

REBECCA CLARK  
(301) 496-1175  
rclark@mail.nih.gov

**SUMMARY STATEMENT**  
( Privileged Communication )

*Release Date:* 08/17/2004  
*Revised Date:* 08/17/2004

*Application Number:* 1 R03 HD048609-01

DORN, SHERMAN J PHD  
UNIVERSITY OF SOUTH FLORIDA  
DEPT OF PSYCH & SOCIAL FDN  
4202 E FOWLER AVE, EDU 162  
TAMPA, FL 33620-7750

*Review Group:* CHHD-W  
Population Sciences Subcommittee

*Meeting Date:* 06/21/2004  
*Council:* OCT 2004  
*Requested Start:* 01/01/2005

*RFA/PA:* PA03-108  
*PCC:* DBS -RC

*Project Title:* Indirect Measures of Student Net Flow

*SRG Action:* Priority Score: 250 Percentile: 52 #

*Human Subjects:* E4-Human subjects involved - Exemption #4 designated

*Animal Subjects:* 10-No live vertebrate animals involved for competing appl.

*Children:* 2A-Only Children, scientifically acceptable

Clinical Research - not NIH-defined Phase III Trial

Project Year	Direct Costs Requested	Estimated Total Cost
1	50,000	72,500
2	50,000	72,500
<b>TOTAL</b>	<b>100,000</b>	<b>145,000</b>

**ADMINISTRATIVE BUDGET NOTE:** The budget shown is the requested budget and has not been adjusted to reflect any recommendations made by reviewers. If an award is planned, the costs will be calculated by Institute grants management staff based on the recommendations outlined below in the COMMITTEE BUDGET RECOMMENDATIONS section.

**NEW INVESTIGATOR**

**RESUME AND SUMMARY OF DISCUSSION:** This very good R03 application submitted by Dr. Sherman Dorn from the University of Florida is in response to the NIH Small Grants Program (PA-03-108) announcement. The applicant proposes to develop and test semi-parametric models of demography to indirectly measure aspects of student net flow in a particular district. The primary strength of this application is the approach proposed for assessing student net flow including its modest improvement over existing measures, and the potential for this approach to reduce some bias in assessing student flow. Additional strengths include the state policy relevance of this study; its potential to contribute to the debate on high-stakes testing and allow for comparisons across districts; the experience and expertise of the applicant in research related to school dropout; and the adequacy of the research environment to support the study. Nevertheless, several weaknesses are noted in the application that significantly dampened the enthusiasm. The primary weaknesses include concerns about the feasibility of the current study to measure student-to-student and within district changes; little information on how or whether the newly developed measure will address the educational policy debate; and the modest innovation of the new technique if successful. Although this project may develop a measure to assess within-state testing, concerns exist about this measure not being able to assess between state comparisons and not having an effect on student net flow. Despite these weaknesses the reviewers were in agreement about the potential contributions of this study and recommended it for further consideration with modest enthusiasm.

**DESCRIPTION (provided by applicant):** The proposed project will develop and test an indirect method of measuring student flow in and out of schools in individual grades. This measure will advance educational research methods, will expand applications of demography, and will contribute to a broad public debate over high-stakes tests. More states are using standardized tests as a gatekeeper for high school graduation, and there is an ongoing debate over the effects of high-stakes testing. The proposed project uses a semi-parametric variation on standard population models to estimate student net flow indirectly. The proposed method allows for an estimation of net flow year by year, so information about the potential effects of policies are available before a grade cohort has finished its K-12 career. Additional benefits lie in expanding the application of demographic methods to areas that thus far have not been accessible to demographers, creating a semi-parametric application of demography. This project will test this method with data on individual school districts from Florida, Massachusetts, North Carolina, Tennessee, and Texas--with data from Florida and Texas stretching back to 1994.

**CRITIQUE NOTE:** The sections that follow are the essentially unedited, verbatim comments of the reviewers assigned to this application. They are provided to illustrate the range of opinions expressed. The application was discussed and scored by all reviewers present. The attached commentaries may not necessarily reflect the position of the reviewers at the close of group discussion, nor the final majority opinion of the group. The Resume and Summary of Discussion, however, is the authoritative representation of the final outcome of the group discussion.

