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Evaluation Summary of the Adream Project

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1. Introduction

Adream, with its stated mission of 'To help our children to grow up with confidence, poise and dignity' invested 330 million yuan in its Adream project between 2008 to 2015. So far, 2018 Adream centers have been built to serve more than 2 million students and teachers. When all of us are admiring the undertakings of Adream, isn't it a time to answer some important questions: What is the impact of the Adream project, if any, on students and teachers? Could good intention lead to improved performance of students and teachers?

To answer these questions, Adream invited the Rural Education Action Program (REAP) to conduct an independent, third-party evaluation of the Adream project. REAP is an impact evaluation organization that aims to inform sound education, health and nutrition policy in China. REAP's goal is to help students from vulnerable communities in China enhance their human capital and overcome obstacles to education so that they can escape poverty and better contribute to China's developing economy. Key members of REAP include the Center for Chinese Agricultural Policy under the Chinese Academy of Sciences, School of Advanced Agricultural Sciences of Peking University, Center for Experimental Economics in Education of Shaanxi Normal University, as well as Stanford University.

As far as the Adream project is concerned, the evaluation aims to understand the impact of the Adream Centers on the development outcomes of students and teachers in a rigorous and scientific way. Despite the fact that complex interactions exist between teachers, students, education officers, and Adream team members that might confound the impact of the Adream project, the evaluation team attempts to explain the underlying mechanism, and to draw lessons and experiences from the Adream Center project to inform future decision-making.

2. Methods of impact evaluation

Causality inference lies at the core of scientific impact evaluation. How much better off are the student and teacher beneficiary in terms of performance because of the Adream project? To assess the impact of the Adream project, we need to compare the performances of the same student/teacher with and without the Adream project at the same point in time. This leads to the missing data problem: what would have happened to the students/teachers without the Adream project? In other words, what is the counterfactual? Since we never observe the student/teacher with and without the Adream project at the same point in time, we need to find a valid counterfactual. Counterfactual is the key to impact evaluation!

What makes a valid counterfactual? A valid counterfactual should have identical characteristics to the treated students/teachers except for benefiting from the Adream project intervention. There are many impact evaluation methods. The ideal method, or the so-called gold standard, would be randomized controlled trial (RCT). The brief idea of RCT is to randomly assign eligible schools to treated group (with Adream project) or the untreated group (without Adream project) and compare the differences in outcomes of interests between these two types of schools.
In short, RCT has four steps. First, RCT recruits ample amount of schools in advance and conduct baseline surveys. Second, by comparing the key observable characteristics collected in the baseline survey, schools are randomly assigned into the treatment group or the control group. The treatment group and the control group are 'statistical twins' in terms of those observable characteristics. Third, the treatment group will receive the treatment (the Adream project) whereas the control group be left aside (no Adream project). Fourth, after a period of intervention, follow-up or endline survey will be conducted on both groups. Using panel data from both the baseline and endline surveys, any differences in outcomes of interests between the treatment and control groups could be attributable to the intervention and be interpreted as causal effects of intervention.

RCT makes the best impact evaluation method when randomization of treatment is possible. For interventions where randomization of treatment is not possible for some reasons, quasi-experimental method fits better. Given the fact that whether to build an Adream center in a school was not randomly assigned, RCT is not the best choice in this case. Therefore, we adopt a quasi-experimental strategy to evaluate the impact of the Adream project. In quasi-experimental methods, the treated and the comparison groups are comparable by means of statistics instead of by pure random chance.

In this project, propensity score matching (PSM) and differences in differences (DID) methods are used to estimate the impact effect of the Adream Project on students and teachers. PSM estimates the counterfactual by matching key characteristics of students (e.g. age, gender, household characteristics, baseline test scores, mental

health etc.) between the treatment (With Adream project) and the comparison (Withou Adream project) students. In this way, PSM disentangle the changes in outcomes of interests that were caused by key characteristics of observations. In comparison, DID method rules out the changes in outcomes of interests that were caused by time-invariant characteristics (e.g. student gender, ethnicity, parental education, etc.).

We estimate the impact in terms of both the Intention to Treat on Treated (ITT) and Average Treatment on the Treated (ATT). ITT estimates the impact based on the original assignment of treatment status whereas ATT estimate the impact based on those who were not only assigned to the treatment group but also literally received the treatment. As in the real world, assigned treatment does not mean treated literally, the magnitude of the ITT estimate is smaller than that of the ATT.

