# Releasing confidence and creativity: The achievements of a decade of early childhood support in Pakistan

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Education is key to poverty reduction and development, and the push over recent decades to establish universal enrolment is a reflection of this. But there are some paradoxes at the centre of this campaign. One is that the massive increase in enrolment in the majority world has not been accompanied by equivalent gains in learning or in school completion. In some places it has actually undermined school quality, and many children drawn into the system quickly drop out again. Most school systems focus on creating an educated elite; the great majority of children who fail or drop out along the way are the chaff that results from the winnowing process. A related paradox is the absence of investment in early childhood programmes, despite their recognized value and their ripple effects for every subsequent stage of education. Children are entering school unprepared for this profound transition – especially those children who come from poverty and illiteracy, and who do not even speak the language used at school.

There have been many constructive efforts around the world to counter these trends by expanding children's chances of success right at the beginning of the educational cycle. One of these is the RCC programme (Releasing Confidence and Creativity) in Pakistan, which worked for a decade to support strong, equitable

preschools and early grade classes in some of the poorest parts of the country. This report describes some of the challenges facing this programme and its hard won achievements, confirmed by the research conducted over the final years of the programme. RCC did not result in miracles; there was room for improvement in almost every area of the programme. In some places it made a more dramatic (and statistically significant) difference than in others. But its' consistently more welcoming classrooms, supportive teachers and involved parents made school a more joyful, absorbing experience for tens of thousands of children. The very real changes in their learning and in their communities' engagement in that learning will surely continue to have an impact as they move through the system.

## Background

Despite Pakistan's commitment to achieving universal access to good primary education, investment remains low (less than 3 percent of GDP)[1], teachers are poorly trained and frequently absent, and school buildings and learning materials are woefully inadequate. The situation has improved in the last decade. But over a quarter of the country's primary-aged children still do not enroll in school and less than half actually finish primary school.[2] Dropout rates are especially high in class 1, reflecting children's aversion to bleak school environments and monotonous, often punitive, approaches to learning. The situation for girls remains worse than for boys, although this varies enormously even within provinces. In Balochistan, for example, there are districts where more girls attend than boys – the result of targeted support for girls' schools. But there are also districts where only one girl attends for every four or five boys, and where scarcely 10 percent make it through primary school.[3] Pakistan lags well behind its South Asian neighbours on this front.


Figure 1: Map of Pakistan

The Aga Khan Foundation and its network partners have a long history in Pakistan, working not only in education but in broad based integrated rural development. RCC was established in 2002 by AKF, with a broad coalition of partners, in the provinces of Balochistan and Sindh, and in the far northern districts of Gilgit-

[1] UNESCO (2010) *Global Education Digest 2010: Comparing Education Statistics Across the World,* UNESCO Institute for Statistics, Montreal.
[2] UNESCO Ibid.
[3] Ministry of Professional and Technical Training, Pakistan Education Atlas, http://www.atlas.edu.pk/

Baltistan and Chitral, These are some of the poorest and most marginalized parts of Pakistan. Not only is poverty chronic and deeply entrenched here; events can also seem to conspire to thwart the most dogged efforts to turn things around. Sindh, for instance, was badly hit by the severe flooding of 2010, and the potential for widespread flood destruction seems to grow with every year. Balochistan's poverty is complicated by high levels of insecurity and conflict – there were times over recent years when programme schools could not even be reached by support staff. Although the two northern districts are poor and remote as well, there is more visible progress here – higher levels of literacy, better opportunities for girls and more commitment generally to children's education, in no small part because of the efforts of the Aga Khan Development Network there over the years. But even where crises do not intervene, everyday conditions can make progress very difficult. In some areas, for instance, winter weather can close schools for three months or more each year.

From 2002 to 2011, the Releasing Confidence and Creativity (RCC) programme worked to increase children's access to preschool and primary school, and to ensure that their experience, once there, would be warmer, richer and more stimulating than the usual fare. The programme also tried to give families and communities the encouragement they needed to support their children's education and general development. RCC was funded from 2002 to 2006 by USAID; after this it was sponsored by the Embassy of the Kingdom of the Netherlands, which expanded the initiative to include some supports for the 0 to 3 age group.

Various developments on the ground converged to make the time right for introducing RCC. A previous USAID-funded project had allowed AKF to support the Aga Khan Education Services in their development of community schools in Sindh and the North, beginning with katchi[4] or preschool level and adding a class each year. This initiative was welcomed by communities and there was rich learning in terms of mobilizing communities and supporting local young women to become confident teachers. The experience left AKF in a good position to undertake the RCC programme. This happened within the broader framework of a mandate within the country to reintroduce katchi and preschool into government primary schools – although no government funding was actually in place to support this. USAID decided to switch from funding NGO community schools to supporting the government system - but still wanted to fund NGOs to undertake this work with government schools. USAID was also as much interested in strengthening the very weak early primary grades as in establishing katchi classes. So this was the context within which RCC was conceived and developed.

In each programme area (Balochistan, Sindh, and in the two northern districts) AKF worked through partners that already had a presence and a history on the ground. This allowed for very locally relevant approaches, building on existing relationships. In Balochistan, the Society for Community Support of Primary Education (SCSPEB) had been working since the 1990s in collaboration with government and local communities helping to establish schools, especially for girls, and addressing the generally conservative values around girls'

4 *Katchi* are the Pakistan equivalent of preschool/pre-primary schools; the two terms will be used interchangeably in this paper.

education. In Sindh, the Health and Nutrition Development Society (HANDS) had over 25 years' experience working in health and integrated development, responding in flexible, participatory ways to the priorities of local communities and their often critical needs. While their experience in early education was limited, they more than made up for this in the quality of their community relationships. In the North (Gilgit-Baltistan and Chitral) the Aga Khan Education Services Pakistan (AKESP) had been active for over a century, establishing and supporting community-based schools where no others existed, and also helping to strengthen government schools. These partners each carried out their own variants of the RCC programme in over 250 schools and communities.

