a visual comparison of percentage of type of feedbacks being used by the pre-service teachers. It gives fast and direct visualization of the distribution of the feedback strategies in observed lessons.
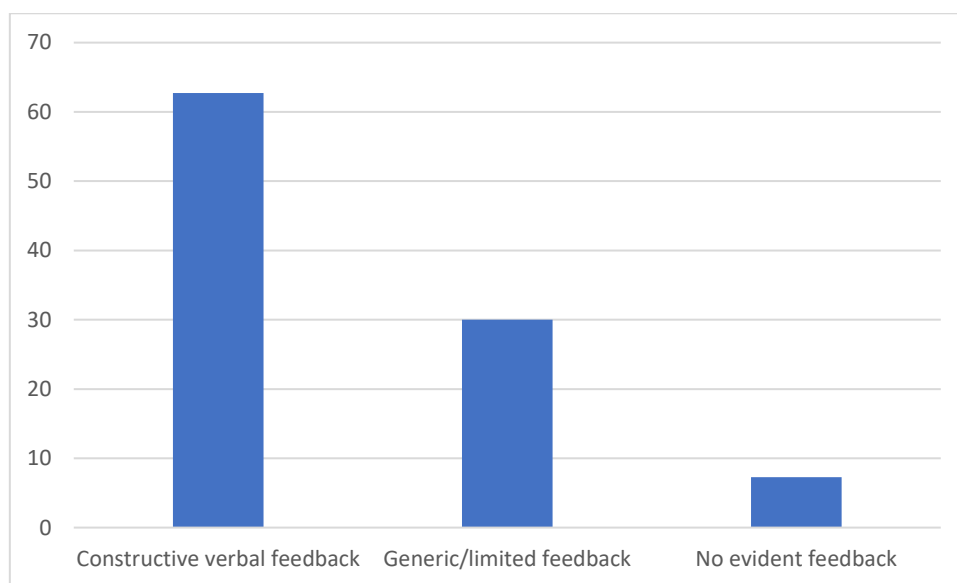

Figure 2: Graphical Representation of the percentage of Use of Feedback Strategies

Figure 2 validates that the constructive verbal feedback was the most predominating method used by the participants. The visual contrast of the tall bar with constructive feedback and the shorter bars with generic and absent feedback enhances the relative success of the training program in the development of this important account of communication.

c. **Use of Non-Verbal Communication**

Facial expression, gestures, posture, eye contact, spatial movement are very important as non-verbal communication during the interaction in the classroom. These aspects usually support verbal instructions, control classroom dynamics and strengthen learner participation.

The frequency and percentageof the non-verbal communication behaviours that occur in the teaching performance of 110 pre-service teachers are indicated in Table 3. It consists of three categories, frequent and purposeful use of non-verbal cues, occasional and unclear use, and finally, absent or distractive use of non-verbal cues.

Table 3: Use of Non-Verbal Communication (Gestures, Eye Contact, Movement)

Observation Result	Frequency	percentage (%)
Frequent and purposeful	81	73.64%
Occasional and unclear use	21	19.09%
Absent or distracting	8	7.27%
Total	**110**	**100%**

The results of Table 3 show that most pre-service teachers (73.64%) displayed very frequent and intentional non-verbal communication which implies that they are familiar with the role that dissimilar kind of communication plays in classroom communication. But almost 19.09 % demonstrated occasional or ambiguous application, whereas 7.27 % demonstrated neglect or distracting non-verbal behaviours, which means self-improvement areas on the issues of training provision and self-awareness.

Figure 3 indicates a bar graph which gives a visual representation of how frequencies in the use of non-verbal communication distribute among the pre-service teachers. It shows how much these behaviours were embedded into the performance of teaching by them.
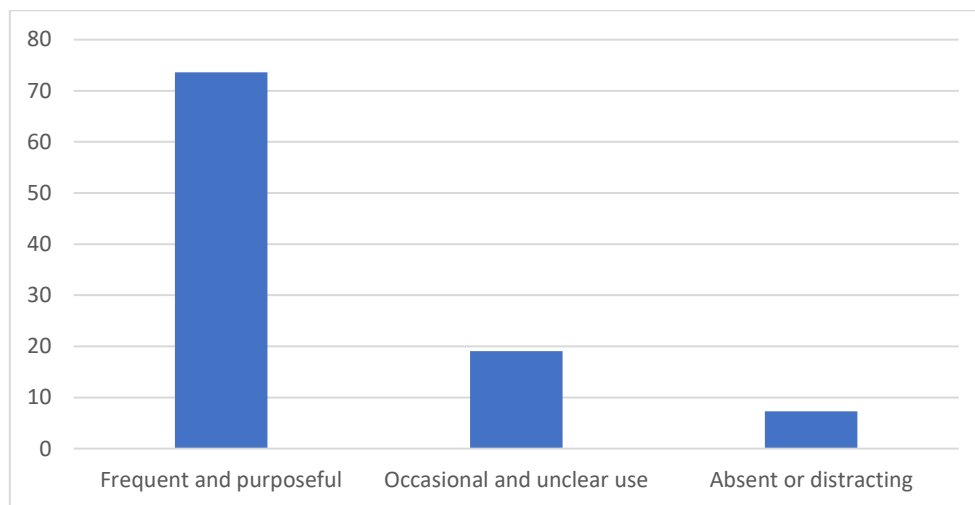
Figure 3: Graphical Representation of the percentage of Use of Non-Verbal Communication (Gestures, Eye Contact, Movement)

