

Final Report for the Gansu Poverty and Education Project (#20000037)
Submitted by Emily Hannum, 9/29/2003

I. Introduction

I would like to state that my colleagues and I are extremely grateful to Spencer for making this project, now called the Gansu Survey of Children and Families (GSCF), possible. This final report consists of the following components: an executive summary (II), a project overview (III), a progress report on activities undertaken during the last year (IV), a discussion of selected findings (V), and a list of products from the project (VI).

II. Executive Summary

The Gansu Survey of Children and Families (GSCF) is a longitudinal, multi-level data collection project designed to analyze children's education and welfare in a poor rural setting. Three primary lines of research have emerged, to date, from the GSCF project.

One line of work has focused on the home environment in which children function, and how this environment links to their welfare and development outcomes. This work has gone beyond documenting socio-economic gaps in achievement to consider some of the attributes of the home environment that serve as mechanisms of advantage and disadvantage. It has shown that higher socio-economic status families invest more in children's education, not only in economic terms but also in terms of time, access to books in the home, parental help with homework, and aspirations. Further, higher socio-economic status families are able to offer more steady access to a variety of nutritious foods, and this access appears to be one mechanism of the educational advantage seen among children in these households.

A second line of work has focused on children's own attitudes and behaviors. Using measures of child adjustment that were piloted in this project, GSCF research indicates that children from higher socio-economic status households experience significantly fewer psychosocial problems, in part because of the different parenting practices in these households. Furthermore, having fewer psychosocial problems confers a significant educational advantage on these children. Beyond broad adjustment measures, we have also considered attitudes and behaviors related to education, including children's educational aspirations, confidence, industriousness, and alienation. Results show that these measures are not simply a function of socio-economic background characteristics, but rather can be linked to social and cultural factors in the home. Parent-child interactions support children's aspirations, confidence and industriousness, and the presence of books in the home supports aspirations and confidence and detracts from alienation. Notably, across many outcomes, including engagement and achievement, socio-economic differences are more striking than gender differences.

A third set of studies has focused on schools and communities and the ways that these institutions affect students and inequality. Part of this research has focused on communities and school finance. There are significant concerns in China that decentralization has made educational finance much more unequal than in the past. Analyses of GSCF data show that school operating expenditures are much more unequally distributed than wage spending, and they are more strongly associated with community income. This leads to a situation where differences in school infrastructure associated with community income levels are much more striking than differences in teachers' wages. Similarly, local sources of educational finance, such as revenue from school businesses, collective contributions, and student fees, are more unequal than government budgetary contributions, so that extra-budgetary finance exacerbates rather than ameliorates the inequality problem.

Part of this work has focused on human resources in schools. A study of teacher satisfaction shows that younger, better-educated teachers are less satisfied, and suggests that teachers may be more satisfied in schools with an organizational climate that supports collaboration and in communities where village leaders support education. More surprisingly, while timely payment of salaries and school expenditures are positively linked to teacher satisfaction, other indicators of economic status of communities and schools such as village income per capita, contributions of the village collective to the school, and teacher salary are negatively linked to teacher satisfaction, or not linked at all. These results underscore the challenge that faces rural, impoverished communities as they seek to retain effective teachers. Whether or not schools are able to retain effective teachers is important for student outcomes. For example, in the GSCF data, much of the variation in achievement test scores (at least about one fourth) can be attributed to teacher differences, and achievement can be systematically linked to teacher quality, as measured by the quality ranking evaluations done by schools.

Together, the studies emerging from this project are painting a complex and full picture of the sources of educational opportunity and inequality for children in China's rural impoverished interior. Results are useful for a policy audience interested in reforming education. For an academic audience, the project is significant as a new empirical case for refining theories of educational stratification in developing countries.