#### **CRITIQUE 1:**

**SIGNIFICANCE:** Proponents and critics of high-stakes testing probably do not base their arguments primarily on the consequences of high-stakes tests on dropout rates. As a result, it's not clear that a better measure of the consequences of high-stakes testing on student net flow would influence the debate much. Assuming that dropout rates are important for the debate, how would the proposed study advance knowledge? This study aims to develop a better measure of student net flow by modeling student retention and net migration, potentially complicating factors, and by providing data useful for making between-district comparisons of student net flow. The investigator describes problems with both population-based measures and administrative-record measures that this work should overcome. The research could, therefore, improve our ability to assess how high-stakes testing has influenced high school graduation rates between states. It also has the potential to allow for comparisons between districts.

**APPROACH:** The demographic model proposed here makes use of the existing *Common Core of Data* and grade-by-grade retention district-level data he has already collected for four states. The investigator will estimate net flow from grades 2-7 and apply this estimate to later grades. While this approach represents a modest improvement upon existing measures, it still may not successfully isolate the effect of high-stakes testing for other reasons. States' or districts' student net flow may change because they have made their curriculum more demanding (often in conjunction with high-stakes testing), or because of changing job market conditions. Without the ability to compare units (districts or states) that are randomly distributed across policy levels, the challenge of isolating the policy effect looms large enough to complicate debates over the consequences of high-stakes tests. The investigator gives this important issue little attention.

Experimental policies on high-stakes testing may not be politically feasible, however. If that is the case, then this imperfect method may represent a \*better\* approach than that used before, and potentially our best estimate of how high-stakes testing influences student net flow.

Unfortunately, the level of analysis will not allow school-to-school comparisons (it will only have district level data) and so these data would not have implications for debates regarding the effect of policies on student flow \*between\* schools. The *No Child Left Behind* legislation, for example, allows for student movement within district, and so these data could not assess student net flow of this kind.

**INNOVATION:** This approach has a novel aspect--adjusting for differences in district-level retention and migration. By trying to avoid some of the pitfalls inherent in population-based and administrative-record measures, the author is likely to produce a better measure of student net flow than past researchers. The innovation is modest, however; and still subject to the limitations of correlational data.

**INVESTIGATOR:** The investigator has several publications relevant to the proposal. Two of these are in *Education Policy Analysis Archives*, two in *History of Education Quarterly*, and one is a book. The investigator appears well-versed in the area.

**ENVIRONMENT:** The researcher's university and department should provide an appropriate environment for this study.

## **CRITIQUE 2:**

**SIGNIFICANCE:** The findings from this research can contribute to the on-going debate on high-stakes testing. Additionally, it has implications for broadening the applications of demography and will enhance educational research methods.

**APPROACH:** This research focuses on developing an indirect method for estimating student flow into and out of individual grades by testing a new method for estimating dropping out of school using mathematical demographic models. This is needed because existing measures of graduation and dropping out are problematic. However, there is very limited discussion on how this technique will advance our knowledge from what is readily available. Although the proposal states that this will improve on existing techniques of student flow, in a particular district the change might be due to something else. More discussion is needed on the levels (state, district) where this technique is likely to contribute and where it is unlikely to be helpful. Additionally, while this technique will reduce some bias, it will not account for it fully and therefore more discussion is needed on its benefits and drawbacks. More discussion is also needed on how this improves on existing techniques,

**INNOVATION:** Although the results from this research would provide a new technique for measuring indirect student flow, this innovation is modest.

**INVESTIGATOR:** The PI has a Masters in demography and a Ph.D. in history from the University of Pennsylvania. He is currently an associate professor of education at the University of Florida. He has several publications related to school dropout.

