Emerging Issues of Pupil-Teacher Ratio and Teacher Deficiencies in Bengali And Olchiki Medium Government Primary Schools of West Circle, Gopiballavpur, Paschim Medinipur, India

| Mrityunjoy Jana | Department of Education, North Orissa University, Baripada, India |
| :---: | :---: |
| Subrata Kumar Arui | Department of Education, Kolkata, University of Calcutta |
| Papiya Dutta (Ray) | Department of Education, Mrinalini Datta Mahavidyapith, Kolkata, India |
| Nityananda Sar | Department of Geography, Kharagpur College, Kharagpur, India |
| This paper assesses pup Medinipur, West Bengal schools and the pupil-te to study. A separate step schools. Thus, pupil-tea was used to divide the p for lower primary level(Ifor indicators that should Overall, this type of pupi in rural primary school | teacher ratio (PTR) in rural primary school level (I-IV) in Gopiballavpur Circle (West), Paschim With respect to 2014 (academic sessions) registered enrolment record in seventy nine primary her ratio was calculated for each school using actual values of measurable parameters relating has been taken to assess for seven Olchiki instruction medium schools among total seventy nine er ratio was assigned to each of the schools according to the pupil-teacher ratio. This analysis pil-teacher ratio into two assigned threshold including on the basis Right to Education Act 2009 of PTR>30 and PTR<30 numeric . However, the interpretation should be the other way round deally approach PTR=30 (e.g. support the recommendation of RTE (Right to Education Act) 2009. eacher ratio assessment may prove useful for future school planning and management programs comprehensive for quality education. |

## KEYWORDS

Enrolment record, Management Programs, Measurable Parameters, Pupil-Teacher Ratio, Right to Education Act, School Planning


#### Abstract

1 Introduction: Universal primary education (UPE) will remain a distant dream for millions of children living in countries without enough teachers in classrooms. Current discussions of the post-2015 development agenda include a target to bolster the supply and training of teachers as part of efforts to ensure that every child learns in a stimulating and supportive classroom environment. 1 To help formulate and monitor possible post-2015 education targets, the UIS has released a new set of projections of the demand and supply of primary teachers at the global and national levels. 2 Students learn better when they are working in smaller groups. When students are working in small groups they are able to learn from each other, share their knowledge, build better personal relationships with their peers and the teacher, and stay more engaged in learning activities (Alhusen et al, 2004; Center for Teaching and Learning, 1999; Fan, 2012; Kelly, 2014, Duflo et al. 2007, Achilles et al. 1998). This educational belief was supported by theorist, Lev Vygotsky. Vygotsky felt that people learn better when involved in social interaction. He thought that the learning process should take place between the teacher and the students together. When the student-teacher ratios are lowered there is allowance for teachers and students to work more closely together and build a stronger learning community between the students and teachers, in turn producing increased student cognition (Kozulin, 2011, Mickelburgh, 1970, Molnar et al. 1999, Duflo et al. 2015, Darling-Hammond, 2000).Vygotsky also felt that people, (students) learn when they are working with in their Zone of Proximal Development, (ZPD). The ZPD is what can be accomplished successfully with the assistance of an adult or help from a peer, surpassing what can be done alone. What learners can accomplish is dependent upon the level of social interaction and the amount of time spent working in the ZPD (Culatta, 2013, Feinstein and Symons, 1999). There have been multiple studies investigating student performance when the student-teacher ratio has been lowered. A study conducted by the state of California, investigating the effect of lower student-teacher ratio, found that when the


student-teacher ratio was lowered, there were fewer interruptions because of behavior and small student gains in performance. Pupil or student-teacher ratio refers to the number of learners enrolled in a given level of education divided by the number of teachers in the system (Williams, 1979, Blatchford, 2011). Pupil or Student-teacher ratio is a significant measure of quality in education. This is because; in a system where the ratio is high learners may lack personal attention from the teacher while the less academic learners are likely to lag behind. Consequently, learners' progress through the curriculum may be hindered, a factor that may lead to dismal performance in the exit examination (Nkinyangi, 2003; Katunzi \& Ndalichako, 2004, Muijs and Reynolds, 2003).