In addition to these partners on the ground, RCC also had technical partners – the Aga Khan University's Institute for Educational Development, the Aga Khan University's Human Development Programme, the Teachers' Resource Centre (TRC) and the Sindh Education Foundation. These partners, all notable players in Pakistan's education world, had active roles in the training, research and advocacy components of the programme.

## The Programme

In the majority of schools where katchi or preschool classes did not already exist, partners worked with communities to find space for them and hired local women as katchi teachers. These teachers were paid by the RCC programme except in AKESP schools, where community members were mobilized to contribute to their salaries. Teachers were supposed to be school graduates, but this qualification was sometimes unrealistic in villages where few people were educated. Often these young women had little experience outside their very conservative home villages and were shy and uncertain about this new role. RCC gave them training, teaching them how to encourage children's learning through play, song, games and activities, and how to set up and run a stimulating classroom with materials they learned to make themselves. These katchi classes were RCC's entry point into communities. They attracted attention with their practical and appealing solution to the need for preschool classes, and gave the project the credibility to involve schools and communities more generally.

Most, but not all, of the class 1 and 2 teachers also had some RCC training. This training followed a trickle down approach; programme staff, themselves trained by the technical partners, went on to train teacher educators, who then trained both the katchi teachers and the primary teachers. These teacher educators remained part of the programme as mentors, and regularly made the rounds through a cluster of schools, watching teachers at work, talking over problems, making suggestions, demonstrating activities. They were especially important to the young katchi teachers who were learning on the job after their brief initial training sessions.

As is customary with AKF programmes, a warm, welcoming, understanding approach was encouraged. Many of the children are frightened to go to school. Often they are the first generation of learners, and even if elder siblings already attend, they are likely to come home with accounts of stern and even harsh teachers. These

teachers aren't necessarily unkind people, but a strict disciplinary approach is what they have always known. Afshan Kazi, one of the primary teachers who received the training, burst into tears when she learned about the detrimental effects of beating children. It was true, she realized; these children hated coming to school, and it was no wonder. The recognition that punishment wasn't an essential part of teaching came as a revelation and a relief to her. For the katchi teachers, mostly new to the job, there was less to unlearn, and most of them took naturally to the patient, loving role that was encouraged, quickly becoming the object of devotion for their students.

AKF also promotes a child-centred, activity-based approach to learning, and all of the grade 1 and 2 classes, as well as the katchi classes, received the kinds of materials that are essential to jump start that process. These were not lavish, but they provided a rich alternative to the starkly bare classrooms that are the norm in this part of the world. They included things like books, flashcards, games, blocks and shapes, basic art materials, props for dramatic play, and beads, keys, and marbles for fine motor play. Some materials were made by teachers; others were cheaply purchased from local markets. AKF also supplied a large amount of teacher support resources, worksheets and other materials aligned with the national curriculum. All these materials are so rare in Pakistan's bare-bones schools that they may seem too special to use; teachers sometimes lock them away in cupboards where they gather dust. Part of the role of the mentors was to make sure that the materials were easily accessible to the children and well used.

The training, mentoring and materials were the core of the programme. But RCC also paid attention to parents and to school management committees. Adult literacy classes, set up by the katchi teachers, were not just about literacy. Many women in these remote areas are not only uneducated but extremely restricted in their exposure to the world. Local needs were assessed in each village, and these classes, depending on the situation, also included information on health and hygiene, religious education and even basic needlework skills. In Tando Bahawal, where many women never stepped out of their homes, Baigoo, the young katchi teacher, felt it was critical that they at least know what medicines to give their children.

In some cases, where school facilities were especially dire, the programme assisted with building latrines or repairing crumbling schools. Mostly these more general improvements were taken on by school management committees. These exist in theory in every Pakistan school, but that does not mean they are always active. One result of the influx of energy from RCC was, in many communities, a more active, energized school management committee that took on the job of raising money and donations of time for much needed improvements.

Different partners added other related programme components, more or less formally tied to RCC. In Sindh, for instance, HANDS established Parwarish Markaz, local centres focused on children under 3, in about 30 communities. Stimulating activities were available for small children, along with workshops for parents and basic supports for health from trained Lady Health Workers, who conducted home visits and health camps

focused on the youngest children.[5] AKESP also started a programme involving home visits and centre based sessions for parents on early development and care in five communities in the North.

## The Schools

The schools in the programme differed on a number fronts. In Balochistan and Sindh, they were primarily government schools. In the North, although the programme included some government schools, for the most part they were private or community schools, run by AKESP. Some programme schools were for boys only, some were for girls only, and some were mixed, especially the community-based schools.

Language varied too. Urdu was the official medium of instruction in Balochistan and in most government schools in the North. Sindhi predominated in Sindh, although even here there were some Urdu medium schools. English was used in the community and private schools in the North and in a handful of Sindh schools. But the official language was only part of the picture. Balochistan and the North are linguistically diverse areas. In Balochistan, Pushto, Bharavi and other local languages were used in classrooms as well as Urdu; and in the North, Shina, Khuwar, Shina, Balti, and Brushaski as well as Urdu and English. Teachers tend to use whatever language they are most familiar with themselves. Children in Sindh have a definite advantage in this regard because they are most likely to be instructed in their mother tongue.