III. Project Overview

A. Focus of Research

The Gansu Survey of Children and Families is a mixed-method, multi-level study designed to analyze the following issues:

- boys' and girls' development and schooling experiences (broadly defined) in a poor rural setting
- attitudes of children, families, and teachers about parenting and schooling
- the mechanisms (home, community, school) linking poverty and girls' and boys' education and development
- rural children's schooling experiences and social mobility

Larger goals are to inform the design of policies and interventions that will improve the quality of life for rural children and to attract the attention of a broader scholarly community to rural educational issues in China.

B. Research Site

The research site is an interior province of China characterized by high rates of illiteracy and prevalent poverty. Gansu is an appropriate research site for studying poverty-education linkages in rural settings because it is characterized both by high rates of poverty and by varying poverty conditions in flat, hilly and remote mountainous sites. Further, the barriers to schooling faced by families in Gansu are common to provinces and autonomous regions located in China's less-developed interior.

C. Sample Design and Instrumentation

The sample design for the GSCF consisted of the following elements:

- a primary sample of 2000 children in 20 rural counties aged 9-12 in June 2000
- five linkable secondary samples of children's mothers, household heads, home-room teachers, school principals, and village leaders
- a census of primary school teachers and school principals in sampled villages

Instrumentation for the survey component of the project included detailed measurement of material resources and the human, social and cultural capital available to children, families, communities and schools. In addition, parent and teacher practices, attitudes and decision-making processes related to the education of children were directly measured. Measures of children's schooling experiences included external measures such as enrollment, attainment, grades, and tests of general skills and academic achievement. Subjective measures of educational experiences included mother's, child's and teacher's assessments of well-being, motivation, engagement, achievement, and behavioral problems.

The project also includes a qualitative interview sample of children, mothers, and teachers. The qualitative component of the Gansu Project, consisting of in-depth interviews, was tested in August 2001 and implemented in March 2002. The in-depth interviews followed lines of inquiry developed for the survey, in order to probe particular findings from analyses of survey data.

D. Rationale

The majority of China's children reside in rural areas, and the problem of poverty is concentrated in rural settings. While it is well-known that children in poor rural areas face economic barriers to schooling, the mechanisms by which poverty hinders education, and the non-economic factors that support or hinder schooling, are less well understood.

The GSCF begins to fill the gap, as the first large-scale, interdisciplinary study of rural children's education and welfare in China. The project has offered an opportunity to revisit theories of educational opportunity and inequality, mostly developed based on empirical research in the US, to see if and how they apply in a rural, developing country context.

From a different perspective, this work has suggested factors that are important to children's schooling in a rural, impoverished setting that may be relevant to other developing countries. For example, nutrition is not commonly considered in sociological studies of achievement, but may be very relevant for impoverished developing country settings, as our research suggests. In another example, student attitudes toward education have been little considered in research on educational attainment in developing countries; GSCF work suggests that attitudes are closely linked to the home environment for learning, and to achievement and teacher perceptions of student ability. In still another example, our research suggests that China's practice of keeping teachers with students over multiple grades appears to hold certain

benefits for student achievement. This practice might offer a low-cost strategy for effectively organizing personnel in resource-constrained settings.

We have sought to communicate our results to practitioners and the public, as well as to an academic community. Professor Wang Jiayi, Vice President of Northwest Normal University and an investigator on this project, is a regular consultant on rural poverty and education issues to the Ministry of Education in China. He has been a chief conduit for transmitting research results from US and China collaborators to a policy audience in China. In addition, we have regularly met with representatives of the Ministry of Education, to brief them on our work. Finally, we held a public conference at Harvard in 2001, which was attended by Mansheng Zhou, Deputy Director-General at the National Center for Education Development Research at the Ministry of Education. This conference was well-attended by area foundation representatives and members of the public with an interest in Chinese education, as well as by scholars.

IV. Progress Report

Activities over the past year primarily consisted of data analysis and writing. Some time was spent on revising a grant proposal for the World Bank, preparing for wave 2 data collection, and launching a web site (<http://www.ssc.upenn.edu/china/gscf/mainGscf.htm>).

