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Patterns And Functions Of Code-Switching And Teachers' Professional Role Identity In Multilingual EFL Classrooms: A Quasi-Experimental Study In A Public Sector University Of Sindh, Pakistan



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Abstract: *The paper explores code-switching patterns and roles and how it is used in multilingual English as a Foreign Language (EFL) classrooms, as well as the relationships between these practices and professional role enactment by instructors working in public universities in the Sindh province, Pakistan. Though English is used as the official media of instruction, Urdu and Sindhi are commonly used as common medium of communication during classroom interaction. Using the quasi-experimental pre- and post-observation design, 24 classroom sessions were observed in six EFL teachers before and after a two-month long pedagogical intervention aimed at increasing the awareness of functional code-switching and role based instructional use of language. Frequency, direction and functional distribution of teacher and student-initiated code-switching were also recorded by use of a structured observation protocol and session based rating scales that included the factors of instructional clarity, interactional engagement and understanding of tasks. The quantitative results indicated that management-driven and habitual code-switching decreased statistically significantly and clarification-based switching increased accordingly. The results of the paired-sample t-test showed that there was a significant change in the instructional performance, student participation, and understanding of the task ($p < .01$) with large effect sizes. A discourse analysis of six observation protocols revealed the change of managerial role enactment to the facilitative and supportive identity positioning. The results prove that code-switching on multilingual EFL classrooms is not only patterned but also functional and is directly connected with the professional role identity of the teacher, not with the compensatory linguistic behavior. The research provides empirical evidence of classroom-based research in Pakistani higher education to the research on multilingual pedagogy and teacher identity.*

Keywords: code-switching, teacher professional identity, multilingual EFL classrooms, quasi-experimental design, Pakistan

Introduction

Pakistan English language teaching exists within the highly multilingual sociolinguistic ecology. Even though the English language is used as the official language of instruction in tertiary education, it is used together with Urdu as the national language, and local languages including

Sindhi, Punjabi, Pashto, and Balochi. In Sindh province where the majority of the students and many teachers speak Sindhi as the dominant language, classroom communication is often characterized by dynamic switching between English, Urdu and Sindhi. Such a multi-lingual

reality leads to a pedagogical context where code-switching is not only widespread, but also part of the structure of instructional discourse.

The code-switching, which is a broad concept that refers to the systematic use of two or more languages in a single interactional session (Gumperz, 1982), has been a contentious issue in the language education domain. The previous monolingual approaches to pedagogy viewed any shift to the first language (L1) as something that would interfere with the process of learning the target language. But still, the notion of code-switching is conceptualized by Contemporary multilingual and translanguaging approaches as a pedagogical tool that could be used to achieve comprehension, organize sophisticated ideas, and affective interaction (García and Wei, 2014; Macaro, 2018; Tai, K. W. 2025; Beltran-Palanques et al., 2025). Instead of being perceived as language impairment, switching is currently regarded as a pedagogical measure in a multilingual classroom.

In code-switching situation in English as a Foreign Language (EFL) context, particularly South Asia, a common phenomenon is the mutual linguistic repertoire between learners and teachers. Scholarly research works in the multilingual higher education setting indicate that educators employ the use of the first language of the learners strategically to explain abstract ideas, instill discipline, decrease cognitive load, and establish a relationship (Hall and Cook, 2012; Littlewood and Yu, 2019; Macaro, E., and Lee, J. H., 2013; Tian and Macaro, 2023). Recent research in the classroom setting proves that thoughtful code-switching may lead to a better understanding of concepts and notion as well as to the decrease of cognitive load in multilingual university classes (Macaro, E., and Lee, J. H., 2013; Tian and Macaro, 2023). In the Pakistani environment of the higher education system, the multilingual classroom talk also shows a pragmatic compromise of the English as a medium of instruction policy and the realities of the learner in terms of language (Rahman T, 2006; Shamim F, 2011). Studies conducted in Pakistani secondary education contexts suggest that multilingual classroom interaction reflects a

negotiation between English-medium policy and learners' linguistic realities, a pattern that is also observable in higher education settings (Rind & Mari, 2019).

Although this realization of the presence of multilingual pedagogical realities is on the rise, code-switching is a controversial phenomenon in Pakistani higher education. English-based teaching is commonly linked to scholarly quality and worldwide competitiveness whereas the change to indigenous languages can be seen as a weakening of linguistic quality. As a result of these factors, teachers often have to balance between conflicting demands: institutional demands of English domination and teaching demands of understanding and engagement of students. Such tension highlights the necessity of methodical research of the occurrence of code-switching in university classrooms and its causes and reasons.

While previous studies on the topic of code-switching have been conducted in Pakistan (Rind and Mari, 2019; Abbasi et al., 2022), the majority of this literature is based on the self-reported questionnaire or interviews. In as much as perception based studies contain a lot of information on attitudes and beliefs, whatever they offer is incomplete in enacting the classroom practices. According to Walsh (2011), the realization of pedagogical decisions and interactional performance of teacher identity occur mostly in the classroom. Real classroom interaction would enable researchers to go beyond what teachers report to do and actually do (Walsh, 2011).

The given paper develops this distinction between reported practice and enacted practice. It also changes the perception based data to a documented classroom interaction in a systematic manner by observing the interaction in a structured manner. The study will not only investigate the patterns and functions of code-switching, but also whether structured pedagogical intervention can have an impact on language practices of teachers by applying a quasi-experimental pre- post design.

The key idea in this investigation is teachers' professional role identity. The identity of

teachers is gradually being conceptualized as dynamic, socially constructed, and practiced through professional practice instead of being a constant feature (Beijaard et al., 2004; Barkhuizen, 2017; Yazan and Lindahl, 2020; Shamim F. 2011). Gee (2000) asserts that identity is an action of discourse; it is manifested through how people place themselves in communication. The teacher in the classroom also implements various professional identities in their teaching language and interactional patterns, including that of facilitator, explainer, classroom manager, supporter, and so on.