Differences between official policy and actual practice were also evident in the length of the katchi programmes. In the community schools in the North, most katchi programmes were two years long; in most government schools, katchi lasted officially for one year. But many children attended for two years, regardless of the official policy. In Balochistan, teachers simply kept children in preschool until they were old enough or skilled enough to enter class 1. In Sindh, many children attended an extra preliminary year in class 1, known as qaida. The situation varied from child to child and from school to school, and it was often no simple matter to determine how many years of preschool children might have had on entering class 1. Another difference had to do with curriculum. In some cases, katchi classes used the government's preschool curriculum. In the community schools in the North, AKESP had its own programme based on the government curriculum. There were also many katchi classes where no curriculum was used.

Schools also varied in terms of the extent of support they had. In many areas, other NGOs and agencies were also active. This was common in Balochistan, where many schools had some involvement from other organizations, most often UNICEF. In some cases, this meant some overlapping activity, such as teacher training and the provision of materials. More often, it involved the provision of funds to pay teacher salaries, or the improvement of infrastructure. Only RCC, however, was involved in preschool activities.

[5] Bhamani, Shelina (2011) Parwarish Markaz: Integrated Services for the Optimal Development of Children Ages 0-3, *ARNEC Connections: Working Together for Early Childhood,* 5, 12-15

## The Research

Despite the complicated variables that this programme represented, it was important to gain a sense of its overall effectiveness. Starting in the 2008-9 school year, a quasi-experimental study was undertaken to compare the effects of this enriched programme with outcomes in comparison schools in each programme area. The research looked at differences in schools and classrooms, in children's attendance and progression through school, and in their learning achievement. In each case, the research was managed by the partner implementing the programme, although tools and objectives were shared. A sample of RCC schools was randomly selected from each area for the research study; non-RCC schools were also randomly selected from the same areas for comparison. The initial sample was made up of 56 programme schools and 56 comparison schools, although numbers fluctuated over time.

*Table 1: The sample schools*

| School owner | Balochistan | | Sindh | | The North | |
|---|---|---|---|---|---|---|
| | RCC | Non-RCC | RCC | Non-RCC | RCC | Non-RCC |
| Government | 13 | 13 | 18 | 17 | 6 | 6 |
| Community/Private | | | 3 | 1 | 16 | 16 |

Not all of the comparison schools had real katchi programmes, especially in Sindh. Sometimes there was a classroom and a teacher for younger children; in some cases, katchi was just part of a multi-year classroom. But there were also cases where un-enrolled younger children were just informally around, often accompanying their elder siblings. This phenomenon of ever-present younger siblings can be what actually precipitates the formation of a katchi class in many cases.

*School profiles:* One of the first steps in the research was creating a "school profile", providing a picture of the characteristics generally considered to be indicators of access and quality. Researchers walked around and observed schools, talked to head teachers, primary teachers and others and looked through school records. They conducted a structured survey, assessing basic school facilities and environment (including toilets, water provision, general maintenance and the quality of outdoor space) and the activities of the school management committee.

Aggregate information was also collected on children's enrollment, attendance, retention, promotion and drop-out rates, all by grade and gender. In the best of worlds this can be easily done using school records. In low-resourced schools, especially where there is a lot of repetition and dropout, records are often confused and inaccurate, and it was necessary to turn to teachers to fill gaps and explain inconsistencies. Attendance

numbers, for instance, were generally based on the head count for the day the researchers visited, in preference to the recorded attendance, with teachers noting whether the number of children present was unusual for any reason. Teachers may not get around to keeping attendance records; there can also be practical reasons for falsifying attendance records, and a head count is often a more reliable indication of reality. In one school, a researcher asked the teacher why so few children were around that day, when the records indicated full attendance. The teacher drew her to the doorway and explained that another organization provided cooking oil to families, contingent on their children's full school attendance. "So we have a mutual understanding with the parents. Half of the oil they take and half we take and when inspection happens we call all the children from home." Incentive programmes, it is clear, do not always have the desired response.

Immediately after the school visit, the research team was expected to prepare a summary of the key information for the school. A number of head teachers expressed their appreciation for this gesture. Some of them said that after all these years of people and organizations coming and collecting data, this was the first time anyone had ever shared results back with them.

*Tracking children:* In each school, a group of children was tracked starting in 2008 when they were in the class immediately before class 1. In other words, where there was a two-year katchi programme, only children in the second year of the programme were selected. These children were tracked for three years – up to the end of class 2 for those who did not drop out or repeat. Over 2000 children were tracked in all. Individual child profiles included household data and information from school records, with teacher input, to follow children's attendance and movement through school from year to year.

This process, theoretically simple, was in fact quite complex. The objective was to start with children who would be entering class 1 a year later. But, as noted above, decisions about a child's transfer into class 1 are based less on the formal length of a preschool programme than on a teacher's judgement about that child's readiness. This meant that a number of children in one-year programmes who, because of age or general development, needed a two-year programme, would end up being recorded as having repeated either katchi or class 1. High repetition rates are generally considered one measure of the failure of a programme. In this situation, repetition is often a practical, constructive response to the needs of children who are not ready to cope with class 1. The realities of the situation put a different spin on the implications of repetition. Another interesting feature of the promotion rates from class 1 to class 2 is that they were not strongly tied to aggregate class 1 learning achievement scores, suggesting that teachers were considering factors other than children's academic achievement – such as social maturity perhaps – when deciding whether or not to promote them.

The complexity of the data collection made it difficult to take these kinds of factors into consideration. While age might be recorded, it was often not accurate. Nor were teachers always able to recall how many years a given child had been coming to school. Haphazard attendance as a younger sibling might or might not be counted as a school year. Recorded repetition and promotion rates, then, could not be easily interpreted.