3. Sampling method and population

Based on results from power calculations given the budget and implementation feasibility, we sampled 166 schools in total, 85 in the treatment group (with Adream project) and the rest 81 in the comparison group (Without Adream project). The list of the 85 treatment schools was provided by the Adream foundation. Afterwards, the 81 comparison schools were selected with the help from local education bureaus with criteria of geographic and demographic characteristics similar to treatment schools.

Four pathways are hypothesized to translate Adream project into improved performance of students and teachers. a.) Attitudes of school principals; b.) Quality of Adream teacher training and teachers' attitude; c.) Teaching capacity, and actual implementation of the Adream course; and d.) Attitude of students and quality of their class participation.

To achieve the goal of rigorously assessing the impact of the Adream project, after rounds of discussions discussed with the Adream foundation and its consultant, the evaluation team developed a comprehensive evaluation protocol. The evaluation involves all stakeholders: school principals, all students of all sample classes in the sample schools in the baseline survey in 2014, class captain of all sample classes, math teachers of all sample classes, teachers of school-based courses of the comparison classes, as well as teachers of Adream courses of the treatment classes.

An important component of the intervention is to offer Adream courses to students. As it turned out, 85 treatment schools had completed the teaching task of Adream courses for 1 to 2 semesters. However, themes of Adream courses, course frequency and teaching method of Adream courses were completely up to the school.

Throughout the process of the evaluation, the evaluation team closely monitored the quality of the three rounds of surveys as well as the qualitative interview. Before each survey, all enumerators were trained in a standardized way by the evaluation team. Standardized survey instruments were administered to survey subjects by our enumerators following the standardized survey protocol.

4. Preliminary results

4.1. Points to make

This section reports the preliminary results from the impact evaluation. Before jumping to the results, there are several points that the evaluation team would like to make.

1. For the sake of brevity, we summarize only those results that come out statistically significant. Positive significant effects are marked by yellow highlights and negative significant impacts are marked by green highlights. For the tables and figures of results, please refer to the attached tables in the report in Chinese version.
2. Evaluation results show that compared to controlled group, Adream project had significantly positive effects on the scores of students. Specifically, Adream project had significant effect on the score improvement among the 4^{th} grade students at the time of the baseline in 2014 and then progressed to the 6^{th} grade at the endline survey in 2016.

3. The evaluation team reserved the rights of interpretation of evaluation results. The main reason was that the psychological scales are still under the process of development. As a little bit of background, during the evaluation design stage, several rounds of back and forth went on between the evaluation team and Adream foundation as well as its consultant. Each side preferred different scales for testing. The evaluation team preferred the scales that have been commonly used in the relevant literature, while Adream foundation preferred the scales recommended by its consultant. As it turned out, the scale preferred by the Adream's consultants were adopted. As we could see from these scales, they provide no norms for reference. When interpreting the results, it is impossible for the evaluation team to make inference about the change in the psychological status of students/teachers without referring to the norms of scales.

4. It takes time for the psychological status of students to change. The fact that the effects of the Adream project on the psychological status of students is limited might have something to do with the limited duration of intervention. As we could see from the results, the Adream project does have some impact on some aspects of students, specifically monetary value, view of power, and awareness of environmental protection. Comparatively speaking, these aspects were easy to internalize and easy to observed by asking students about their mental representations. In contrast, students might have fixed mindset on teacher-student relationship, self-efficiency and self-evaluation, which takes more time to observe the effects of Adream project.

4.2. ITT and ATT Results: Whole sample

Note: Treated group referred to students/teachers in schools with 'Adream Centers'; treatment on treated referred to students/teachers in schools with 'Adream Center' and

literally have implemented 'Adream courses'; comparison group referred to students/teachers in schools without 'Adream Center'.

Intensity of intervention, in this case, the frequency of Adream courses, plays an important role in the evaluation design. The data shows that the average frequency of Adream courses was once per 4 weeks, which lagged far behind the once per week frequency by design. This explains, to a much extent, the limited impact of the Adream Center project on students and teachers.