A. August-December 2002

- Faculty and students worked on revising papers throughout this period. A sample of presentations made by US-based scholars on this work includes the following:

Hannum, Emily and Albert Park. (2002). Children's Educational Engagement in Rural China. Invited presentations, New York University Steinhardt School of Education (September 2002), Princeton University Office of Population Research (November 2002), and Brown University Population Studies and Training Center (December 2002).

Hannum, Emily and Peggy Kong. (2002) Family Sources of Educational Gender Inequality in Rural China: A Critical Assessment. Invited presentation, the National Academy of Education Fall Fellows Forum, Toronto (October 2002).

Park, Albert and Emily Hannum. (2002) How Do Teacher Characteristics Affect Student Learning in Developing Countries?: Evidence from Matched Teacher-Student Data from Rural China. Conference presentation, Northeast Universities Development Conference, Williams College (October) and invited presentation, Applied Economics Seminar, University of Pittsburgh and Carnegie Mellon University, (December).

- We also received and responded to comments from reviewers on the World Bank proposal to fund wave 2 data collection.

B. January-August 2003

- Faculty and students continued working on papers throughout this period. A selection of presentations made based on these papers are as follows:

Adams, J. (2003) The Place they Call Home: The Influence of Communities on Children's Schooling in Gansu. Conference presentation, International Conference on Chinese Education, Teachers College, Columbia University (February).

Brown, Phil. (2003) Parental Investment in Children's Human Capital in Rural China. Conference presentation, Annual Meeting of the Midwest Economics Association meetings (St. Louis, March).

Hannum, Emily and Albert Park. (2003) Children's Educational Engagement in Rural China. Invited presentation, University of Pennsylvania Population Studies Center (February).

Liu, X. D. (2003) Community Effects, Parenting Practices, and Child psychological Adjustment in Rural China: A Multi-level Analysis. Invited presentations, Ohio State University (March) and the University of Memphis (March).

Liu, X. D. (2003) The Process of Measurement Construction: An Empirical Study in Rural China. Invited presentation, College of Saint Rose (March).

Park., Albert. (2003) School Equity in Rural China. Conference presentations, Poverty Policy Workshop, Beijing, (February) and International Conference on Chinese Education, Teachers College, Columbia University (February).

Sargent, Tanja and Emily Hannum. (2003) Keeping Teachers Happy: Teacher Work Satisfaction in Rural Gansu, China. Conference presentation, Annual Meeting of the International Sociology Association Research Committee on Social Stratification, New York (August).

Yu, Shengchao and Emily Hannum. (2003) Food for Thought: Poverty, Family Nutritional Environment and Children's Educational Performance in Rural China. Presented at the Annual Meeting of the International Health Economics Association, San Francisco (June), the Annual Meeting of the Population Association of America, Minneapolis (April) and the Annual Meeting of the Association of Asian Studies, Washington, D.C. (March), and the University of Pennsylvania Graduate School of Education International Education Seminar (January).

- We received word from the World Bank that our proposal for wave 2 data collection would be funded. Wave 2 continues with the detailed measures of education introduced in wave 1, but adds a significant focus on physical and psychosocial health, and direct assessments of literacy and life skills. It will also incorporate a randomized health intervention, the provision of eyeglasses, to consider impact on learning and school persistence.¹
- In early spring, we made the decision not to go ahead with wave 2 data collection in the summer of 2003, due to SARS. In some sense, the decision was not ours: both Penn and Michigan placed a moratorium on all research travel to SARS-affected areas.
- Albert Park and Emily Hannum worked on an edited book manuscript based on a conference, supported in part through the Major Grant, on education reform in China (manuscript enclosed).
- Tanja Sargent, Shengchao Yu and Emily Hannum worked to compile documentation and research papers and have placed this documentation on the web site, <http://www.ssc.upenn.edu/china/gscf/mainGscf.htm>.