*Classroom observations:* In addition to the more general assessment of school facilities, in-depth information was gathered on the classroom environment in katchi and class 1 classrooms. This classroom environment, both in material terms and in terms of the quality of interaction taking place there, was the primary target of the RCC programme, and it was important to look closely at the many features that together made up a child's learning experience.

At first, for looking at these classroom processes, the research team planned to adapt the international Early Childhood Environment Rating Scales.[6] But after working for many months to adapt these tools, partners decided that they were cumbersome, not always culturally appropriate, and gave too little attention to teacher-child interactions. They decided to collaborate on developing their own simple observation tool, with relevant measures on physical layout and classroom quality, the presence and use of materials, and the interactions between teachers and children and among children. Two team members were to observe a classroom for at least an hour and rate it independently; through discussion, they would then come to consensus on their rating. They had been trained to employ the same standards in their assessments, and in the early stages of classroom assessments, an experienced team leader was also involved in the process.

*Children's learning achievement:* The tools to test children's learning were also locally developed and piloted, with the involvement of the various technical partners. These tools assessed children's skills at the end of classes 1 and 2, based on the local curriculum and its expectations. This included their grasp of early mathematics concepts, and their reading and writing skills in both Urdu (or Sindhi, for students at Sindhi-medium schools) and English. Each test was piloted in at least two regions, and adapted before being used for broader data collection.

*Challenges:* Although the research was simple in concept, in fact it was quite difficult to carry out. There were, to start with, so many variables to challenge simplicity – the different kinds of schools involved, the experience of the implementing partners, the presence or absence of katchi programmes in comparison schools, the length of preschool programmes, the use (or not) of curriculum, the age at which children entered school, the training, or lack of training for programme teachers. In the North, a number of RCC-trained teachers left the programme's community-based schools to teach at government schools where the salary was higher. So it was not uncommon to be observing new RCC teachers who had limited experience with the programme.

The activities of other NGOs in the same schools added complexity to the research landscape. Aside from possibly confounding effects for RCC outcomes, the engagement of other organizations could interfere sometimes in the data collection. In one school, for example, children appeared to be unusually nervous about being tested. It turned out that another NGO had been collecting data for its own purposes a week earlier, and children had been intimidated by the researchers' reported abruptness and intimidation. And, as described

6 Harms, T., Clifford, R. M., & Cryer, D. (2005). Early Childhood Environment Rating Scale - Revised Edition (ECERS-R). New York, NY: Teachers College Press. Sylva, K., Siraj-Blatchford, I., & Taggart, B. (2003). Assessing Quality in the Early Years: Early Childhood Environment Rating Scale - Extension (ECERS-E): Four Curricular Subscales. Stoke on Trent, UK: Trentham Books.

above, the involvement of other organizations could even lead to the falsification of school records.

Even putting together a representative sample of schools was frustrating. In Balochistan, two RCC schools in the sample had to be dropped from the programme because of squabbles among school committee members. One comparison school was taken on by the programme to balance the numbers, keeping in mind the need for proximity. In Sindh, a couple of comparison schools closed down during the course of the research, as did one in the North. Another school refused to continue participating in the study. The sample shrank over time.

There were also all the complexities of managing a large geographically spread out study in the face of poor communications systems, difficulties with transportation, changes in staffing, high levels of absenteeism, and different school calendars in different districts. Security issues in Balochistan made access impossible sometimes; during the first research year no data could be collected. In year two, classroom observations could be conducted in only a handful of Balochistan schools. Serious flooding in 2010, especially in Sindh and parts of the North, also slowed up research efforts. Almost 40 percent of the Sindh schools were directly affected and some were turned into emergency shelters for displaced people. Meanwhile in some of the schools in the North, there were teachers' strikes in the last research year.

For the most part, the partners had strong research capacity, but even with good training, different teams facing different realities can start drifting apart when they are actually observing classrooms or testing children. Piloting cannot anticipate every problem, and regular centralized oversight can be critical in the field, because problems can compound themselves quickly. But it's impossible to be everywhere at once. In the North, where there were staff tensions and a lot of turnover in research assistants, training, as the research manager described it, "went down the drain". There were concerns that testers were giving children more support than they should have had in answering the learning achievement questions, that data was not dependably entered, that commitment was shaky; all leading to findings there that were not considered wholly reliable.

Acknowledging the various constraints, the research resulted in a rich and valuable set of data, much of which remains to be fully mined. The research in this sense reflects the programme that it seeks to represent. Both programme and research faced significant obstacles. But despite the complexity of the situation, it is clear that RCC made important differences to children, much of which the research has been able to capture.

## The Findings

### *The schools*

Poor rural schools in Pakistan are very basic. Although crowding is not the serious problem that it can be in many places, schools tend to be rundown and poorly equipped. Many lack electricity and toilets, and although there is outdoor space, there is seldom provision for play or recreation. The school profiles showed no significant difference in the physical conditions of RCC and comparison schools. RCC schools mostly scored better, but this was not consistent.

This did not come as a great surprise. RCC did not make investments in school facilities except in a few cases. Any advantage within RCC schools would have been a reflection of activity on the part of a committed school management committee rather than a direct feature of the programme. Generally speaking, outdoor space, water provision and general maintenance did not vary much and tended to be reasonably good for this part of the world. The availability of electricity and toilets was more of a problem. Balochistan, at the low end, had electricity in only half its schools, and even there it was not in use in many cases because of load shedding. The Balochistan schools were also least likely to have usable, decently maintained toilets, a factor increasingly recognized for its significance in enrolling and retaining girls.