1. Math scores:

a) Results from the ITT analyses show that students in the treatment (with Adream project) scored 0.06 standard deviation higher than students in the comparison group (without Adream project). And the difference is statistically significant at the 0.01 level. In other words, students in the treatment group see their math scores red significantly increased 1.26 more points than those in the comparison group, the math scores in baseline and the last evaluation was 73.61 and 66.42 for students in the treatment group, whereas 70.46 and 65.20 for those in the comparison group.

b) Results from the ATT analyses are consistent with those from the ITT analyses. Students in the treatment group who literally got Adream courses scored 0.1 standard deviation higher than those in the comparison group. In other words, students in the treatment group who got the courses see their math scores red significantly increased 2.1 more points than those in the comparison group. Again, the difference is statistically significant at the 0.01 level. The average scores of students who literally received Adream courses were 74.22 in baseline and 65.74 in the last evaluation.

2. Teacher-student conflict:

a) ITT: Students in the treatment group increased 0.04 more points than those in the comparison group. ($p<0.1$)

b) ATT: Students in the treatment group who literally received the Adream courses increased 0.06 more points than those in the comparison group ($p<0.1$)

3. School avoidance:

a) ITT: Students in the treatment group increased 0.05 more points than those in the comparison group ($p<0.05$).

b) ATT: Students in the treatment group who literally received Adream courses increased 0.08 more points than those in the comparison group ($p<0.05$).

4. Self-efficiency

a) ITT: Students in the treatment group reduced 0.02 more points than those in the comparison group ($p<0.1$).

b) ATT: Students in the treatment group who literally received Adream courses reduced 0.04 more points than those in the comparison group ($p<0.1$).

5. **Sense of accomplishment**

a) ITT: Students in the treatment group reduced 0.03 more points than those in the comparison group ($p<0.1$);

b) ATT: Students in the treatment group who literally received Adream courses reduced 0.05 more points than those in the comparison group ($p<0.1$).

6. **Monetary value:**

a) ITT: Students in the treatment group increased 0.04 more points than those in the comparison group ($p<0.01$);

b) ATT: Students in the treatment group who literally received Adream courses increased 0.06 more points than those in the comparison group ($p<0.05$), intervention made students put more weight on the function of money.

7. **View of power**

a) ITT: Students in the treatment group increased 0.04 more points than those in the comparison group ($p<0.1$).

b) ATT: Students in the treatment group who literally received Adream courses increased 0.06 more points than those in the comparison group ($p<0.1$), interventions made students paid more attention on the value of power.

8. **National identity:**

a) ITT: Students in the treatment group reduced 0.05more points than those in the comparison group ($p<0.01$).

b) ATT: Students in the treatment group who literally received Adream courses reduced 0.08 more points than those in the comparison group ($p<0.01$).

9. **Collectivism:**

a) ITT: Students in the treatment group reduced 0.04 more points than those in the comparison group ($p<0.05$);

b) ATT: Students in the treatment group who literally received Adream courses reduced 0.06 more points than those in the comparison group ($p<0.05$).

10. **Awareness of environmental protection:**

a) ITT: Students in the treatment group reduced 0.04 more points than those in the comparison group ($p<0.01$).

b) ATT: Students in the treatment group who literally received Adream courses reduced 0.07 more points than those in the comparison group ($p<0.01$).

11. **Belief in a just world:**

a) ITT: Students in the treatment group reduced 0.04 more points than those in the comparison group ($p<0.01$).

b) ATT: Students those in the treatment group who literally received Adream courses reduced 0.06 more points than those in the comparison group ($p<0.01$).

4.3. ATT Results: Sub-sample of the 4th graders

1. **Math scores:** Students in the treatment group who literally received Adream courses scored 0.11 standard deviation higher than those in the comparison group ($p<0.01$). In other words, students in the treatment group who got the courses see their math scores red significantly increased 2.28 more points than those in the comparison group. Again, the difference is statistically significant at the 0.01 level. The average scores of the 4th grade students who literally received Adream courses were 76.09 in baseline and 65.83 in the last evaluation. The average scores of students in the comparison groups were 75.89 in baseline and 63.72 in the last evaluation.

2. **Student-teacher relationship:** students in the treatment group who literally received Adream courses increased 0.06 more points than those in the comparison group ($p<0.1$).

3. **School avoidance:** students in the treatment group who literally received Adream courses increased 0.09 more points than those in the comparison group ($p<0.05$).

4. **Sense of accomplishment:** students in the treatment group who literally received Adream courses reduced 0.05 more points than those in the comparison group. ($p<0.1$)

5. **Self-expression:** students in the treatment group who literally received Adream courses increased 0.06 more points than those in the comparison group. ($p<0.05$).