## 2 Objectives of the Study:

- To assesses pupil-teacher ratio (PTR) in rural primary school level
- Enrolment of children in the habitation
- Regular attendance of children
- Level of learning in Language (Bengali and Olchiki)
- The performance of schools reveals wide variety from schools whose average achievement scores exceed $90 \%$ to those schools where practically no learning is happening.


## 3 Materials and Methods:

Data related to no. of teacher and pupil-teacher ratio has been collected from the CLRC (Circle Level Resource Centre) of Gopiballavpur block. In a low pupil or student-teacher ratio learning environment, learners are more likely to get more one-on-one time with the teacher. Moreover, teachers may get to know the individual student better, thereby enhancing teacher's capacity to identify areas where the student may be in need of assistance. In the final analysis, learners get more value out of their education. These observations lend support to the view that other factors held constant (e.g., learner's family background, material inputs, and so on), teacher factor is the most powerful determinant of learner's academic achievement (Glass, 1982).
$P R_{h}^{t}=\left(\frac{E_{h}^{t}}{T_{h}^{I}}\right)$
Where,
$P T R_{h}^{t}$ Pupil teacher ratio at level of education $h$ in the school year $\boldsymbol{t}$
$E_{h}^{t}$ Total number of pupils or (students) at level of education $h$ in a school year $t$
$T_{h}^{t}$ Total number of teachers at level of education h in a school year t

Generally speaking, pupils or students in rural areas are educationally disadvantaged compared to their urban counterparts. This observation is reinforced by views gleaned from literature research based and otherwise. For instance, it has been observed that rural schools face challenges relating to isolation, poverty and limited job opportunities for school leavers. Isolation denies rural schools the advantages of ur-ban-based resources (e.g., libraries, electricity, technology etc.) that might enhance learning gains (Capper, 1993, Smith and Glass, 1979). The poverty of many rural communities, on the other hand limits parents ability to provide for their children and to augment their children education with resources at home that can spark and sustain interest in learning in the absence of the teacher. Bickel \& Lange (1995) have further averred that because of limited employment opportunities, learners in rural areas do not see any financial benefits to attend or succeed in school. Consequently, most rural based learners end up performing poorly in the exit examination which limits their chances of moving up the education ladder. Sheldon (2012) has also noted that rural schools tends to harbor (this is particularly so in the less developed countries) untrained or unqualified teachers, which is a great disservice to learners. Furthermore, due to distance factor, most rural schools rarely get visited by school inspectors or quality assurance officers for that matter. This implies that teachers in rural schools are less likely to get the much needed supervisory advice from their professional seniors. Moreover, due to lack of attractive amenities (e. g., good houses, clean water, electricity and so on) a significant prorportion of teachers posted to rural schools either apply for transfer immediately or become habitual absentees. This makes it difficult for rural schools to keep classrooms staffed. Added to that is lack of facilities in most rural schools. For instance, a 1988 World Bank report observed that most rural schools in Africa were characterized by dilapidated buildings, missing or broken desks and chairs and a lack of good ventilation and sanitation facilities (World Bank, 1988). These circumstances, the report noted had the net effect of discouraging school attendance and hampering schools' efforts to enhance learning gains by learners.