Language choice in multilingual EFL classrooms is an important source of resources on which teachers can exercise these professional roles. Indicatively, the facilitative identity that might be directed towards scaffolding understanding is expressed by switching to the first language of the learners when explaining concepts. In contrast, the act of switching in the process of discipline management can be used to point to a managerial position. Therefore, the analysis of code-switching in the framework of professional role identity is an analytical perspective that helms the linguistic behavior to pedagogical positioning.

In addition, Recent scholarship suggests that code-switching should be strategically regulated instead of being eradicated, and the focus should be on the pedagogically meaningful multilingual activities in the language classrooms (Macaro, 2018; Hall and Cook, 2012; Tai, K. W. 2025). Recent intervention-based research on the topic of multilingual higher education indicates that the teacher consciousness of switching patterns can contribute to the more pedagogically controlled multilingual practices (Tai, K. W. 2025). Deliberate, purposeful, and pedagogically justified switching, is known as strategic language use, and only occurs in accordance with instructional goals, even though English is still the main medium of academic instruction. Nonetheless, limited empirical intervention-based research investigating whether teachers have the power to control their switching behavior by a structured training is present especially on Pakistani

university settings.

This research fills this empirical gap, by conducting research to explore code-switching and teacher professional role identity practice in multilingual EFL classrooms in a public university in the Sindh province. Using a quasi-experimental design of observation, the study observes six teachers and twenty-four observed classes in terms of their pre-intervention and post-intervention classroom activities. The study analyses the hypothesis that systematic awareness of strategic language use causes measurable shifts in switching frequency, functional distribution, instructional clarity, and student engagement by using systematic coding, rating scales, and inferential statistical analysis. Although, there has been increased awareness regarding multilingual pedagogy, there is a paucity of empirical classroom-based research studies to identify the level of interaction of code-switching patterns, functional distribution, and teacher professional role identity within the context of intervention-based designs, especially in Pakistani higher education settings.

In particular, the research questions of the study are as follows:

1. Does pedagogic intervention cause any significant change in code-switching patterns in multilingual EFL classrooms, both teacher-initiated and student-initiated?
2. Is there an intervention effect on the functional distribution of code-switching?
3. What is the way the professional role identity of teachers is realized in the use of code-switching before and after intervention?

This study adds value to the literature of multilingual pedagogy in three levels through the combination of quantitative frequency analysis and the discourse interpretation of qualitative data. To begin with, it offers empirical data through observation on Pakistani higher education which is not a well represented area in intervention-based code-switching studies. Second, it connects code-switching

patterns to teacher professional role identity, which provides a theoretical perspective that goes beyond functional classification. Third, it shows that a multilingual practice can be strategically regulated and, in fact, can be used to promote instructional performance and performance without undermining the academic performance in English.

By so doing, the study critiques deficit-based readings of code-switching and places it within the context-specific, role mediated pedagogical resource that is entrenched in the multi-lingual spaces of public sector Universities within Sindh.

2. Literature Review

2.1 Conceptualizing Code-Switching in Multilingual Classrooms

The concept of code-switching has been extensively studied in the areas of sociolinguistics and the study of classroom discourse because of a systematic alternation of two or more languages in a single interactional episode (Gumperz, 1982; Myers-Scotton, 1993). In the educational field, code-switching is not only spontaneous linguistic process but a regular and socially significant practice that is incorporated into the discourse of instructions (Ferguson, 2003; Walsh, 2011).

The use of the first language (L1) of learners in EFL classrooms was explained in terms of pedagogical inadequacy that prevented the exposure to the target language (Cook, 2001). But the modern world tends to think more and more about the breaking of strict monolingual assumptions. Multilingual and translanguaging models claim that bilinguals are using an integrated linguistic repertoire instead of a partitioned language systems (García and Wei, 2014; Li, 2018). In this perception, code-switching can even be viewed as a tool of meaning-making, but not an impediment to language learning.

Macaro (2018) differentiates between virtual position (when the target language is strictly used) and maxima position (when the use of the target language is judicious) arguing that restrictive and principled code-switching can

help to understand and reduce mental load. In the same way, Hall and Cook (2012) also highlight that the use of a first language by teachers may aid classroom management and clarification and have a positive influence on affective rapport, when used strategically.

Therefore, the relatively more modern scholarship is coming to the realization that it is not the question of whether or not code-switching takes place, but the question of how and why it is performed.

2.2 Patterns of Code-Switching in EFL Contexts

A lot of research on classroom code-switching has differentiated between interactional patterns and structural patterns. Structurally speaking, switching can either be inter or intrasentential (between or within a sentence) (Poplack, 2020). Interactionally, teacher-initiated and student-initiated switching can be observed with each having a different communicative intention (Ustunel and Seedhouse 2005).

Code-switching is often initiated by teachers in EFL environments when explaining complicated grammar or translation of abstract vocabulary or giving instructions on the task (Ferguson, 2003; Sert, 2005). Student induced switching in contrast tends to occur when students engage in the negotiation of meaning with their peers or when they experience lexical retrieval problems or when they request clarification (Canagarajah, 2011).

A number of empirical studies reveal that teacher-initiated switching is likely to prevail in the classroom conversation in situations where teachers have the same first language as learners (Probyn, 2009; Tian and Macaro, 2020). Nevertheless, this excessive switching could decrease the possibility of long-standing interaction with the target language (Littlewood and Yu, 2019). Researchers are, therefore, more and more promoting the systematic records of the frequency and direction of switching in order to understand whether patterns are a result of pedagogical need or habitual routine.