6. **Monetary value:** students in the treatment group who literally received Adream courses increased 0.06 more points than those in the comparison group ($p<0.05$), intervention significantly affects students' monetary value.

7. **National identity:** students in the treatment group who literally received Adream courses reduced 0.05 more points than those in the comparison group ($p<0.05$).

8. **Awareness of environmental protection:** students in the treatment group who literally received Adream courses reduced 0.07 more points than those in the comparison group ($p<0.01$).

9. **Belief in a just world:** students in the treatment group who literally received Adream courses reduced 0.05 more points than those in the comparison group ($p<0.1$).

4.4 ATT results: Sub-sample of the 7th graders

1. **Monetary value:** students in the treatment group who literally received Adream courses increased 0.22 more points than those in the comparison group ($p<0.1$), intervention made students of 7th grade put more weight on the function of money.

2. **National identity:** students in the treatment group who literally received Adream courses reduced 0.29 more points than those in the comparison group ($p<0.05$).

3. **Collectivism:** students in the treatment group who literally received Adream courses reduced 0.2 more points than those in the comparison group ($p<0.1$).

4.5. ATT results: Sub-sample of Shanxi province

1. **Math scores:** students in the treatment group who literally received Adream courses reduced 0.22 more points than those in the comparison group ($p<0.01$).
2. **Teacher-student intimacy:** students in the treatment group who literally received Adream courses reduced 0.23 more points than those in the comparison group ($p<0.01$).
3. **Teacher-student support:** students in the treatment group who literally received Adream courses reduced 0.25 more points than those in the comparison group ($p<0.01$).
4. **School avoidance:** students in the treatment group who literally received Adream courses reduced 0.09 more points than those in the comparison group ($p<0.1$), intervention reduced students the feeling of school avoidance.
5. **Study attitude:** students in the treatment group who literally received Adream courses reduced 0.08 more points than those in the comparison group ($p<0.1$).
6. **Self-efficiency:** students in the treatment group who literally received Adream courses reduced 0.14 more points than those in the comparison group ($p<0.01$).
7. **Sense of accomplishment:** students in the treatment group who literally received Adream courses reduced 0.06 more points than those in the comparison group ($p<0.1$).
8. **Self-expression:** students in the treatment group who literally received Adream courses reduced 0.21 more points than those in the comparison schools ($p<0.01$).
9. **Self-confidence:** students in the treatment group who literally received Adream courses reduced 0.13 more points than those in the comparison group ($p<0.01$).
10. **Self-control:** students in the treatment group who literally received Adream courses reduced 0.07 more points than those in the comparison group ($p<0.05$).
11. **Monetary value:** students in the treatment group who literally received Adream courses increased 0.12 more points than those in the comparison group ($p<0.01$), intervention made treated students in Shanxi province value more on the function of money.
12. **Value of power:** students in the treatment group who literally received Adream courses increased 0.1 more points than those in the comparison group ($p<0.05$), intervention made treated students in Shanxi province value more on the function of power.
13. **National identity:** students in the treatment group who literally received Adream courses increased 0.09 more points than those in the comparison group ($p<0.01$), intervention improved students' national identity and had deeper feeling of nationalism.
14. **Awareness of environmental protection:** students in the treatment group who

literally received Adream courses increased 0.05 more points than those in the comparison group ($p<0.05$). Intervention significantly improved students' awareness of the value of environmental protection.

15. **Personal belief in a just world:** students in the treatment group who literally received Adream courses reduced 0.07 more points than those in the comparison group ($p<0.05$).
16. **Belief in a just world:** students in the treatment group who literally received Adream courses reduced 0.07 more points than those in the comparison group ($p<0.05$).
17. **Emotion:** students in the treatment group who literally received Adream courses reduced 0.16 more points than those in the comparison group ($p<0.05$).
18. **Happiness:** students in the treatment group who literally received Adream courses reduced 0.32 more points than those in the comparison group ($p<0.05$).

4.6. Impact Heterogeneity by Gender

1. **Self-express:** girls reduced 0.05 more points than boys in the treatment group who literally have Adream courses ($p<0.01$).
2. **National identity:** girls reduced 0.04 more points than boys in the treatment group who literally have Adream courses ($p<0.01$).
3. **Personal belief in a just world:** girls reduced 0.06 more points than boys in the treatment group who literally have Adream courses ($p<0.01$).
4. **Belief in a just world:** girls reduced 0.05 more points than boys in the treatment group who literally have Adream courses ($p<0.01$).