Given the emphasis in the programme on revitalizing school management committees, one might have expected to see greater improvements in the school environment scores over the duration of the research, and these were not apparent. But it should be kept in mind that the serious floods of 2010, followed by less critical flooding the following year, resulted in damage at many schools and this does not show up either. In other words, it may have taken an effort simply to maintain the status quo – something that is not easily reflected in annual assessments.

School management committees are a built-in part of the school system in Pakistan. Almost every school reported having one, except in Balochistan, where they were less common even among programme schools. Most of these committees were reported to be active, especially in RCC schools, and the number of active committees grew over the course of the research. Balochistan, again, was the exception. Here, more than half of the RCC school management committees were not taking an active role, nor were there many women on these committees. Sindh's RCC schools were most impressive in this regard, with women making up a strong two thirds of most committees – perhaps a reflection of the strong community development record of HANDS, the partner on the ground there. Gender parity was worst in the community schools in the North, where, although committees were active, women made up only one in five committee members.

***The classrooms***

During the first round of classroom observations in year two, when logistical issues made it difficult to observe many classrooms, class 1 observations took place in only 15 RCC and 13 non-RCC classrooms, all in Sindh. Researchers had better luck with katchi classes; 32 RCC classrooms were observed and 18 non-RCC. (In a number of the non-programme schools, as noted, there were in fact no preschools to observe.) During the second round of observations in year three, almost all the classrooms were covered (bearing in mind of course the absence of katchi classrooms in a number of the comparison schools).

These classroom observations demonstrated the really important difference between programme and comparison schools. RCC programme classrooms were significantly brighter, cleaner, more colourful and better equipped than non-programme classrooms. Most were arranged in more flexible, interactive ways; they were far more likely to have interesting materials and the children's own work displayed; learning materials were more likely to be available and accessible to children. Where non-programme classrooms across all three programme areas in 2008 scored an average of 2.9 out of 4 for the physical quality of classrooms, RCC classrooms scored an average of 3.9.

Almost all activities were teacher-directed in the comparison schools; in the programme schools, children were more likely to be involved in choosing what they did, teachers were more interactive, and children were more likely to be allowed to talk and work together. "I was not used to children talking to each other before, and I maintained strict discipline in the classroom," said Sultana, a government school teacher from Tando Bahawal, "Now that I've changed my approach, I can see that children learn more when they interact with each other." [7] Not all RCC teachers managed to make the shift to more child-centred methods however. It can be a challenge to abandon the practices of many years, and for some teachers a higher level of control over what happened may have been a more comfortable and productive alternative. Rote learning is not always lacking in value. However, in the course of classroom observations, researchers were able to see some of the penalties associated with a purely rote approach. In some comparison classrooms, children had clearly memorized their textbooks – when called on by the teacher to read, if they happened to turn over two pages by mistake instead of one, they would continue "reading" the words that were actually on the previous page. Figure 2 illustrates the differences on the combined classroom scores for all programme areas for year three of the research.

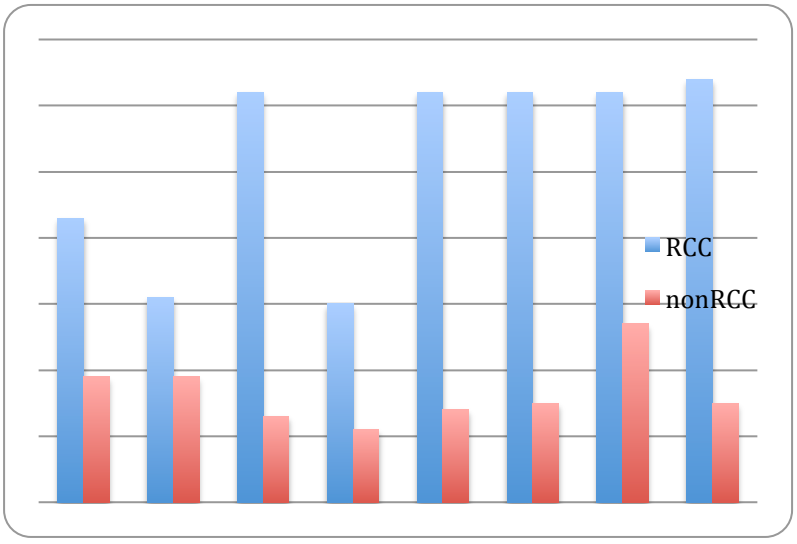



*Figure 2: Classroom observation scores (out of 10) in RCC and non-RCC schools, year 3*

When broken down into their components, these differences show significance (indicated by 'yes' in the tables below) on most fronts, with some exceptions (Table 2).

*Table 2: Differences between RCC and non-RCC katchi classrooms*

| Variables | Balochistan (Government) | Sindh (Government) | North (Goverment) | North (Community Based Schools (CBS)/private) |
|---|---|---|---|---|
| Classroom Setup | Yes < .001 | Yes < .001 | NO | Yes < .001 |
| Materials | Yes < .001 | Yes < .001 | NO | Yes < .001 |
| Teaching | Yes < .050 | Yes < .001 | Yes < .001 | Yes = .001 |
| Activities | Yes < .010 | Yes < .001 | NO | Yes < .050 |
| Interaction | Yes < .050 | Yes < .010 | Yes < .010 | Yes < .050 |

[7] AKESP (2006) *Impact of RCC on Children: Stimulating the Love for Learning,* page 9

Differences between RCC and non-RCC class 1 classrooms

| Variables | Balochistan | Sindh | North Govt | North CBS |
|---|---|---|---|---|
| Classroom Setup | NO | Yes =.001 | Yes < .001 | Yes < .001 |
| Materials | NO | Yes = .001 | Yes < .001 | Yes < .001 |
| Teaching | Yes <.050 | NO | Yes <.010 | Yes < .001 |
| Activities | NO | Yes <.050 | Yes <.010 | Yes < .001 |
| Interaction | NO | Yes = .001 | Yes <.050 | Yes < .001 |

Of course all the differences here, significant or not, depend on the quality of the comparison schools, which are not in fact always that comparable. The relative lack of significant difference in Balochistan's first grade RCC classrooms, for instance, hides the fact that the actual scores here were higher than those in Sindh. But comparison class 1 classrooms in Sindh were really poor, scoring on average just 1.1 out of a possible 10.