The code-switching patterns in the South Asian higher education are influenced by intricate

hierarchies in the sociolinguistic life. In Pakistan, the English language has institutional power and socioeconomic prestige, and Urdu is a lingua franca in the country, along with the regional languages: Sindhi and others have a high level of identity meaning (Rahman, 2006). It has been found that mixing between English and Urdu is a normative situation in the classroom of the university, especially when presenting disciplinary material (Rind and Mari, 2019). Similar patterns of multilingual negotiation have also been observed in higher education settings (Rahman, 2006; Mansoor, 2004). Nevertheless, there are a few studies that measure switching patterns using empirical observation.

The gap that is filled in the current research involves the recording of frequency, direction, and initiator patterns, both pre-intervention and post-intervention, in multilingual EFL classrooms.

2.3 Functions of Code-Switching in Classroom Interaction

In addition to structural patterns, studies have also dwelled much on functional aspects of classroom code-switching. Common functional categories are clarification, classroom management, reinforcement, affective support and discourse structuring (Ferguson, 2003; Sert, 2005).

It is also common to find clarification as the most prevalent role of teacher-managed switching. Educators tend to use L1 of learners to clarify abstract words, grammar, and conceptual differences (Tian and Macaro, 2020). Such scaffolding role corresponds with the Vygotskian sociocultural theory where language is used as a mediational process to cognitive development (Lantolf and Thorne, 2006).

Another widely reported role is classroom management. The teachers can alternate languages to control discipline, provide procedural direction or to attract attention (Probyn, 2009). Nonetheless, studies indicate that active movement of management based switching can indicate reactive but not strategic pedagogy (Walsh, 2011).

Another aspect of switching is affective support. Educators can also utilize the first language of the learners in order to alleviate anxiety, facilitate engagement or establish rapport (Cook, 2001). In the context of multilingualism, the said switching may encourage a sense of relational intimacy and constitute an environment conducive to learning.

Notably, the allocation of these functions can give an indication of the pedagogical orientations. In situations where switching is mostly managerially led, this can be as an indication that they are dependent on L1 to control and not to instruct. Switching can also serve as a planned teaching support system when clarification and reinforcement prevail.

Although there is a growing literature of functional research, limited studies have been able to research whether or not targeted pedagogical intervention is able to change functional patterns of distribution in the long run. The current paper builds on prior research by investigating the existence of functional shifts by quasi-experimental comparison.

2.4 Teacher Professional Role Identity and Classroom Discourse

The teacher identity has become one of the key constructs of the language education research. Instead of using identity as a static psychological characteristic, the modern scholarship considers the identity of teachers as dynamic, socially constructed and practiced through discourse and action (Beijaard et al., 2004; Barkhuizen, 2017).

According to Beijaard et al. (2004), subject-matter expertise, pedagogical knowledge, and relational positioning are the elements that influence teacher identity. Gee (2000) also views identity as a performance based on discourse; it is apparent in the conduct of interaction and the positioning of communication.

Within classroom settings, educators play various professional roles at the same time, e.g., facilitator, explainer, manager, evaluator and supporter (Walsh, 2011). These roles do not remain constant but change as per instructional requirements. One of the key ways by means of

which such roles can be played is through language choice.

As an illustration, a transference to using L1 of learners in the explanation can represent facilitative identity performance that seeks to scaffold understanding. The discipline switching can portray the positioning of the managers. Institutional alignment or authority may be indexed by avoiding switching and maintaining an English only discourse.

In multilingual EFL, identity enactment cuts across the subject of language policy and pedagogic ideology. The English-medium instructional demands of the institution and the communicative requirements of the learners have to be negotiated by the teachers. In this way, the analysis of code-switching within the context of professional role identity provides an opportunity to comprehend the ways instructional roles are linguistically played.

Nevertheless, the few empirical studies have combined identity theory with quantitative research of switching patterns and functions. The majority of the identity studies are based on narrative inquiry or interview data (Barkhuizen, 2017). The current research is valuable in the contribution that discourse practices seen correlate with role identity performance in a quasi-experimental design.

2.5 Multilingual Higher Education in Pakistan

The situation of the multilingual education of Pakistan is quite a complicated one. English has gained a preferred status as a higher education, administrative, and mobility language (Rahman, 2006). Urdu is used as national lingua franca in all the provinces, though regional languages like Sindhi have a strong culture and identity meaning.

According to Shamim (2011), the policies based on the use of English as a medium in Pakistan often go hand in hand with the multilingual negotiation on the classroom level. Educators often switch between English and Urdu in order to achieve inclusivity especially in classes with heterogeneity. The further occurrence of Sindhi language in the Sindh province complicates the

situation even more.

According to recent research, it is not true that multilingual practices in Pakistani classrooms are random, but they are patterned based on sociocultural expectations and communicative needs (Abbasi et al., 2022). Nevertheless, the majority of the existing research is based on the attitude to the code-switching instead of a systematic description of the dynamics of switching during the intervention stages.

With the current discussion on the effectiveness of the English-medium policy in Pakistan, there is a pressing need to carry out empirical classroom-based studies to explore how the code-switching mechanism works in actual instructional situations.

2.6 Research Gap

Although the past research has vastly analyzed patterns and roles of code-switching and individual studies have focused on teacher identity enactment, there are not many studies that have combined these aspects in the context of a quasi-experimental study in Pakistani higher education.

In particular, the research has been limited to:

1. Measured alteration in switching rate and regional distribution of functions after an orderly intervention.
2. Linked observable switching patterns to teachers' professional role identity enactment.
3. Multilingual university classes in Sindh Multilingual: Combined structured observation, rating scales, and inferential statistics.

The current research fills these gaps and holes by conducting a systematic recording of pre-intervention and post-intervention classroom conversations, as well as interpreting the results through professional role identity.

Through this, it will add empirical findings to the body of multilingual pedagogy research and provide context-specific information that is applicable to English-based higher education in Pakistan.