## 4 Results and Discussion:

In according to Fig 1 no. of teacher and pupil-teacher ratio of 79 primary schools in Gopiballavpur circle are shown in logarithmic scale. In first 19 schools no. of teacher are less than another 60 schools. Pupil-teacher ratio of P8, P12, P20, P32, P33, P54, P74, and P77 are high in logarithmic scale. But the fig shows the inequality of no. of teacher and pupil-teacher ratio are overall high. Infrastructural facilities of 79 primary schools in this circle are not good at all. Pupils of this circle are less literate than the surrounded area. Teachers of sampled schools are very poor in number. Among seven alchiki instruction medium primary schools have same deficiencies both teacher and pupil-teacher ratio. Bhalukasole new primary school and Saria Mathasai primary School experienced by low rate of pupil-teacher ratio and poor number of teacher. As per the RTE act, the Pupil-Teacher Ratio (PTR) should be revised as 30:1 for LP schools (classes I to V) and 35:1 for U.P schools (classes VI to VIII ), in West Bengal, the existing PTR in as per the divisions in a school. The PTR is therefore revised as 30:1 for LP schools and 35:1 for the UP schools taking into con-
sideration the total strength of students of sanctioning class divisions. However the existing system of sanctioning class divisions will continue but an additional post will be sanctioned only based on the school wise PTR. Whenever the additional teachers are found necessary based on school wise PTR, the existing teachers bank will be used. DPI will assess the PTR School wise and take necessary action to ensure 30:1 for LP and $35: 1$ for UP schools from the Academic Year 2015. How does this growth in teachers compare to that of pupils? The number and distribution of teachers are important policy parameters helping to determine the quality of education. The pupil-teacher ratio is a commonly-used indicator, reflecting the human resource capacity of education systems. The low number of qualified teachers has always been a major lacuna of the Indian educational system. This is one of the many flaws in a system which is 'a mixed bag of glaring gaps and remarkable successes'. As the author points out, the literacy rate in the country has shown a remarkable growth from $18.38 \%$ in 1950-51 to $65.38 \%$ in 2000-01 ( $74 \%$ in 2010-11). However illiteracy is still significant and a substantial number of children do not attend school. There are disparities in schooling levels across rural and urban areas, across genders, and for marginalized communities like SCs and STs. One of the major issues listed in the article is that in 2002, the national average for the number of qualified teachers in government-managed primary schools has only been 2.47 . It is widely understood and accepted that a low pupil-teacher ratio enables individual attention by teachers and therefore can increase student achievement. It enables better absorption and understanding of the subject. Thus a low pupil-teacher ratio is an essential for long term and broad based academic achievement. Pedagogy specialists argue that a smaller pupil-teacher ratio has a larger impact during the early years of schooling (Jennifer Brozak, Global Post, n.d.). It is found that children who attend schools with lower pupil-teacher ratios have a greater likelihood of continuing schooling for a greater number of years. Moreover, there is also the possibility of student-teacher ratios making for "better citizens" through better educational attainment. Arum (2008) argues that more investment in schools and in reducing student-teacher ratios reduces the risk of prison incarceration in later life. Azim Premji Foundation's own previous studies have underlined the criticality of the pupil-teacher ratio in classroom learning. In a survey study of 766 lower primary schools in North East Karnataka, we found that a PTR of less than 30:1 has a high correlation with superior school performance.


Fig 1 No. of teacher and pupil-teacher ratio of 79 primary schools in Gopiballavpur (West) circle.


Fig 2 No. of teacher and pupil-teacher ratio in alchiki medium schools

The chance of strong performance declines with increasing PTRs, and when PTR is as high as 40:1, schools have a less than $2 \%$ chance of turning in a strong performance (The Criticality of Pupil Teacher Ratio, Azim Premji Foundation, n.d.).

## 5 Conclusions:

On the basis of results and findings of our study it can be concluded that government should take some specific planning and management policies which can help the infrastructural facilities of all primary schools of this circle. The Government of India has recently mandated a set of rules within the framework of the Right to Education (RTE) Act, 2009. RTE has placed education in India within a rights based framework whereby the government is duty bound to provide educational opportunities to all children up to the Elementary level. The rules that govern areas in education therefore fall within the purview of this rights based framework; which means that every one of the issues within the RTE is a right. One of the important injunctions in RTE relates to the pupil-teacher ratio. The RTE mandates a maximum PTR of $30: 1$ to be maintained in each school individually. In fact, "It provides for rational deployment of teachers by ensuring that the specified pupil teacher ratio is maintained for each school, rather than just as an average for the State or District or Block, thus ensuring that there is no urban-rural imbalance in teacher postings." (Department of School Education and Literacy, note on Right to Education). In this article we look at the real state of the PTRs in the states and districts Azim Premji Foundation works in. We also look at the situation of schools in terms of number of teachers in an effort to isolate areas of concentration of single- or two-teacher schools.