4.7. Results from Fixed Effects Model

As a robustness check, we took advantage of the panel structure of a sub-sample of the dataset and conducted fixed effects (FE) analyses. Results from FE revealed that from the baseline in 2014 to the endline in 2016, students in the treatment group increased 0.04 standard deviation more on math score than those in the comparison group. That is to say, students in the treatment group see their math scores significantly increased 0.82 more points than those in the comparison group. And the difference is statistically significant at the 0.01 level. In terms of teacher-student intimacy, students in the treatment group reduced 0.24 more points than those in the comparison group ($p<0.01$). In terms of teacher-student satisfaction, students in the treatment group reduced 0.07 more points than those in the comparison group ($p<0.01$). In terms of feeling of teacher's support, students in the treatment group reduced 0.19 more points than those in the comparison group ($p<0.01$). In terms of study attitude and preference of school, students in the treatment group reduced 0.17 ($p<0.1$) more points and 0.18 ($p<0.1$) more points separately than the students in the comparison group. In terms of self-efficiency, self-expression and self-confidence, students in the treatment group also perform worse than those in the comparison group, the former reduced 0.08 more points ($p<0.01$), 0.15 more points ($p<0.01$), and 0.05 more points ($p<0.1$) separately in these three aspects. In terms of the sense of accomplishment, students in the treatment group increased 0.08 more points than those in the comparison group ($p<0.01$). In terms of self-control,

students in the treatment group reduced 0.04 more points than those in the comparison group ($p<0.01$). In terms of monetary value, view of power and conception of learning, students in the treatment group reduced 0.02 more points ($p<0.05$), 0.16 more points ($p<0.01$), and 0.07 more points ($p<0.01$) separately. Students in the treatment group performed better in recognition of national identity, collectivism, and awareness of environmental protection, they increased 0.23 more points ($p<0.01$), 0.06 more points ($p<0.01$), and 0.36 more points ($p<0.01$) separately than those in the comparison group. Students in the treatment group reduced 0.02 more points ($p<0.01$) both in personal belief in a just world and belief in a just world than those in the comparison group.

Results from the Fixed Effect model analysis are consistent with those from the ATT analysis in terms of math scores, monetary value, view of power, self-efficiency and belief in a just world.

4.8. Impacts on Adream teachers

Results using the sub-sample of teachers who participated in all the three waves of surveys show that happiness scores of teachers were 0.15 points less in treatment group than in the comparison group ($p<0.05$). However, nothing comes out significant when we compare the difference in the scale of psychological traits between teachers of Adream courses and teachers in the comparison group.

When we focused on those teachers who participated the midline and endline surveys, results show the self-efficiency of teachers with Adream courses improved 0.22 points more than teachers in controlled group ($p<0.05$). However, Adream teachers were worse off in terms of the efficacy of teachings on general courses, 0.32 points lower ($p<0.05$).

4.9 Summary of qualitative survey

The aim of impact evaluation was to assess the impacts of intervention, and to explore the causal chain. In other words, impact evaluation can answer two questions: what is the impact of the intervention, if any? Why there is or there is not any impact. Along this line, the purpose of the impact evaluation is to provide evidence for Adream foundation to take ex ante approaches to maximize the benefit of its Adream project. To get a better understanding about the project per se and about results from the quantitative analysis above, we conducted comprehensive, in-depth qualitative interviews with all stakeholders of Adream project.

In face-to-face interviews, most officers of education bureaus, school principals, teachers of Adream courses and students expressed their fondness and affirmation on the benefit of Adream project, and provided suggestions for the improvement of the project. We summarize the feedbacks from the qualitative survey below.

1. Leaders of bureau of education

Adream project provided an idea for the national drive of upgrading the quality of

education and well-round development of students. At a first glance, the goal of Adream Centers and its courses overlap with the goal to upgrade education quality. However, the success of Adream courses heavily relied on the supportive attitude of principals and low turnover rate of Adream teachers.

Because the important role of teachers in the Adream project, the foundation should improve the quality and intensity of teacher training and strengthen the collaboration with local bureaus of education on developing Adream courses. Moreover, Adream foundation should consider to reduce the burden of local bureaus of matching fund to set up of Adream centers by increasing the coverage of donation.