3. Methodology

The current research design was a quasi-experimental pre- post observational design that investigated code-switching patterns and functionalities and their connection to the professional role identity of teachers in multilingual EFL classrooms. The within-subject repeated-measures methodology was employed due to the use of intact university classes and the impossibility of random assignment, which is believed to be the right design that should be applied in natural learning conditions (Creswell, 2009; Anderson-Cook, C. M., 2005). The setting of the study was a Pakistani university operating in the public sector based in Sindh, in which English is used as the official medium of instruction, but co-exists with Urdu as the national lingua franca, and Sindhi as the local mother tongue. There were 6 EFL teachers who volunteered to take part in the research, one undergraduate class (26-40 students), with each teacher teaching it. It was observed that each teacher would undergo two 50-minute sessions of observation prior to and two sessions following the intervention, which makes a total of 24 observations, and they could be compared within the subject with the language instruction practice across the phases.

The intervention lasted four weeks, and it involved three professional development sessions that were organized and then implemented in the classroom. The sessions were dedicated to the creation of awareness of the current switching patterns, the identification of functional categories of code-switching, and the analysis of the language choice as the professional role enactment (facilitator, explorer, classroom manager, supporter). Instead of being discouraging of the idea of using multiple languages, the intervention focused on the consistency of pedagogical intent and language use without making English the major instructional language.

The structured non-participant classroom observation was used to gather data, and it is known to be a systematic method of recording the instructional practices enacted and classroom discourse (Walsh, 2011; Cohen, Manion, and Morrison, 2018). The audio and

video recordings were not allowed because of institutional and ethical limitations; comprehensive field notes were kept at every session. The protocol of structured observation has been elaborated to record the code-switching instances and their details: direction (e.g., English-Urdu, English-Sindhi), initiator (teacher or student), functional (clarification, classroom management, reinforcement, affective support, habitual use), and role enacted by the teacher. Moreover, five-point rating scales which included session based, were applied to determine the levels of instructional clarity, interactional engagement, the role of language and teacher and the student participation. The understanding of the task in question was also assessed in the form of academic tasks in the classroom and scored in percentage.

All the instances of switching were coded based on the established criteria based on classroom discourse and code-switching literature. Intra-rater reliability was also determined by re-coding 20 percent of the data, two weeks after the coding process to provide consistency in coding. Cohen was used to calculate agreement (Cohen, 1960), $\kappa = .81$, which is considered to be very reliable by the existing standards (Landis and Koch, 1977). The analysis of data consisted of the descriptive and inferential analysis. Frequencies and percentages distributions were determined in order to detect changes in pre- and post switching patterns and functions. The paired samples t-tests were performed to establish statistically significant differences based on instructional performance, switching frequency, student involvement, and student understanding of the task between stages (Field, 2018). The p-value was set to a statistical significance of $p < .01$ and effect sizes (Cohen d) were computed to determine the effect size of practical significance. Ethical consent was provided by the concerned institutional authority, an informed consent was signed by relevant participating teachers and students were told that their participation is voluntary. Anonymization of all data was done to maintain confidentiality.

4. Data Analysis and Results

This part will report the results of the quasi-

experimental observation period in the classroom (patterns and functions of the code-switching between pre- and post-intervention stages). The analysis combines the descriptive frequencies, percentage distributions, and inferential statistical comparisons to study the changes in teacher-initiated and student-initiated switching. Moreover, there are presented pieces of classroom talk to demonstrate how the noticed language practices are manifested in the realization of the professional role identities of teachers during multilingual teaching/learning interaction. This section would offer empirical data of the way the patterns of code-switching

4.2 Patterns of Teacher-initiated code switching

Table 1

Frequency and Percentage Distribution of

Language Switch	Pre (n = 214)	%	Post (n = 168)	%
English → Sindhi	91	42.5	53	31.5
English → Urdu	81	37.9	49	29.2
English Only	42	19.6	66	39.3
Total	214	100.0	168	100.0

Note. Frequencies are the summation of the number of sessions in 12 sessions per phase.

4.3 Patterns of code-switching, which are initiated by students

Table 2

were displayed and how these shifts are related to the performance of the instructional roles in the EFL classroom observed.

4.1 Classroom Observation Data Analysis (Quantitative)

In order to strengthen the experimental aspect of the research, the data of observation were expressed as systematic scores and rating-scale ratings. The quantitative analysis was done on three aspects (a) patterns of code-switching, (b) functional distribution of code-switching and (c) instructional and learners performance indicators.

Teacher-Initiated Code-Switching (Pre and Post Intervention)

Frequency and Percentages Distribution of Student-initiated code-switching (Pre-intervention and Post-intervention)

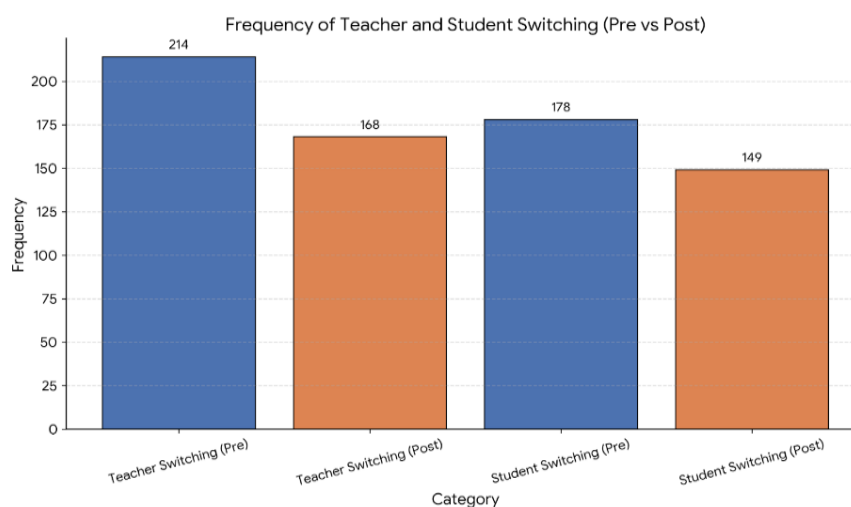


Figure 1. Pre-post comparison of teacher-initiated and student-initiated code-switching frequencies across the observed classroom sessions.