**ENVIRONMENT:** The environment provides the necessary support for carrying out this research.

**BUDGET:** The budget is appropriate.

**HUMAN SUBJECTS:** There are no human subjects concerns.

**GENDER/MINORITY INCLUSION:** This study will assess school net flow for male and female students of multiracial backgrounds.

**THE FOLLOWING RESUME SECTIONS WERE PREPARED BY THE SCIENTIFIC REVIEW ADMINISTRATOR TO SUMMARIZE THE OUTCOME OF DISCUSSIONS OF THE REVIEW COMMITTEE ON THE FOLLOWING ISSUES:**

**PROTECTION OF HUMAN SUBJECTS (Resume): ACCEPTABLE.** This study will conduct secondary analyses of Common Core data and district-level school data for which personal identifiers will be removed to develop and test semi-parametric models of demography to indirectly measure aspects of student net flow.

**INCLUSION OF WOMEN PLAN (Resume): ACCEPTABLE.** This study will include information for male and female students to assess indirectly measures of student net flow.

**INCLUSION OF MINORITIES PLAN (Resume): ACCEPTABLE.** This study will include information on both minorities and non-minorities to assess indirectly measures of student net flow.

**INCLUSION OF CHILDREN PLAN (Resume): ACCEPTABLE.** The primary focus of this study is on children and youth only in the effort to measure aspects of student net flow.

**COMMITTEE BUDGET RECOMMENDATIONS:** The budget was recommended as requested.

---

# Ad hoc or special section application percentiled against "Total CSR" base.

NOTICE: The NIH has modified its policy regarding the receipt of amended applications. Detailed information can be found by accessing the following URL address:  
<http://grants.nih.gov/grants/policy/amendedapps.htm>

NIH announced implementation of Modular Research Grants in the December 18, 1998 issue of the NIH Guide to Grants and Contracts. The main feature of this concept is that grant applications (R01, R03, R21, R15) will request direct costs in \$25,000 modules, without budget detail for individual categories. Further information can be obtained from the Modular Grants Web site at <http://grants.nih.gov/grants/funding/modular/modular.htm>

## MEETING ROSTER

**Population Sciences Subcommittee  
National Institute of Child Health and Human Development Initial Review Group  
NATIONAL INSTITUTE OF CHILD HEALTH AND HUMAN DEVELOPMENT  
CHHD-W S  
June 21, 2004 - June 22, 2004**

### **CHAIRPERSON**

TOLNAY, STEWART E, PHD  
PROFESSOR  
DEPARTMENT OF SOCIOLOGY  
UNIVERSITY OF WASHINGTON  
SEATTLE, WA 981953340

HORWITZ, SARAH M, PHD \*  
PROFESSOR  
DEPARTMENT OF PSYCHIATRY  
CASE WESTERN RESERVE UNIVERSITY  
CASE SCHOOL OF MEDICINE  
CLEVELAND, OH 44106

### **MEMBERS**

AXINN, WILLIAM G., PHD \*  
PROFESSOR  
DEPARTMENT OF SOCIOLOGY  
UNIVERSITY OF MICHIGAN  
ANN ARBOR, MI 48106

JAYAKODY, RUKMALIE T., PHD  
ASSOCIATE PROFESSOR  
DEPARTMENT OF HUMAN DEVELOPMENT  
AND FAMILY STUDIES  
PENNSYLVANIA STATE UNIVERSITY  
UNIVERSITY PARK, PA 16802

BEAN, FRANK D., PHD  
PROFESSOR AND CO-DIRECTOR  
CENTER FOR RESEARCH ON IMMIGRATION,  
POPULATION AND PUBLIC POLICY  
SCHOOL OF SOCIAL SCIENCES  
UNIVERSITY OF CALIFORNIA, IRVINE  
IRVINE, CA 92697

KAROLY, LYNN A., PHD \*  
SENIOR ECONOMIST  
RAND CORPORATION  
ARLINGTON, VA 22202

BHAT, RAMA , MD \*  
PROFESSOR OF PEDIATRICS  
UNIVERSITY OF ILLINOIS MEDICAL CENTER  
DEPARTMENT OF PEDIATRICS  
CHICAGO, IL 60612