2. School principals

Adream courses was a type of school-based, transitional and supplement courses. However, decisions about courses should be case specific rather than one-size-fits-all. Each school should have its own rights to determine whether to launch the course or not, the frequency and the contents of the course according to its own circumstances rather than being imposed from the upper level bureaus of education. Moreover, the contents of courses fit students at the primary school level better than students at the junior high school level. Under the current education system in China, the top priority of junior high school students should be on entrance examine into senior high school. With that understanding, the introduction of the Adream courses will conflict with the priority of schools. The value of Adream courses pertain to provide a chance for students to relax and improve students' awareness of self-study.

3. Teachers of Adream courses

Adream courses are a type of activity-oriented class that require the participation of students. The Adream courses help students study enthusiastically and happily, and help students learn a lot of extra-curriculum stuff and become more self-confident.

4. Students of Adream courses

Adream courses teach students knowledge and disciplines, and practical skills. Participating in Adream courses make students very happy. Adream courses can help students succeed. In Adream courses, all students are equal, self-confident, and interact with each other more often. Adream courses help students to stimulate their enthusiasm of learning and build up their practical skills to cope with daily life.

5. Summary of preliminary results

5.1 Impact on students

Results from the evaluation show that:

1. **Mathematics test scores.** After 2 years of Adream courses, compared with students in the comparison group, students in the treatment group increased 2 more points (full score is 100). The positive impact may result from the vivid atmosphere of Adream courses. And the relative eased teacher-student relationship help students to reduce their study pressure, eased tension with teachers, and stimulated their study enthusiasm and improved their scores.
2. **Monetary value.** Students who had 2 years of Adream courses had apparently put more weight on the function and value of money, compared with students in the comparison group. The reason of the change may come from the Adream courses on financial literacy and basic life skills. Through participating in these courses, students further experienced the function of money and changed their attitude towards money.
3. **View of power.** Students who had 2 years of Adream courses had apparently higher awareness on the function and value of power, compared with students who had not access to Adream courses. The reason of the change may come from the contents (living skills) and organization of Adream courses (group discussion), which let students experience the value of power and therefore changed their attitudes towards power.

As to teacher-student relationship, self-efficiency, just world belief, sense of happiness, our results do not provide any evidence of impacts. As we noted above, it takes time to change psychological characteristics. Moreover, students' mental health can be influenced by many other factors. Maybe the 2-year duration of Adream intervention is too short to change students' psychological characteristics.

5.2 Impact on teachers

Our evaluation results did not find any significant positive effect of Adream project on teachers' psychological characteristics in terms of work burnout, work efficiency, work involvement and meaningfulness, or happiness. Similar to the mental health of students, teachers' mental health is also influenced by various factors. It is likely that the positive effects of Adream training and working experience may not be strong enough to counteract the effects of other working and living pressure that teachers experienced.

6. Recommendations for Adream Foundation

6.1 Recommendations about Adream courses

So far, our evaluation results have shown that the Adream Center project has no impact on the psychological characteristics of students. Therefore, the evaluation team recommends the foundation to improve the structure and contents of courses by adjusting the themes of Adream courses. Specifically,

1. Considering the goal of 'To help our children to grow up with confidence, poise and dignity', also considering the psychological characteristics of students at different stage of development, the foundation should design courses to help students open the scope of world, forming good habits and growth mindset.

2. The foundation should encourage teachers to participate in salons and trainings to discuss course-related themes. Moreover, the foundation should re-design those existing courses that are beyond the understanding of teachers.

   Considering the fact that many teachers revealed they had undue time burden to prepare the Adream courses, the evaluation team recommended the foundation to provide more illustrative materials such as PPTs, videos and plans of Adream courses alleviate the already heavy burden of Adream teachers.

   Considering the fact that some of teachers have no idea on how to upload or download materials from the Adream websites, the evaluation team recommended the foundation to provide a simplified version of 'Adream box' so that even teachers with zero skill of operating computer can easily upload or download useful materials.

6.2 Recommendation on building up the capacity for Adream teachers

To ensure the targeted goal of Adream courses could be accomplished, and to guarantee the quality of teacher training, training for Adream teachers should be delivered in a standardized way. Interviews with teachers and school principals show that useful toolkits including standardized contents of teacher training, standardized materials, and the training per se should come as a prerequisite instead of optional.