Language Switch	Pre (n = 178)	%	Post (n = 149)	%
English → Sindhi	76	42.7	48	32.2
English → Urdu	69	38.8	54	36.2
English Only	33	18.5	47	31.5
Total	178	100.0	149	100.0

Figure 1. Pre–post comparison of teacher- and student-initiated code-switching frequencies across observed classroom sessions.

Urdu continued to be the prevailing common medium of interaction among the students and the fact that the process of returning to English

Table 3

The Distribution of Teacher Code-Switching is functional.

Function of Code-Switching	Pre (n = 214)	%	Post (n = 168)	%
Conceptual Clarification	81	37.9	69	41.1
Classroom Management	58	27.1	25	14.9
Reinforcement / Repetition	30	14.0	29	17.3
Affective Support	19	8.9	22	13.1
Habitual / Non-strategic	26	12.1	23	13.6
Total	214	100	168	100.0

The apparent increase in the percentage of habitual switching in the post-intervention phase reflects the reduction in overall switching frequency rather than an increase in habitual switching itself.

after intervention suggests that students felt confident and more invested in the academic activities that were mediated by English.

4.4 Functional Distribution of Teacher Code-Switching

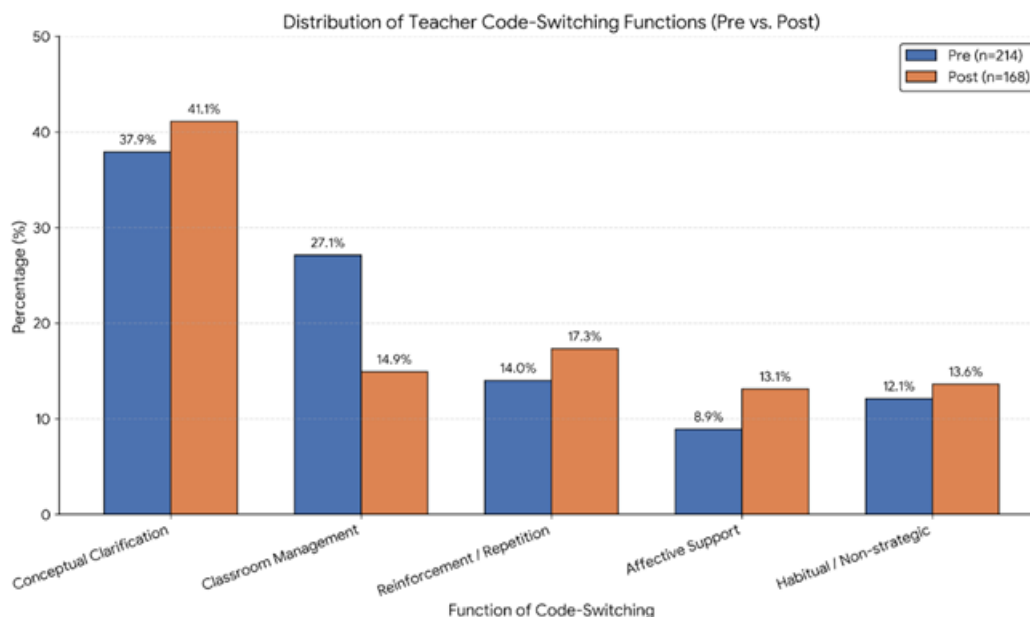


Figure 1. Functional distribution of teacher-initiated code-switching across pre-intervention and post-intervention classroom observations.

Figure 2. Functional distribution of teacher-initiated code-switching across pre- and post-intervention observations.

The results indicate a functional shift from management-driven switching toward clarification- and reinforcement-oriented switching. Although the percentage of habitual switching appears marginally higher in the post-intervention phase due to reduced overall switching frequency, the raw number of habitual instances decreased, indicating reduced absolute reliance on non-strategic switching.

5. Statistical Analysis

To evaluate whether the pedagogical intervention produced statistically significant changes in language practices and instructional performance of the classroom, paired-sample t-tests were used. The teachers and intact classes were monitored pre-intervention and post-intervention, hence a within-subject (repeated-measures) design was used.

Mean scores were determined at pre-intervention and the post-intervention stages. Statistical tests were conducted on instructional performance and switching frequency and participation and task comprehension measures on the student and teacher level.

5.1 Teachers' Instructional Performance

The teachers were evaluated based on four dimensions (instructional clarity, strategic language use, interactional engagement, and alignment with the role of the professional identity) that were rated and averaged to compute the instructional performance scores.

In mean score of instruction, pre-intervention was $M = 2.84$ ($SD = .41$) and the post-intervention was $M = 4.18$ ($SD = .36$).

A paired-sample t-test showed that there was a statistically significant difference between the pre- and post-intervention instructional performance:

$$t(5) = 6.72, p < .01$$

The levels of freedom ($df = 5$) represent the 6 involved teachers in the within-subject comparison.

The size of the effect calculated using Cohen's d was:

$$d = 1.68$$

Based on the benchmarks that Cohen (1988)

suggests, this is a large effect size, which means that there has been a significant practical enhancement of strategy in the language use and instructions of teachers after the intervention.

5.2 Teacher Code-switching Frequency

The total cases of teacher-initiated switching were summed up in observed sessions in each phase.

The total number of switches before intervention: $n = 214$.

Total switching after the intervention: $n = 168$.

Frequency of switching (mean across observed sessions) per teacher was computed by dividing the total switching cases by the number of teachers who participated in a single phase.

Pre-intervention mean switching per teacher: $M = 35.7$.

Mean switching per teacher after the intervention: $M = 28.0$.