As illustrated in figure 3, there has been dominance of effective non-verbal communication which is as shown by the tallest bar labelled as frequent and purposeful. It means that training in body language-related issues and classroom presence was successfully internalized. Yet, the shorter bars that refer to the factors of Occasional and unclear use and Absent or distracting, indicate that not all pre-service teachers are going to be polished enough in using non-verbal strategies steadily and efficiently.

4.4 Language Clarity and Instructional Commands

The clarity and organization of the language, which is utilized by a teacher, is a significant element of being understood by students and effective teaching. Instructional commands are articulated in a manner that reduces confusion and affirms control of the classroom as well as student confidence in the performance of the tasks. This section assesses the manner pre service teachers used their language to present instructions in moments of drama.

In Table 4, we can see frequency and percentage of language clarity viewed in the context of 110 pre-service teachers.

Table 4: Language Clarity and Instructional Commands

Language Use	Frequency	percentage (%)
Clear and structured	76	69.09%
Slightly ambiguous	26	23.64%
Incoherent/confusing	8	7.27%

Total	110	100%

As evidenced by Table 4, a heavy majority (69.09 %) of the pre-service teachers used clear and structured language, which is according to the best practices in delivering instructions. The next smaller but important sample (23.64%) paraphrased the words in a little unclear way, which can be the cause of some misunderstandings. In the meantime, 7.27 % was classified as incoherent or confusing, which demonstrates the necessity of more intensive training in the area of verbal clarity and instruction delivery.

Figure 4 includes a bar graph that visually expresses the percentage of ratio of the instructional language clarity that is found in the study. It allows rapid comparing among the three categories evaluated.
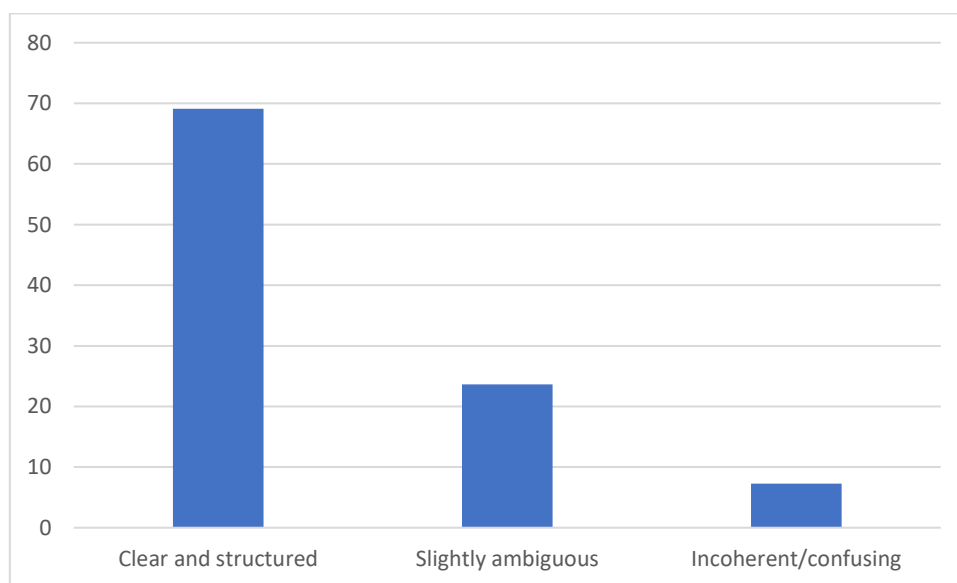

Figure 4: Graphical Representation of the percentage of Language Clarity and Instructional Commands

Figure 4 confirms the data that was tabulated since most respondents spoke with logical and coherent use of language as illustrated by the highest bar. Nonetheless, the fact that there is an identifiable level of individuals, who use ambiguous or confusing instructions, is indicative of the necessity to enforce this sector in communication learning. Predominance of organized patterns of language usage is a good trait however training programs could incorporate more specific forms of microteaching language practice to enhance the degree of control of the language owing to less vagueness in the language procedures.