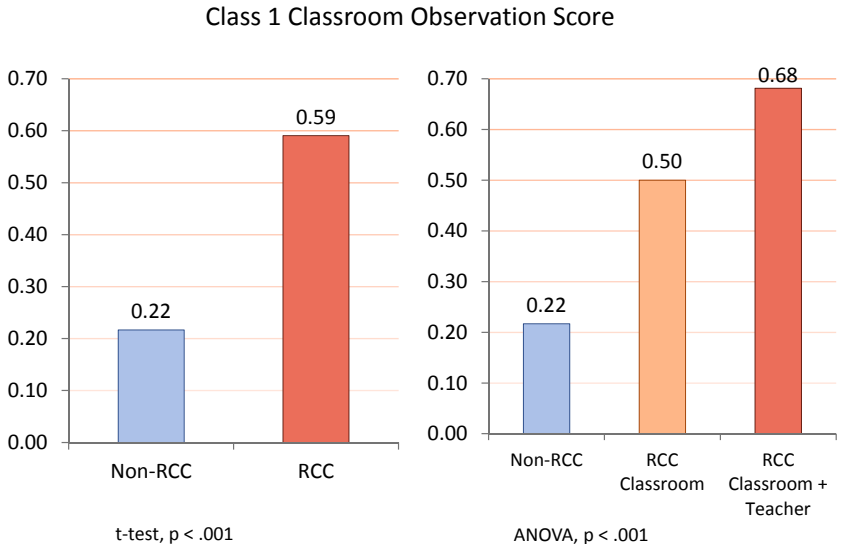



*Figure 3. Classroom observation scores (out of 2) in Sindh, including RCC teacher training.*

More detailed analysis was undertaken with the Sindh data, and here it is possible to see the significant difference it made to have an RCC class 1 teacher who had benefited not only from materials and mentoring, but also from the initial RCC training. (It should be recalled here that not all RCC teachers had the opportunity to be trained by RCC.

***Enrollment, attendance, drop out, promotion***

Aggregate school-level numbers showed that the programme had a very positive effect on children's enrollment, attendance and promotion during the first research year, especially in Sindh. The benefits were most evident in the programme's government schools. Overall, RCC government schools showed attendance rates 20 to 50 percent higher than non-RCC government schools.

By year three, however, effects in these areas only reached significance in a few cases – in the retention and promotion of kindergarten girls in one programme area, and the enrollment of kindergarten boys in another. Events in the country at the time – extensive flooding as well as conflict within Balochistan – could have contributed to the decline of the earlier positive trends; but other variables are at work as well, including

unreliable school records. Despite the significant gains posted in the first year of the research, and despite qualitative evidence in these areas, it is difficult to make substantiated claims for differences the programme might have made in these important areas. The impact of the programme for children's learning achievement was much more clearly positive.

***Learning achievement***

Almost without exception, RCC children's average scores in the tests of learning achievement were better than those of comparison children. The exception was in class 2 in the high scoring community-based schools in the North, where non-RCC children did slightly better than their RCC peers. This only reached significance in the English test however. These community-based comparison school children scored about twice as high as the government school comparison children in all provinces.

Scores were generally higher in class 1 than in class 2, in both programme and comparison schools – suggesting that this was a function of the test rather than of any falling off of programme effects (Figures 4 and 5). On the contrary, despite the lower overall scores in class 2, the gap between programme and non programme children widened in this second year (with the exception of the community-based schools). This trend may also reflect the more general misalignment of curriculum expectations with what teachers are actually able to teach children – with the gap becoming a bit larger each year.

*Figure 4: Learning achievement scores in class 1, research year 2.*

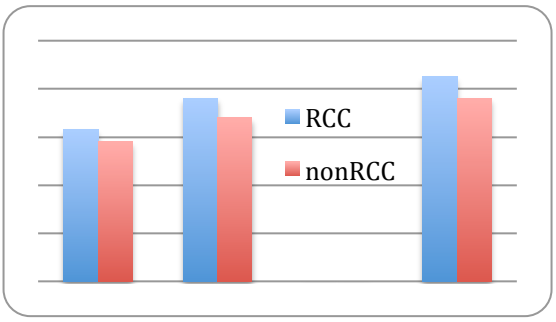
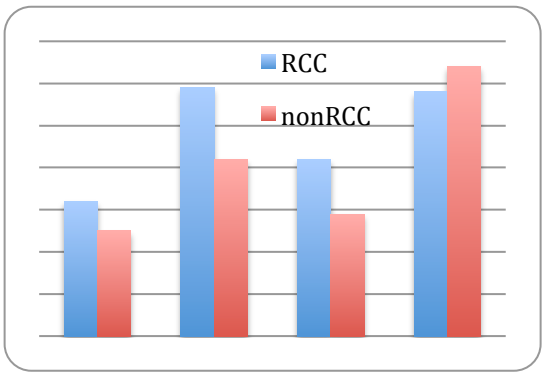