A paired-sample t-test showed a statistically significant difference between the switching frequency before and after intervention:

$$t(5) = 4.11, p < .01$$

Cohen's d was calculated as:

$$d = 1.02$$

Large effect size indicates that the switching behavior of teachers was more regulated and controlled in the post-training period.

5.3 Students' Oral Participation and Engagement

Student classroom participation was assessed using a structured five-point rating scale. As the scoring was done at the session level, mean scores on participation at the session level were determined during the 12 pre-intervention sessions and 12 post-intervention sessions.

Pre-intervention mean score of mean participation: $M = 2.90$.

Mean score of participation after the

intervention: $M = 4.15$.

At the session level, a statistically significant improvement of student engagement was observed with the help of a paired-sample t-test:

$$t(11) = 5.11, p < .01$$

The number of degrees of freedom ($df = 11$) indicates the 12 paired session-level observations that were covered in the analysis.

Cohen's d was calculated as:

$$d = 0.86$$

This effect size has a big practical effect on student participation after organized multilingual tutorial conformity.

5.4 Task Comprehension Score

The assessment of task comprehension among students was done using academic tasks of classroom activities and was graded in percentages. Each phase had session based mean percentages calculated.

Pre-intervention mean score on comprehension: 58.6%

Mean comprehension score after the intervention: 73.4%

A paired-sample t-test at the level of a session proved that the improvement was statistically significant:

$$t(11) = 4.92, p < .01$$

Cohen's d was calculated as:

$$d = 0.81$$

This large effect size suggests that gains in the academic performance of the students were quantifiable improvements with respect to the strategic use of language in the observed sessions.

5.5 Summary of Inferential Results

To offer a summarized view of the statistical results, Table 4 will show the results of the paired-sample t-test on all the measured variables.

Table 4*Paired-Sample t-Test Results of Pre- Post Comparisons*

Variable	Pre M (SD)	Post M (SD)	Mean Diff	t	df	p	95% CI	Cohen's d
Instructional Score	2.84 (.41)	4.18 (.36)	1.34	6.72	5	< .01	[.85, 1.83]	1.68
Switching Frequency	35.7 (4.2)	28.0 (3.8)	7.7	4.11	5	< .01	[2.8, 12.6]	1.02
Student Participation	2.90 (.52)	4.15 (.48)	1.25	5.11	11	< .01	[.75, 1.75]	0.86
Task Comprehension (%)	58.6 (8.3)	73.4 (7.5)	14.8	4.92	11	< .01	[8.7, 20.9]	0.81

Table 4 demonstrates that statistically significant changes were detected in all the dimensions measured. The consistently large effect sizes indicate that the intervention produced substantial practical improvements in instructional regulation of code-switching, student engagement, and task comprehension.

6. Detailed Analysis of Selected Classroom Observation Protocols

6.1 Observation Protocol 1: Pre-Intervention Phase

The Pre-intervention occurred within the framework of an undergraduate EFL class with 31 students, where the Observation Protocol 1 took place. The 50 minutes lesson was on expository paragraph writing, especially on how to build topic sentences as well as supporting details. There were 37 instances of teacher initiated and 29 instances of student initiated code-switching. The alternate language was English, Sindhi (first language), and Urdu (common national language).

During this session, classroom management and habitual switching took up a significant part of teacher-initiated switches. It was clarified, although not always organized. For instance, *Write the main idea and make it clear... jaldi karo, time ghatt aahe*. In this case, the teacher swapped to Urdu and Sindhi in the process of teaching. The transition was sudden and served

only to control the speed and not the understanding of academic material. In like manner, when switching tasks:

Now please hand in your copies... *sabb jama karayo* (سب جمع کرايو).

Management and compliance were done in the code-switch to Sindhi.

During this pre-intervention lesson, the teacher played the role of a classroom manager more. During transitional and disciplinary moments code switching was common implying that it was reactive and not strategic. In cases where students had problems in vocabulary, there would be clarification although in most instances without turning back to English.

Student: Sir, cohesion *matlab* (مطلب) ?

Teacher: *Rabto* (رابطو) -Sentence *jo* (جو) connection.

The explanation was also in Sindhi without bringing scaffolding students to English. This trend shows that the teacher tried to facilitate, but her reinforcement of using English was not constant. Identity performance at this stage displays the managerial supremacy that partially facilitates.

Peer negotiation of meaning: This switching was primarily spontaneously initiated by the students:

“Yaar, evidence *kean likhbo?*”

“ڪيئن لکبو؟ evidence ڀار”

In activities where a lot of cognitive effort is required in writing, students used Sindhi. The teacher failed to intervene regularly to correct language choice and this implied that there was minimal monitoring of strategy.

The switching patterns are uncontrolled as witnessed in Observation Protocol 1. Although code-switching had communicative functions, it was not organized in accordance with its pedagogical purpose. The role identity of the teacher was more managerial with facilitative aspects coming out inconsistently.

6.2 Observation Protocol 2: Pre-Intervention Consolidation Pattern

Observation Protocol 2 was held at the pre-intervention stage of another EFL undergraduate course of 34 students. The 50-minute lesson was based on the structure of a narrative essay and usage of transitional expressions.

There were 35 teacher initiated and 26 student initiated switching instances. Like in Observation Protocol 1, the predominant English and Sindhi language alternation was used with an occasional use of the Urdu language to find common ground.

Clarification and classroom management were almost the same in frequency among teacher initiated switches in this observation. Nevertheless, the process of switching was spontaneous alternation instead of being a strategic scaffolding. For example:

Use transitory words... *jo sentence ko connect karte hain.*

The transition to Urdu was not structured in any way and was made in the middle of the sentence without a structured reversion to English vocabulary. Although the explanation made it easy to understand, it did not force the students to re-do the production of English.

In another instance:

Write the paragraph all the way through... *copy karan jo waqt naahe.*

Complete the ڪاپي ڪرڻ جو وقت ناهي”

Paragraph.....

In this case the switch was just to be used as a management and pacing aid.