V. Findings

The Gansu Survey of Children and Families (GSCF) is a longitudinal, multi-level data collection project designed to analyze children's education and welfare in a poor rural setting. Three primary lines of research have emerged, to date, from the GSCF project.

One line of work has focused on the home environment in which children function, and how this environment links to their welfare and development outcomes. This work has gone beyond documenting socio-economic gaps in achievement to consider some of the attributes of the home environment that serve as mechanisms of advantage and disadvantage. It has shown that wealthier and better-educated parents invest more in children's education, not only in goods but also in terms of time (Brown 2003; Kong 2003). Higher socio-economic status children enjoy significantly greater access to children's books in the home and parental help with homework, and their mothers have higher aspirations for them (Hannum and Park 2003). Mother's aspirations and books in the home appear particularly consequential for a variety of children's educational outcomes (Hannum and Park 2003).

Research has also shown that wealthier households are able to offer a more favorable nutritional environment to children, and suggests that nutrition may be one mechanism of the educational advantage seen among children in these households (Yu and Hannum 2002). In multivariate analyses, home access to a variety of nutritional foods significantly predicts student math and language end-of-semester test scores, and predicts current achievement on standardized language tests even net of end-of-semester scores.

Notably, across many measures of family environment, socio-economic differences are much more striking than gender differences. Few gender differences can be found in parents' economic investments and provision of a learning environment by gender, and few mothers espouse overtly discriminatory beliefs about girls' abilities and rights (Brown 2003; Kong 2003; Hannum and Kong 2002). However, we note that while mothers' aspirations for girls are very high, mothers have higher aspirations for boys, and they are more likely to call on girls to do chores (Hannum and Kong 2002).

A second line of work has focused on children's own attitudes and behaviors. For example, Liu's (2002, 2003) work has adapted a set of internationally-used measures of children's adjustment for use in rural China.² Using these measures, research indicates that children from wealthier families experience significantly fewer psychosocial problems, in part because of the different parenting practices in these households (Liu 2003; Yu, Hannum and Liu 2003). Work in

¹ Due to the SARS-related delay, the details of the intervention are still being worked out. Nutritional supplementation is also being considered as a possible intervention.

² These are internalizing problems, identified by symptoms of withdrawal, anxiety, and depression, and externalizing problems, identified by behaviors including hyperactivity, aggression, and delinquency.

progress suggests that having fewer psychosocial problems may confer an educational achievement advantage on these children, even controlling for previous semester's test scores (Yu, Hannum and Liu 2003).

Beyond broad adjustment measures, we have also considered attitudes and behaviors related to education, including children's educational aspirations, confidence, industriousness, and alienation from schooling. Results show that these measures are not simply a function of socio-economic background characteristics, but rather can be linked to social and cultural factors in the home. Parent-child interactions support children's aspirations, confidence and industriousness, and the presence of books in the home supports aspirations and confidence and detracts from alienation (Hannum and Park 2002). Rural girls compare well to boys in own achievement, industriousness, academic confidence, and alienation from school (Hannum and Kong 2002; Kong 2003). Girls and boys both have high aspirations, but boys' are significantly higher. The gender differences that do emerge in children's aspirations may be attributable in part to mothers' aspirations and chore allocation (Hannum and Kong 2003).

A third set of studies has focused on schools and communities and the ways that these institutions affect students and inequality. Part of this work has focused on communities and school finance. There are significant concerns in China that decentralization has made educational finance much more unequal than in the past. Analyses of GSCF data show that school operating expenditures are much more unequally distributed than wage spending, and more strongly associated with community income (Park, Li and Wang 2003). This leads to a situation where differences in school infrastructure associated with community income levels are much more striking than differences in teachers' wages. Similarly, local sources of educational finance, such as revenue from school businesses, collective contributions, and student fees, are more unequal than government budgetary contributions, so that extra-budgetary finance exacerbates rather than ameliorates the inequality problem (Park, Li and Wang 2003).