The foundation can increase the frequency of Adream salon, be responsive to teachers' questions, or provide an apprentice system that experienced teachers can hand on first hand methods and ideology of Adream courses, so that the apprentice-teacher could smoothly adapt to the requirement of Adream courses.

In addition, the evaluation team suggest the foundation to step forward to encourage schools to reduce the turnover rate of Adream teachers and stabilize the schedule of Adream courses. In this way, on the one hand, the ideas and skills of Adream courses

could be learned by the designated teachers and apply them into their teaching practices. On the other hand, students will not be hurt by the potentially negative effect that might come from the frequent turnover of Adream teachers.

For schools that had already offered Adream courses, the evaluation team recommend the foundation to communicate with principals of in charge of the Adream courses in a more active and effective way. In this way, their doubts, questions and comments about the Adream courses can be taken care of in a more timely and effective manner. The communications can take such forms as paper manuals, face to face workshops, field trips or online courses.

In some schools where the teacher performance payment system is being implemented, some teachers and principals suggested to include Adream courses into the performance assessment of teachers. Moreover, some suggestions are proposed from the field on how to treat Adream teachers equally as those non-Adream teachers in the performance assessment.

1. The foundation is recommended to make efforts to lobby local bureau of education to incorporate Adream courses into the evaluation system of teachers.

2. The foundation is recommended to publish those excellent cases of courses, and share the insights of teachers about how to better teach Adream courses. To publish the work of those Adream teachers per se is an appreciation of the efforts of those teachers. In addition, the publication could be an excellent representation for teachers' teaching ability and therefore could be helpful for their promotion.

6.3 Recommendation for the design and evaluation of Adream courses

As we have seen from our data, the proportion of schools that literally offered Adream courses was low. Even among schools that did offer Adream courses, the frequency of classes was less than expected. Thus, the evaluation team recommend the Adream foundation to take steps to strengthen the intensity of intervention by increasing the proportion of schools that offered Adream courses and its frequency of classes. The foundation might want to consider the following measures.

1. The foundation is recommended to increase the incentives of school principals, to inform about the value of Adream Centers so that they are willing to implement the Adream courses.

2. The foundation should work with schools to improve the offering of the Adream courses. For examples, the foundation could build up a smooth communication channels with schools, monitor the Adream courses implementation of schools regularly, and build up a system to support schools when they offer Adream courses.

3. The foundation is recommended to set up a timely communication system with

schools to ensure the course materials of the Adream Project could be updated and delivered in a timely manner. Course materials include the uptake, dissemination, and update of reference books, computers (desktops, laptops, and pads), teaching utensils of the Adream project.

4. Training offered under the umbrella of the Adream project should be teacher-oriented, with special focus on improving their teaching skills, and encourage schools to build a network of knowledge sharing so that teachers could have more opportunities to interact with each other.

5. Regarding the on-going drive for effective course system, the evaluation team recommends the foundation to communicate effectively with local bureaus of education, school principals and teachers to contemplate, search and promote good practices so that the Adream project could be implemented and adapted smoothly when the effective-course-system is introduced in all schools.

6. Our evaluation revealed it is difficult for teachers to understand the evaluation system of Adream courses. They have no idea on how to evaluate their students after they had completed the Adream courses. Therefore, the evaluation team recommend the foundation to clarify the objective of each Adream course so that teachers could improve their skills of teaching Adream courses.

7. Concluding remarks

To know whether a project is good (with impact) or bad (no impact) was not all the story of impact evaluation. The quintessence of impact evaluation is to provide insights on the reason behind ‘good’ or ‘bad’ outcomes so that decision makers can modify ex ante approach to achieve better outcome.

Merely wishful thinking of charity alone cannot guarantee the accomplishment of the stated lofty goal and objectives. If the goal and objectives were achieved, it must be due to the collaborative efforts of all stakeholders. Collaborative thinking was particularly important for an education project like Adream, where Adream schools, preparation of Adream teachers, enthusiasm of local education bureaus, frequency of Adream courses, efforts of students and attention of parents, all play some role, to some extent, in shaping the outcomes of the Adream project. Impact evaluation can reflect the Achilles’ heel of the project. As always, we, as an independent evaluation team, share the same goal with the Foundation and all stakeholders, ‘let good intention brings good results’.