*Figure 5: Learning achievement scores in class 2, research year 3*




Positive results in children's learning achievement were especially evident in Sindh, where the differences between RCC and non-programme children in both class 1 and class 2 were highly significant (P< .001) in all subject areas, with the exception of numeracy in class 2, which was only slightly less significant at P=.004. In Balochistan, results were also positive, although less consistently significant than in Sindh. In the North, overall scores were highest, but, as noted, there was less significant difference between programme and comparison schools. A number of factors come into play in these schools. Because children were generally doing better to start with, especially in the private and community-based schools, there was less room for improvement, or for differences with comparison children. There were also smaller samples here, especially with the government schools, and so greater difficulty in reaching significance. AKF was also least confident about the reliability of research assistants and data here.

*Table 3: Significance of differences in learning achievement, between RCC and non-RCC schools*

| Subjects | Baluchistan | | Sindh | | North Govt | | North CBS | |
|---|---|---|---|---|---|---|---|---|
| Classes | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| English | * | ** | ** | ** | | * | * | |
| Urdu (or Sindhi) | | * | ** | ** | | | | ** |
| Numeracy | | * | ** | * | | | ** | |

* p<.05; ** p<.001

According to one of the researchers, a factor that it is only fair to keep in mind in considering the differences in the test results of RCC and non-programme children, is the presentation of the tests, which were given to the children on worksheets. This format was far more familiar to RCC children, for whom working on handouts was a routine activity. For the non-programme children, who only had textbooks, more explanation was necessary.

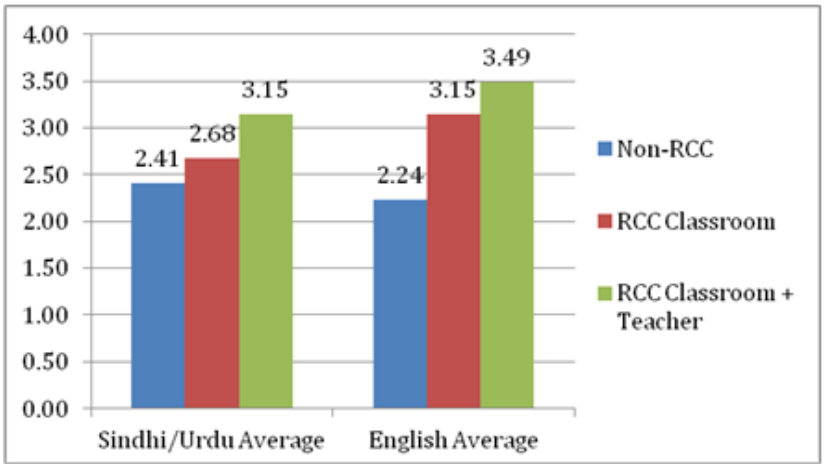



*Figure 6: Differences in Sindh literacy scores by RCC, and RCC plus trained RCC teachers*

As in the case of the classroom observations, it was possible in Sindh to observe the difference that was made when RCC teachers had and had not received the initial RCC training. While there were clear differences, these only reached significance in the case of scores in English literacy.

The core of RCC's efforts was in the creation of stimulating classrooms with warm, responsive, interactive teachers. Presumably the effect of these classrooms was to improve children's learning outcomes. But it's useful to know exactly what facets of the RCC effort were most effective in bringing about these changes. Once again, more detailed analysis was undertaken with the Sindh data. Preliminary results indicate some significant correlations between children's literacy outcomes and specific features of their classroom quality: the occurrence of learning activities primarily, as well as the availability and accessibility of learning materials, especially materials related to fine motor activities; the teacher's instructional style; the opportunities for peer

learning; and effective classroom management.[8] The same correlations have not yet been undertaken in other programme areas yet because of the time involved in cleaning, recoding and merging data to allow individual child scores to be related to classroom scores.

*Table 4: Correlations between features of classroom quality and children's literacy outcomes*

| | Sindhi / Urdu | English |
|---|---|---|
| Classroom set-up | .289 | .338 |
| Availability of materials | .432 | .568* |
| Teaching & learning | .433 | .518* |
| Learning activities | .663** | .712** |
| Interactions | .304 | .405 |

* significant at .05; ** significant at .01

Children's age at entry, the number of years they had spent in a preschool class, their health status, levels of parental education, household income and the relationship between language of instruction and language used at home, would all have been extremely interesting and valuable variables to explore in relation to learning outcomes. But in the context of what was already a large and, for many reasons, very challenging study, the data for these areas remained either uncollected or too complex to analyse, at least for the time being. More analysis may yet happen.

### Other impacts of the programme

Although the quality of children's learning environments and the results for their achievement was at the core of RCC, the changes that were galvanized by the programme went well beyond the classroom. Other effects were not subject to the same level of investigation, but are described in various qualitative reports by partners, and in the objective external evaluation of the programme's Dutch donor.[9]

The changes for local women – both community teachers and mothers – are perhaps most striking. The katchi community teachers were mostly shy young women who had met few people outside their own villages and who were hesitant initially about their new roles. The greatest challenge in their training was overcoming their

[8] Sadaf Shallwani and Haroona Jatoi (2012) The effects of an early intervention programme on early literacy in Pakistan, Presentation CIES April 27, 2012
[9] Moreno de Yanez, Arelys (2011) Releasing Creativity and Confidence: Early Childhood Development Programme (phase III, 2006-2011) Technical Mid Term Review

reticence and persuading them that they had the capacity to contribute a lot to the young children in their charge. They became, as a group, not only skilled and increasingly confident as preschool teachers, beloved by the children, but also dedicated community mobilisers. They were in an excellent position to share their self-assurance with other local women, with a level of access that would have been difficult for outsiders. According to one of these young teachers, "If it wasn't my own community, I would not have been able to accomplish anything because I wouldn't know other people's life style or have been comfortable with the way they talk. I feel confident talking to the older women of the community and can work with anyone now."[10] People in many of these very conservative villages were initially skeptical and disapproving about the involvement of these community teachers, but in the end their dedication and seriousness earned everyone's respect, and many katchi teachers became role models for girls in their communities.