Part of this work has focused on human resources in schools. A study of teacher satisfaction shows that younger, better-educated teachers are less satisfied, and suggests that teachers may be more satisfied in schools with an organizational climate that supports collaboration and in communities where village leaders support education (Sargent 2003; Sargent and Hannum 2003). More surprisingly, while timely payment of salaries and school expenditures are positively linked to teacher satisfaction, other indicators of economic status of communities and schools such as village income per capita, contributions of the village collective to the school, and teacher salary are negatively linked to teacher satisfaction, or not linked at all (Sargent and Hannum 2003). These results underscore the challenge that faces rural, impoverished communities as they seek to retain teachers, and especially well educated teachers. Whether or not schools are able to retain good teachers is important for student outcomes. For example, in the GSCF data, much of the variation in achievement test scores (at least about one fourth) can be attributed to teacher differences, and achievement can be systematically linked to teacher quality, as measured by the quality ranking evaluations done by schools (Park and Hannum 2001).

As China seeks to expand access to high-quality education to remote rural areas, there is a need for understanding of rural home and school environments, and their links to student attitudes and behaviors. Together, the studies emerging from this project are painting a complex and full picture of the sources of educational opportunity and inequality for children in China's rural impoverished interior. Results offer useful information to a policy audience interested in reforming education. Results also provide scholars with a new empirical case that can inform the conceptualization of educational stratification in rural, developing country contexts.

Brown, Phil. (2003) Parental Investment in Children's Human Capital in Rural China. Conference presentation, Annual Meeting of the Midwest Economics Association meetings (St. Louis, March).

Hannum, Emily and Peggy Kong. (2002) Family Sources of Educational Gender Inequality in Rural China: A Critical Assessment. Invited presentation, the National Academy of Education Fall Fellows Forum, Toronto (October 2002).

Hannum, Emily and Albert Park. (2002) Families, Teachers and Children's Educational Engagement in Rural Gansu, China. (Paper presented at the 2002 Annual Meetings of the Population Association of America, Atlanta, April 2002. Earlier version presented at the Harvard Conference on Chinese Education Reform, Cambridge, July 2001).

Hannum, Emily and Albert Park. (2003) Academic Achievement and Engagement in Rural China, for the volume Education and Reform in China, edited by Emily Hannum and Albert Park (prospectus under review).

Kong, Peggy. (2003) Gender, Socio-economic Status, and Parental Investments in Children's Schooling in Rural Gansu, China. Qualifying Paper, Administration, Planning and Social Policy, Harvard Graduate School of Education.

- Liu Xiaodong. (2002) The Effects of Parental Warmth and Punishment on Children's Internalizing Behaviors: an Empirical Study in Rural China. Qualifying Paper, Human Development and Psychology, Harvard Graduate School of Education.
- Liu Xiaodong. (2003) Parenting Practices, School Environment, and Children's Adjustment in Rural Northwest China. Dissertation, Human Development and Psychology, Harvard Graduate School of Education.
- Park, Albert and Emily Hannum. (2001) Teacher Influences on Child Learning in Developing Countries: Evidence from Rural China. Paper presented at the Social Science Research Council Conference, "Rethinking Social Science Research on the Developing World in the 21st Century," Utah, June, and at the Harvard Conference on Chinese Education Reform, Cambridge, July.
- Park, Albert, Wen Li, and Sangu Wang. (2003) School Equity in Rural China. Conference presentations, Poverty Policy Workshop, Beijing, (February) and International Conference on Chinese Education, Teachers College, Columbia University (February).
- Sargent, Tanja. (2003) Who Will Teach the Poor and Remote? Teacher Distribution and Job Satisfaction in Rural China. Master's Thesis, Department of Sociology, University of Pennsylvania.
- Sargent, Tanja and Emily Hannum. (2003) Keeping Teachers Happy: Teacher Work Satisfaction in Rural Gansu, China. Paper presented at the Annual Meeting of the International Sociology Association Research Committee on Social Stratification, New York (August).
- Yu, Shengchao and Emily Hannum. (2003) Food for Thought: Poverty, Family Nutritional Environment and Children's Educational Performance in Rural China. Presented at the Annual Meeting of the International Health Economics Association, San Francisco (June).
- Yu, Shengchao, Emily Hannum, and Xiaodong Liu. (2003) Poverty, Psychosocial Well-Being, and School Performance in Rural China. (Work in progress).