The teacher in this session shifted between the position of the explainer and the position of the manager, however, there was no explicit linguistic control. The process of code-switching in the explanation was common and it could usually go beyond a short scaffold. For example:

A thesis statement puts down the central idea - *matlab sabh khan aham gaalh - jeka poore mazmoon jo rukh budhaey.*

مطلب سڀ کان اهم ڳالھ جيڪا پوري مضمون جو رُخ ٻڌائي....”

The protracted use of Sindhi implies the dependency on L1 to make sure it is clear but without systematic diminishing L1 dependency.

As compared to the subsequent post-intervention sessions, the English language was not always reinstated as the main language of instruction after clarification.

Students often transitioned to Sindhi when discussing narrative topics in peer discussion:

Introduction *kean shuru thendo aa, yaar.*

..ڪيئن شروع ٿيندو آ introduction ڀار”

In this observation, the intervention by the teacher to redirect the use of English was minimal, which implies that there was little observance of language choice when undertaking collaborative activity.

Observation Protocol 2 supports the trend of Protocol 1. Switching after interventions was in place but not strategically controlled. Facilitative and explanatory roles were played by teachers but managerial identity prevailed in transitional times. The lack of intentional language redirection reflects the fact that the process of code-switching was employed as a convenience tool and not a pedagogically premeditated process.

6.3 Observation Protocol 3: Transitional Phase (Early Post-Training Implementation)

Observation Protocol 3 was carried out at the

initial stages of implementation after the training on dealing with strategic language use. The topic of the lesson was based on argumentative essay format and counter-arguments. The number of teacher-initiated and student-initiated switching cases was 28 and 22, respectively, which indicates a decrease in the number of such instances as compared to the pre-intervention sessions.

Clarification was the prevailing role as compared to the pre-intervention stage. Switching related to management reduced significantly. For example:

“What is a counter-argument? It is the contrary opinion - *mukhalif rai* (مخالف راء) now explain it in English.

In this case, the teacher momentarily transitioned to Urdu to scaffold meaning, though almost instantly sent students back to English. This is an indication of intentional scaffolding and not replacement.

The teacher played a more consistent role as a facilitator in this session. There was the purposeful code-switching that was limited to conceptuality clarification. The teacher did not switch in the normal management of routine. Questions like: “Open your books to page 45.” This was continued in the English language. This change shows the closer the association between professional role identity and the choice of language.

During peer discussion, students still used Sindhi and Urdu, but as time progressed, the teacher insisted on English paraphrase: In English please. This intervention can be seen as enhanced surveillance and role playing.

The Observation Protocol 3 is the transitional stage when code-switching was more pedagogical controlled. The teacher showed a new understanding of the role-based language practice.

6.4 Observation Protocol 4: Structured Strategic Implementation Phase

Observation Protocol 4 was conducted at post-intervention stage when teachers had undergone systematic training on strategic language use

and role based code-switching. The 50-minute lesson was devoted to persuasive writing and writing arguments on the basis of the thesis. Twenty-four instances of switching initiated by teachers and 20 instances of switching initiated by students were counted, which showed a significant decrease, in comparison with the observations before the intervention.

In comparison to the previous lessons, the major role of teacher-initiated code-switching became clarification, whereas the switching that was associated with classroom management became significantly less frequent. For example:

“What is a counterclaim? *Mukhalif point* — it is the opposite argument, now say it in the English.

The teacher did a semantic scaffolding briefly in Urdu and soon guided students back to English. This is evidence of ordered, planned switching in line with instructional intent. The management commands, including the ones like Submit your assignment. were given in full in English language, which implied more linguistic control.

During this session, the facilitator role was mainly played by the teacher. Code-switching was confined, short and intentional. The educator did not use the L1 explanations that were lengthy and instead kept English as the main language of instruction. Where students had difficulty in their concepts, the teacher would offer little L1 support after which the student would be expected to recast their ideas in English, which will support the role alignment in line with the pedagogical objectives.

Observation Protocol 4 is a definite transition to strategic regulation. Code-switching ceased to be automatic or responsive and adopted selectively to provide better understanding without losing control over the target language.

6.5 Observation Protocol 5: Reinforcement and Students Engagement Phase

Observation Protocol 5 occurred in the lesson about oral presentation skills and peer feedback. Short analytical replies of the students were given, and interactive questioning was carried out after every presentation. There were 21

instances of teacher initiated and 18 instances of student initiated switching.

Supportive and reinforcement functions of teacher switching were more apparent.

For example:

“Good example. This is referred to as coherence and unity -*inkhe jumlan ae khayalan ji hamahangi chaebo ahey*. Repeat ‘coherence’.”

“انهي کي جملن ۽ خيالن جي هم آهنگي چئبو آهي”

In this case, alternation was employed to reinforce the conceptual meaning and retain the English repetition. In another instance:

“Very good effort. Confidence *rakho*.”

The short Urdu sentence was an appeal to the heart.

This session was characterized by both the supporter and facilitator roles performed by the teacher. The change was made in instances of motivational reinforcement but not discipline. In comparison to the pre-intervention sessions, the issue of classroom management involved was processed entirely in English, which also showed greater professional control. There was switching by students, which took place at times of problem with lexical challenge, but the teacher always corrected them:

“Try again in English.”

This signifies conscious identity performance as language guide.

Observation Protocol 5 is the stabilized strategic switching practices. The instructor was also consistent with his roles and the switching was not spontaneous but integrated as part of the pedagogy.

6.6 Observation Protocol 6: Consolidated Post-Intervention Pattern

Observation Protocol 6 is the last observed session during the stage of the experiment. The lesson was devoted to the discussion of social problems and argumentative reactions in a small group. Teacher-initiated switching went down further to 19 instances and the student-initiated switching was registered at 17 instances.

Making things clear was the most used role, and

then support. Switching with respect to classroom management was low. For example:

“What is evidence? It is demonstration, *daleel ya saabti*, now make it out in your own language.