The adult literacy groups were not restricted to mothers. Fathers and grandparents also had the chance to be involved. According to the mid-term review, "Grandparents mention that they know now how to use medicines because they can read the labels, they know when expiry date is, they can sign documents, read cooking recipes, read stories to their grandchildren." [11] There was a tangible impact in terms of local values. Many people who had disapproved of education for girls began to send their daughters to school and to help raise funds for local RCC efforts. People who had little contact with one another before RCC because of religious or political differences began to discuss ways to keep their katchi classes going at community meetings. And hundreds of women, formerly isolated from the world, could read the newspaper and discuss it with each other.

All this local energy had immediate benefits for small children. Aside from the more formal 0 to 3 programmes set up in some of the programme villages, it was also not unusual for mothers to learn how to set up small learning corners in their homes where small children could play and share with siblings and neighbour children. Community engagement in local schools has also been generally enhanced – not only in terms of more active school management committees and parent groups, but also through hands on involvement in classrooms. The mid-term review notes that it's not uncommon for volunteers to come into class and help out teachers with specific projects. The benefits of the programme were also starting to spread to other communities, as trained teachers went to schools outside the programme area to share their learning and to create informal networks.

Research assistants were also affected by the process. They learned a lot about research concepts and principles and were trained to use tools reliably and to work with data entry software. They also had to learn to cope with significant logistical problems – challenges in travel, political insecurity in the field, a lack of cooperation from some schools, difficulties maintaining contact with team managers. Their new skills, together with the exposure to very different communities and conditions and the experience of working intensely with

[10] AKESP (2006) Building on Community Resource: Stories and Experiences of Community ECD Teachers, Aga Khan Education Service, Pakistan, page 7

[11] Moreno de Yanez, Arelys (2011) Releasing Creativity and Confidence: Early Childhood Development Programme (phase III, 2006-2011) Technical Mid Term Review

team-mates, combined to increase their confidence and their capacity to go on to new opportunities. "I started my career with this. It was really an amazing learning period for me," said one assistant from Sindh.[12]

One of the objectives of RCC was to influence ECD policy and practice at different levels in the country. There was some progress in the effort to regularize the position of the community katchi teachers, clearly a constructive model for the country in general to take up. Some of the partners worked with education officials on the development of provincial plans for early education, and RCC was invited to join the commissions discussing the national curriculum. These efforts took place, however, without much clarity or follow-up on the part of government. There was constant turnover in the Ministry of Education, and in 2011 ministerial responsibilities were delegated to the provincial level, creating yet another set of partners. The practical implications of the earlier ECE policy have never been really clarified or reflected in budgets. Constant changes within RCC at both partner and management levels also made it difficult to take these broader efforts as far as they might have gone. Coordination of all the relevant actors is never easy, and the survival and success of the programme within the context of numerous challenges was inevitably the more immediate focus for RCC staff and the partners. The weakest aspect of RCC, according to the mid-term review, was the lack of "a centralizing entity" that could pull it all together, making it possible to lobby and advocate effectively around early childhood investment and programming. However, without the very successful work on the ground, there would be little to advocate around.

## Conclusion

Successful development is rarely a tidy or predictable process. The RCC programme coped with extraordinary odds – not only the anticipated challenges of impoverished schools, poorly trained teachers, and remote and difficult to access communities, but also weak government commitment, changing staff, floods and political insecurity. It's not hard to find problems with the programme or scope for improvement. More surprising is the fact that it made as much headway as it did in meeting its ambitious objectives. This programme brightened the lives and the prospects of thousands of young children. It engaged parents and gave them a chance to reflect on their children's potential and their own capacity to provide them with options in life. It allowed teachers to rethink their assumptions about how learning happens. It gave hundreds of young women the opportunity to do meaningful work and enlarge their horizons. The programme was complicated and cumbersome, responding as it did to very different settings and unpredictable developments. But AKF's flexibility in dealing with partners and allowing the programme to adapt to the circumstances made for dynamic responses to often messy realities on the ground.

The research was often as messy as the programme. Evaluations of interventions like RCC are often expected to have the clean simplicity of a lab experiment – clear numbers that prove unambiguously that the initiative worked. This research did its part in that regard – it demonstrated some significant gains for the programme children, when comparing them to children without the RCC experience. But these results were not without

[12] RCC Core Research Study: Reflections from Research Teams

ambiguity. How does one interpret repetition rates, for instance, that are based on children unexpectedly being given an extra year of preschool – something they undoubtedly needed? Did they "fail" the year or not? How can an intervention that is predicated on teacher training be fairly assessed when many of the trained teachers moved on to better paid jobs and were replaced mid-stream? Those significant numbers are in fact a thin representation of the richness of the intervention. Far more telling are the anecdotes, the photographs, and the documentation that occurred around the edges of the challenging quantitative study. Both programme and research are good reminders of the fact that cookie cutter approaches have their weaknesses, that progress often looks quite disorderly, and that even the best research design cannot capture the all-important ripples that extend beyond its focus.