VI. Products

A. Student Accomplishments

One of the pleasures of this project has been the chance to collaborate with an interdisciplinary group of talented graduate students. The GSCF has offered many opportunities for student research, in both China and in the US. Considering US students alone, the GSCF data has been used or is being used for at least eight dissertations, master's papers, and qualifying papers (see VI-C-II below); much of this work has been presented at professional conferences. Students have also been able to leverage research support through internal grants at their home institutions and through national fellowship competitions, made possible in part by access to a data set that supports investigation of interesting research questions. Two students on the project have graduated and taken faculty positions; they will continue to be involved in the project as investigators. Some of the achievements of affiliated student researchers include the following:

- Student project researcher Peggy Kong (Administration, Planning and Social Policy, Harvard) applied for and received a Spencer Advanced Doctoral Student Grant to work with the Gansu data, and has received a David L. Boren Fellowship to support dissertation fieldwork in Gansu.
- Student project researcher Tanja Sargent (Teaching, Learning and Curriculum, Penn) applied for and received a FLAS Fellowship and a David L. Boren Fellowship to support study, research, and fieldwork connected to the Gansu Project. The Boren Fellowship will allow her to add some substantial qualitative data to the project in her area of interest.
- Student project researcher Xiaodong Liu (Human Development and Psychology, Harvard), whose dissertation employed the GSCF data, graduated and obtained an assistant professor position at the College of Education at Ohio State University.
- Student project researcher Phil Brown (Economics, Michigan), whose dissertation employed the GSCF data, was a recipient of a Spencer Dissertation Fellowship to support this work. He has graduated and obtained an assistant professor position in the Economics Department at Colby College.

B. Other Funded Grants for Work Related to the GSCF

Support from Spencer has allowed us to attract other support for activities related to the GSCF. We list these other sources of support here:

- “Harvard Conference on Chinese Education Reform” (2001) Ford Foundation-Beijing and Harvard University Asia Center support given to Emily Hannum and Albert Park. Session titles: priorities for basic education reform, teachers and school performance, student motivation and engagement, schooling in poor and minority areas, trends in education finance, higher education reform issues, education and social stratification, and education and the labor market. (\$45,000 total.) We convened a private add-on conference focused on the GSCF, and GSCF researchers also participated in the open conference. A conference volume is being prepared.
- “Gansu Survey of Children and Families, Waves 2 and 3: Pilot.” (2001-2002) Awarded to Emily Hannum and Albert Park by the Fogarty International Center at National Institutes of Health. (\$121,000 to support pretesting for wave 2.)
- National Academy of Education/Spencer Foundation Post-doctoral Fellowship, (2001-2002) Awarded to Emily Hannum to analyze poverty, gender and children’s schooling experiences using Gansu data.
- “The Interaction of Health, Education and Employment in Western China.” (2003-2004) Awarded to World Bank researchers Guo Li and Alan Piazza and external researchers Paul Glewwe, Emily Hannum, and Albert Park by the World Bank. ([Funding through an internal grant at the World Bank.] \$271,000 to support GSCF wave 2.)