5. CONCLUSION

This paper has shown that structured communication training will be found to impart a great value to classroom interaction skills among pre-service teachers, because the study has shown more emphasis and coverage of actual teaching performance rather than the surveys of self-perception, which is considered more realistic regarding classroom lessons of its application of communication strategies. Good use of open-ended questions, effective non-verbal communication and instructional commands through specific commands were evident in many participants and justified the usefulness of specific training modules. Nonetheless, a variance in the presentation of feedback and verbal clarity indicates that the theoretical teaching is not sufficient. Reflective practice, a continuous coaching session, and rehearing in a simulated classroom is essential in achieving communicative constancy. Thus, a model of teacher education needs to transform abstract theories of communication into a practical, performance-based instructional program with video analysis, observations rubrics, and peer feedback to better equip pre-service teachers with the knowledge of interactive and inclusive teaching methods.

REFERENCES

1. Alrajeh, T. S. (2021). Project-based learning to enhance pre-service teachers' teaching skills in science education. Universal Journal of Educational Research, 9(2), 271-279.

2. Bamrungsin, P., & Khampirat, B. (2022). Improving professional skills of pre-service teachers using online training: applying work-integrated learning approaches through a quasi-experimental study. Sustainability, 14(7), 4362.

3. Boye, E. S., & Agyei, D. D. (2023). Effectiveness of problem-based learning strategy in improving teaching and learning of mathematics for pre-service teachers in Ghana. Social Sciences & Humanities Open, 7(1), 100453.

4. Damnet, A. (2021). Enhancing pre-service EFL teachers' teaching skill through teacher training: A case study of a university in Thailand. Advances in Language and Literary Studies, 12(3), 1-11.

5. Demirkan, O. (2019). Pre-Service Teachers' Views about Digital Teaching Materials. Educational Policy Analysis and Strategic Research, 14(1), 40-60.\

6. Dogan, A. (2021). A Study on the Soft Skills of Pre-Service Teachers. International Journal of Progressive Education, 17(4), 35-48.

7. Fukkink, R., Helmerhorst, K., Gevers Deynoot-Schaub, M., & Sluiter, R. (2019). Training interaction skills of pre-service ECEC teachers: Moving from in-service to pre-service professional development. Early Childhood Education Journal, 47(4), 497-507.

8. Gisewhite, R. A., Jeanfreau, M. M., & Holden, C. L. (2021). A call for ecologically-based teacher-parent communication skills training in pre-service teacher education programmes. Educational Review, 73(5), 597-616.

9. Jeon, J., Lee, S., & Choe, H. (2022). Enhancing EFL pre-service teachers' affordance noticing and utilizing with the Synthesis of Qualitative Evidence strategies: An exploratory study of a customizable virtual environment platform. Computers & Education, 190, 104620.

10. Kuru Gönen, S. İ. (2019). A qualitative study on a situated experience of technology integration: Reflections from pre-service teachers and students. Computer Assisted Language Learning, 32(3), 163-189.

11. López Solé, S., Civís Zaragoza, M., & Díaz-Gibson, J. (2018). Improving interaction in teacher training programmes: the rise of the social dimension in pre-service teacher education. Teachers and Teaching, 24(6), 644-658.

12. Malik, A., Setiawan, A., Suhandi, A., Permanasari, A., Dirgantara, Y., Yuniarti, H., ... & Hermita, N. (2018). Enhancing communication skills of pre-service physics teacher through hot lab related to electric circuit. In Journal of Physics: Conference Series (Vol. 953, No. 1, p. 012017). IOP Publishing.

13. Sert, O. (2019). Classroom interaction and language teacher education. In The Routledge handbook of English language teacher education (pp. 216-238). Routledge.

14. Taghizadeh, M., & Ejtehadi, A. (2023). Investigating pre-service EFL teachers' and teacher educators' experience and attitudes towards online interaction tools. Computer Assisted Language Learning, 36(8), 1633-1667.

15. Utama, I., & Hidayatullah, H. (2020). Mobile Applications to Improve English Writing Skills Viewed from Critical Thinking Ability for Pre-Service Teachers. International Journal of Interactive Mobile Technologies, 14(7).