Changing was short, accurate and was closely followed by production in English.

The teacher distinctly fulfilled the role of a facilitator and with a few instances of supporter role in this last session. The language alternating was:

- Controlled
- Minimal
- Strategically timed

The instructions given by the management were all in English which indicated enhanced confidence and professional control.

The teacher was not making use of long L1 explanation. Rather, L1 was temporarily employed so as to make certain of cognitive access and then back to English discourse.

Students tried to use English persistently. Switching was mostly in conceptual uncertainty as opposed to habit. Intervention by teachers was always successful in returning students to English language, which proved the consistency in identity with strategic instructional objectives.

The united result of the intervention is observed in Observation Protocol 6. Code-switching has become a pedagogically fine-tuned instrument in line with professional role identity as opposed to default communicative mechanism.

7. Grounding Teachers’ Role Identity in Theory

7.1 Theoretical Grounding of Teachers’ Professional Role Identity

The role identity of teachers in the present investigation is based on sociocultural and teacher identity frameworks, especially, the work of Beijgaard, Meijer, and Verloop (2004) who define teacher identity as a dynamic process constructed by the teacher in his/her professional practice. The role identity is perceived as the performance of professional

roles, i.e. facilitator, explainer, and manager (in a certain instructional setting).

Moreover, the concept of identity put forward by Gee (2000) as it is performed in the discourse helps to interpret the fact that in the language used in classroom interaction, teachers demonstrate their professional position. Code-switching, in multilingual EFL contexts, apprehends code-switching as a discursive means where teachers conduct and negotiate these discursive roles. In the frame, identity is not considered as a fixed psychological characteristic but as a place performance arising out of classroom interaction.

By placing the role identity of teachers in these systems, the study offers theoretical basis to define the code-switching as a role-based pedagogical approach, but not a random language practice.

Teacher identity has also been conceptualized within communities of practice frameworks (Wenger, 1998) and as socially negotiated professional positioning within institutional contexts (Varghese et al., 2005). These perspectives reinforce the view that identity is not a fixed attribute but an interactionally constructed performance shaped by sociocultural expectations and pedagogical decisions.

8. Conclusion

The paper has discussed the trends and roles of code-switching in multilingual EFL classrooms in a public sector university in Sindh, Pakistan, and has investigated the way in which these practices can be related to the professional role identity enactment by teachers. The research has transcended the perceptions-based data through a quasi-experimental pre- and post-observation design to systematically record enacted classroom discourse on six structured observation protocols.

The results indicate that the code-switching in multilingual EFL classrooms is not random and habitual. The observations made prior to intervention indicated that there was a high frequency of teacher-initiated switching that was mostly due to managerial and procedural

reasons. During such sessions, there was a good tendency of language alternation in classroom control, task regulation, and spontaneous clarification which were a manifestation of a prevailing managerial role performance. Nevertheless, after systemic pedagogic intervention, both the frequency and functional distribution of switching changed. The management-conditioned and habitual switching reduced sharply; the clarification-oriented and the reinforcement-based switching turned out to be more outstanding and pedagogically oriented.

The statistical analysis by use of inferential statistics, proved that these changes were not accidental. Paired-sample comparisons showed statistically significant decreases in overall switching frequency, and quantifiable changes in the clarity of instruction, student participation and understanding of the task. The fact that the effect sizes are large indicates that the intervention was practically as well as statistically significant. These findings are empirical in that they support the view that multilingual instructional practices are regulated and coordinated to pedagogical intent, without the need to eradicate the legitimate use of the shared linguistic resources.

In addition to quantitative alterations, discourse-based analysis of three protocols of observation showed a significant change in the professional role enactment. In contrast to the pre-intervention session, which showed a managerial identity performance, the post-intervention session showed evidence of facilitative and supportive positioning. Code-switching was brief, more focused and instructional. The English language continued to be used as an academic tool, though Sindhi and Urdu were occasionally utilized to frame conceptual knowledge and ensure the involvement of everybody. The findings reinforce the thesis that the identity of professional role of teachers is not merely self-perceived but practiced in relation to patterned language practices through the interaction in the classroom.

Notably, the paper leads to the literature on multilingual pedagogy by combining the

quantitative analysis based on frequencies with the discourse analysis, informed by identities. Through this, it will fill a methodological gap in existing studies, which have mostly been overly dependent on self report measures. The framework of observation design, the testing of reliability, and the inferential statistical analysis reinforced the internal validity of the results and proved that the multilingual higher education settings can study classroom discourse in a systematic way.

The paper also provides context-based implications to the English-medium higher education in Pakistan. In multilingual provinces like Sindh where English, Urdu and regional languages co-exist in institutional contexts, perfect eradication of code-switching is not possible as well as pedagogically desirable. Rather, the results indicate that the professional development programs are to be aimed at sensitization to patterns and functions of code-switching and coordinating the language choice to instructional roles. Such alignment allows teachers to keep using English as the main language of instruction and to plan the use of common linguistic tools that could be used to facilitate understanding and interaction.

However, there are some shortcomings that should be admitted. The research was carried out in one institutional context and a rather limited number of teachers were involved. Whereas the within subject design enhanced internal comparison, greater externalization of the findings to different provinces and institutional type need additional research. The further studies can be upscaled, involved discourse analysis can be audio-recorded, or longitudinal studies can be conducted to study the long-term identity changes.

To sum up, the paper offers empirical support on the idea that code-switching in multilingual EFL classrooms is a context-dependent, role-mediated pedagogical phenomenon and did not presuppose linguistic deficiency. The patterns and functions of switching are directly connected with the role identity of teachers and can be molded with the help of the systematic pedagogical awareness. The study empowers the knowledge of the dynamic association among

identity, pattern, and function of code-switching in the public sector university of Sindh through recording observable changes in instructional discourse to a quasi-experimental framework.

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