C. Research

I. Conference Papers, Manuscripts, and Publications

- Adams, Jennifer. (2002) A Different Kind of Capital: What Does Social Capital Look Like in China? (Work in Progress).
- Adams, Jennifer. (2003) The Place They Call Home: Links between Communities and Children's Schooling in Gansu. (Paper presented at the International Conference on Educational Reform in China, Center on Chinese Education, Teachers College, Columbia University.
- Brown, Phil. (2001) Disentangling the Relationship between Parent Education and Child Learning in Rural China. (Paper presented at the Education Research Workshop for the Gansu Poverty and Education Project, Cambridge, July).
- Brown, Phil. (2002) "Parental Investment in Children's Human Capital in Rural China," China Education Forum 3(1) (on-line journal).
- Brown, Phil. (2003) Parental Investment in Children's Human Capital in Rural China. (Paper presented at the Annual Meeting of the Midwest Economics Association meetings, St Louis, March).
- Hannum, Emily. (2001) “Investigating Children's Schooling in the Interior: The Gansu Survey of Children and Families.” China Education Forum 2 (1) (on-line journal).
- Hannum, Emily and Jennifer Adams. (2003) Poverty and Children’s Schooling in Rural Northwest China. (Book manuscript in progress, based on Gansu Project data).
- Hannum, Emily and Peggy Kong. (2002) Family Sources of Educational Gender Inequality in Rural China: A Critical Assessment. (Paper presented at the American Association of Asian Studies, Washington DC, March 2002 and invited presentation, the National Academy of Education Fall Fellows Forum, Toronto, October 2002. Manuscript under review).
- Hannum, Emily and Albert Park [eds.]. (2003) Education Reform in China. (Prospectus submitted to Harvard University Press; all chapters are in and are being edited. A segment of the book will highlight issues of education and rural poverty; a chapter will feature Gansu Project data).
- Hannum, Emily and Albert Park. (2002) “Educating China’s Rural Children in the 21st Century.” Harvard China Review 3 (2): 8-14.
- Hannum, Emily and Albert Park. (2002) Families, Teachers and Children’s Educational Engagement in Rural Gansu, China. Paper presented at the 2002 Annual Meetings of the Population Association of America (Atlanta, April 2002). Earlier version presented at the Harvard Conference on Chinese Education Reform (Cambridge, July 2001).