## REFERENCES

Allhusen, V., Belsky, J., Booth-LaForce, C. L., Bradley, R., Brownwell, C. A., Burchinal, M., \& Weinraub, M. (2004). Does class size in first grade relate to children's academic and social performance or observed classroom processes. Developmental Psychology, 40(5), 651. Achilles, C. M., \& Sharp, M. A. (1998). Solve Your Puzzles Using Class Size and Pupil-Teacher Ratio (PTR) Differences. Catalyst for change, 28(1), 5-10. Blatchford, P., Bassett, P., \& Brown, P. (2011). Examining the effect of class size on classroom engagement and teacher-pupil interaction: Differences in relation to pupil prior attainment and primary vs. secondary schools. Learning and Instruction, $21(6), 715-730$. Capper, C. A. (Ed.). (1993). Educational administration in a pluralistic society. SUNY Press. "World Bank. 1988. World Development Report 1988. New York: Oxford University Press. © World Bank. https://openknowledge.worldbank.org/handle/10986/5971 License: CC BY 3.0 IGO." Culatta, R. (n.d.). Social Development Theory (Lev Vygotsky). Social Development Theory. Retrieved March 18, 2014, from http://www.instructionaldesign.org/theories/social-development.html Duflo, E., Dupas, P., \& Kremer, M. (2007). Peer effects, pupil-teacher ratios, and teacher incentives: Evidence from a randomized evaluation in Kenya. Duflo, E., Dupas, P., \& Kremer, M. (2015). School governance, teacher incentives, and pupil-teacher ratios: Experimental evidence from Kenyan primary schools. Journal of Public Economics, 123, 92-110. Darling-Hammond, L. (2000). Teacher quality and student achievement.Education policy analysis archives, 8, 1. Glass, G. V. (1982) School Class Size: Research and Policy. Beverly Hills, California: Sage. Fan, H. (2012). Research on the Physical Education Teaching Effectiveness of the Higher Colleges and Universities with Intuitionistic Fuzzy Information.Journal of Convergence Information Technology, 7(15). Feinstein, L., \& Symons, J. (1999). Attainment in secondary school. Oxford Economic Papers, 51(2), 300-321. Kelly, D. (2014). A handbook for translator trainers. Routledge. Kozulin, A. (2011). Learning potential and cognitive modifiability. Assessment in Education: Principles, Policy \& Practice, $18(2)$, $169-181$. Katunzi, N. \& Ndalichako, J. L. (2004) Pupils Teacher Ratio. Paris: UNESCO Mickelburgh, B. (1970). Pupil-Teacher Ratios. Monday Morning, 4(7), 4. Molnar, A., Smith, P., Zahorik, J., Palmer, A., Halbach, A., \& Ehrle, K. (1999). Evaluating the SAGE program: A pilot program in targeted pupil-teacher reduction in Wisconsin. Educational Evaluation and Policy Analysis, 21(2), 165-177. Muijs, D., \& Reynolds, D. (2003). The effectiveness of the use of learning support assistants in improving the mathematics achievement of low achieving pupils in primary school. Educational Research, 45(3), 219-230. Nkinyangi, S. (2003) Kenya's Bold Decision to Provide Free Primary Schooling (One Line). Available: http//portal.unesco.org/education. Accessed on 01.09.2003 Smith, M. L., \& Glass, G. V. (1979). Relationship of Class-Size to Classroom Processes, Teacher Satisfaction and Pupil Affect: A Meta-Analysis. Williams, P. (1979). Planning Teacher Demand and Supply. Fundamentals of Educational Planning--27. IIEP Publications, International Institute for Educational Planning, 7-9, rue Eugene-Delacroix, 75016 Paris, FRANCE (Order No. N. 13; 12.00 francs). Also available in French edition.