LANDRY, DAVID , MS \*  
SENIOR RESEARCH ASSOCIATE  
ALAN GUTTMACHER INSTITUTE (AGI)  
NEW YORK, NY 10005

DOWNEY, DOUGLAS B, PHD \*  
ASSOCIATE PROFESSOR  
DEPARTMENT OF SOCIOLOGY  
OHIO STATE UNIVERSITY  
COLUMBUS, OH 43210

MITCHELL, JEAN M., PHD \*  
PROFESSOR  
GEORGETOWN PUBLIC POLICY INSTITUTE  
GEORGETOWN UNIVERSITY  
WASHINGTON, DC 20007

GLICK, JENNIFER E, PHD \*  
ASSISTANT PROFESSOR  
DEPARTMENT OF SOCIOLOGY  
ARIZONA STATE UNIVERSITY  
TEMPE, AZ 85287

ROGERS, RICHARD G, PHD  
PROFESSOR  
DEPARTMENT OF SOCIOLOGY  
UNIVERSITY OF COLORADO  
BOULDER, CO 80309

GOLDMAN, NOREEN , DSC  
PROFESSOR  
OFFICE OF POPULATION RESEARCH  
PRINCETON UNIVERSITY  
PRINCETON, NJ 08540

SCHOEN, ROBERT , PHD \*  
PROFESSOR  
DEPARTMENT OF SOCIOLOGY  
PENNSYLVANIA STATE UNIVERSITY  
UNIVERSITY PARK, PA 16802

GROSSMAN, MICHAEL , PHD  
PROFESSOR  
NATIONAL BUREAU OF ECONOMIC RESEARCH  
NEW YORK, NY 100165309

SMOCK, PAMELA J., PHD \*  
ASSOCIATE DIRECTOR  
INSTITUTE FOR SOCIAL RESEARCH  
THE UNIVERSITY OF MICHIGAN  
ANN ARBOR, MI 481061248

HODDINOTT, JOHN , PHD \*  
SENIOR RESEARCH FELLOW  
INTERNATIONAL FOOD POLICY RESEARCH INSTITUTE  
WASHINGTON, DC 20006

UMBERSON, DEBRA J., PHD \*  
PROFESSOR AND CHAIR  
DEPARTMENT OF SOCIOLOGY  
UNIVERSITY OF TEXAS  
AUSTIN, TX 787121088

WHITE, MICHAEL J., PHD  
PROFESSOR AND CHAIR  
DEPARTMENT OF SOCIOLOGY  
BROWN UNIVERSITY  
PROVIDENCE, RI 02912

WILSON, FRANKLIN D, PHD  
PROFESSOR  
DEPARTMENT OF SOCIOLOGY  
UNIVERSITY OF WISCONSIN-MADISON  
MADISON, WI 537061393

WILSON, MELVIN N., PHD \*  
PROFESSOR  
DEPARTMENT OF PSYCHOLOGY  
UNIVERSITY OF VIRGINIA  
CHARLOTTESVILLE, VA 229032477

**SCIENTIFIC REVIEW ADMINISTRATOR**

WALLS, CARLA T., PHD  
SCIENTIFIC REVIEW ADMINISTRATOR  
DIVISION OF SCIENTIFIC REVIEW  
NATIONAL INSTITUTE OF CHILD HEALTH  
AND HUMAN DEVELOPMENT, NIH  
BETHESDA, MD 20892

**GRANTS TECHNICAL ASSISTANT**

GOMEZ, ALEXANDRA L., OTH  
GRANTS TECHNICAL ASSISTANT  
DIVISION OF SCIENTIFIC REVIEW  
NATIONAL INSTITUTE OF CHILD HEALTH  
AND HUMAN DEVELOPMENT  
ROCKVILLE, MD 20852

\* Temporary Member. For grant applications, temporary members may participate in the entire meeting or may review only selected applications as needed.

Consultants are required to absent themselves from the room during the review of any application if their presence would constitute or appear to constitute a conflict of interest.