- Hannum, Emily and Albert Park. (2002) Children's Educational Engagement in Rural China. Invited presentations, New York University Steinhardt School of Education (September 2002), Princeton University Office of Population Research (November 2002), Brown University Population Studies and Training Center (December 2002), and University of Pennsylvania Population Studies Center (February 2003).
- Hannum, Emily and Albert Park. (2003) Academic Achievement and Engagement in Rural China, for the volume Education and Reform in China, edited by Emily Hannum and Albert Park (prospectus under review).
- Kao, Grace, Shengchao Yu and Emily Hannum. Household Migration and Its Effects on Wages in Rural China. (Work in progress).
- Kao, Grace, Shengchao Yu and Emily Hannum. Parental Migration and Educational Achievement among Children in Rural China. (Work in progress).
- Kao, Grace, Yuping Zhang and Emily Hannum. Does Mothers' Educational Attainment Affect Aspirations for Children? A Look at Rural China (Work in progress).
- Li Wen, Wang Sangui and Albert Park. (2002) Equity in School Finance in Rural Gansu. (Paper presented at the American Association of Asian Studies, Washington DC, March, 2002. Earlier version presented at the Education Research Workshop for the Gansu Poverty and Education Project, Cambridge, July, in Chinese).
- Liu Xiaodong. (2001) The Effects of Parental Warmth and Punishment on Children's Internalizing Behaviors: an Empirical Study in Rural China. (Paper presented at the Sixth Annual Student Research Conference and Eighteenth Annual International Forum, Harvard Graduate School of Education, Cambridge, February, and the Education Research Workshop for the Gansu Poverty and Education Project, Cambridge, July).
- Liu Xiaodong. (2002) How does Community Matter in Children's Problem Behaviors in Rural China? (Paper presented at the Seventh Annual Student Research Conference and Nineteenth Annual International Forum, Harvard Graduate School of Education, Cambridge, February.)
- Liu Xiaodong. (2003) Community Effects, Parenting Practices, and Child Psychological Adjustment in Rural China: a Multi-level Analysis. Invited presentations, Ohio State University (March) and the University of Memphis (March).
- Liu Xiaodong. (2003) The Process of Measurement Construction: An Empirical Study in Rural China. Invited presentation, College of Saint Rose (March).
- Liu Xiaodong, Emily Hannum, and Gil Noam. (2002) Parental Behaviors and Young Adolescents' Internalizing Problems in Rural China. (Manuscript under review).
- Park, Albert and Emily Hannum. (2001) Teacher Influences on Child Learning in Developing Countries: Evidence from Rural China. (Paper presented at the Social Science Research Council Conference, "Rethinking Social Science Research on the Developing World in the 21st Century," Utah, June, and at the Harvard Conference on Chinese Education Reform, Cambridge, July).
- Park, Albert, Wen Li, and Sangui Wang. (2003) School Equity in Rural China. Conference presentations, Poverty Policy Workshop, Beijing, (February) and International Conference on Chinese Education, Teachers College, Columbia University (February).
- Sargent, Tanja and Emily Hannum. (2003) Keeping Teachers Happy: Teacher Work Satisfaction in Rural Gansu, China. Paper presented at the Annual Meeting of the International Sociology Association Research Committee on Social Stratification, New York (August).
- Yu Shengchao and Emily Hannum. (2003) Food for Thought: Poverty, Family Nutritional Environment and Children's Educational Performance in Rural China. Presented at the Annual Meeting of the International Health Economics Association, San Francisco (June), the Annual Meeting of the Population Association of America, Minneapolis (April) and the Annual Meeting of the Association of Asian Studies, Washington, D.C. (March), and the University of Pennsylvania Graduate School of Education International Education Seminar (January).
- Yu Shengchao and Emily Hannum. (2003) Poverty, Children's Health and Education in Rural China. (Work in progress, for the volume Education, Stratification and Social Change in China, edited by Gerard A. Postiglione, expected date of publication June 2004.
- Yu Shengchao, Emily Hannum, and Xiaodong Liu. (2003) Poverty, Psychosocial Well-Being, and School Performance in Rural China. (Work in progress).

Zhang Yanhong. (2001) School Effects on Student Academic Performance in Rural Gansu. (Paper presented at the Education Research Workshop for the Gansu Poverty and Education Project, Cambridge, July).

II. Dissertations, Master's Papers and Qualifying Papers

Adams, Jennifer. (2003) Local Advantage: The Influence of Communities on Children's Schooling in Gansu. Dissertation in progress, Administration, Planning and Social Policy, Harvard Graduate School of Education.

Brown, Phil. (2003) Time and Money Investments in Children's Human Capital in China. Dissertation Third Paper, Department of Economics, University of Michigan.

Kong, Peggy. (2003) Gender, Socio-economic Status, and Parental Investments in Children's Schooling in Rural Gansu, China. Qualifying Paper, Administration, Planning and Social Policy, Harvard Graduate School of Education.

Liu Xiaodong. (2002) The Effects of Parental Warmth and Punishment on Children's Internalizing Behaviors: an Empirical Study in Rural China. Qualifying Paper, Human Development and Psychology, Harvard Graduate School of Education.

Liu Xiaodong. (2003) Parenting Practices, School Environment, and Children's Adjustment in Rural Northwest China. Dissertation, Human Development and Psychology, Harvard Graduate School of Education.

Zhang Yuping. (2003) Social capital and Girls' Education in Rural Gansu. Dissertation in progress, Department of Sociology, University of Pennsylvania.

Sargent, Tanja. (2003) Who Will Teach the Poor and Remote? Teacher Distribution and Job Satisfaction in Rural China. Master's Thesis, Department of Sociology, University of Pennsylvania.

Sargent, Tanja. (2003) Values, Norms and School Reforms: The Quality Education Initiative in Rural China. Dissertation in progress, Graduate School of Education, Teaching, Learning and Curriculum, University of Pennsylvania.