



Xueli Wang EDITOR

Studying Transfer
in Higher
Education: New
Approaches to
Enduring and
Emerging Topics



NUMBER 170

Discover this journal online at
Wiley Online Library
wileyonlinelibrary.com

NEW DIRECTIONS FOR
INSTITUTIONAL RESEARCH

 **JOSSEY-BASS™**
A Wiley Brand

**New Directions for
Institutional Research**

John F. Ryan
Gloria Crisp
CO-EDITORS

Studying Transfer in
Higher Education:
New Approaches
to Enduring and
Emerging Topics

Xueli Wang
EDITOR

Number 170
Jossey-Bass
San Francisco

Studying Transfer in Higher Education: New Approaches to Enduring and Emerging Topics

Xueli Wang (ed.)

New Directions for Institutional Research, no. 170

Co-editors: John F. Ryan and Gloria Crisp

NEW DIRECTIONS FOR INSTITUTIONAL RESEARCH, (Print ISSN: 0271-0579; Online ISSN: 1536-075X), is published quarterly by Wiley Subscription Services, Inc., a Wiley Company, 111 River St., Hoboken, NJ 07030-5774 USA.

Postmaster: Send all address changes to *NEW DIRECTIONS FOR INSTITUTIONAL RESEARCH*, John Wiley & Sons Inc., C/O The Sheridan Press, PO Box 465, Hanover, PA 17331 USA.

Copyright and Copying (in any format)

Copyright © 2017 Wiley Periodicals, Inc., a Wiley Company. All rights reserved. No part of this publication may be reproduced, stored or transmitted in any form or by any means without the prior permission in writing from the copyright holder. Authorization to copy items for internal and personal use is granted by the copyright holder for libraries and other users registered with their local Reproduction Rights Organisation (RRO), e.g. Copyright Clearance Center (CCC), 222 Rosewood Drive, Danvers, MA 01923, USA (www.copyright.com), provided the appropriate fee is paid directly to the RRO. This consent does not extend to other kinds of copying such as copying for general distribution, for advertising or promotional purposes, for republication, for creating new collective works or for resale. Permissions for such reuse can be obtained using the RightsLink "Request Permissions" link on Wiley Online Library. Special requests should be addressed to permissions@wiley.com

Information for subscribers

NEW DIRECTIONS FOR INSTITUTIONAL RESEARCH is published in 4 issues per year. Institutional subscription prices for 2017 are: Print & Online: US\$461 (US), US\$515 (Canada & Mexico), US\$561 (Rest of World), €366 (Europe), £2890 (UK). Prices are exclusive of tax. Asia-Pacific GST, Canadian GST/HST and European VAT will be applied at the appropriate rates. For more information on current tax rates, please go to www.wileyonlinelibrary.com/tax-vat. The price includes online access to the current and all online backfiles to January 1st 2013, where available. For other pricing options, including access information and terms and conditions, please visit www.wileyonlinelibrary.com/access.

Delivery Terms and Legal Title

Where the subscription price includes print issues and delivery is to the recipient's address, delivery terms are **Delivered at Place (DAP)**; the recipient is responsible for paying any import duty or taxes. Title to all issues transfers FOB our shipping point, freight prepaid. We will endeavour to fulfil claims for missing or damaged copies within six months of publication, within our reasonable discretion and subject to availability.

Back issues: Single issues from current and recent volumes are available at the current single issue price from cs-journals@wiley.com.

Disclaimer

The Publisher and Editors cannot be held responsible for errors or any consequences arising from the use of information contained in this journal; the views and opinions expressed do not necessarily reflect those of the Publisher and Editors, neither does the publication of advertisements constitute any endorsement by the Publisher and Editors of the products advertised.

Publisher: *NEW DIRECTIONS FOR INSTITUTIONAL RESEARCH* is published by Wiley Periodicals, Inc., 350 Main St., Malden, MA 02148-5020.

Journal Customer Services: For ordering information, claims and any enquiry concerning your journal subscription please go to www.wileycustomerhelp.com/ask or contact your nearest office.

Americas: Email: cs-journals@wiley.com; Tel: +1 781 388 8598 or +1 800 835 6770 (toll free in the USA & Canada).

Europe, Middle East and Africa: Email: cs-journals@wiley.com; Tel: +44 (0) 1865 778315.

Asia Pacific: Email: cs-journals@wiley.com; Tel: +65 6511 8000.

Japan: For Japanese speaking support, Email: cs-japan@wiley.com.

Visit our Online Customer Help available in 7 languages at www.wileycustomerhelp.com/ask

Production Editor: Poornita Jugran (email: pjugran@wiley.com).

Wiley's Corporate Citizenship initiative seeks to address the environmental, social, economic, and ethical challenges faced in our business and which are important to our diverse stakeholder groups. Since launching the initiative, we have focused on sharing our content with those in need, enhancing community philanthropy, reducing our carbon impact, creating global guidelines and best practices for paper use, establishing a vendor code of ethics, and engaging our colleagues and other stakeholders in our efforts. Follow our progress at www.wiley.com/go/citizenship

View this journal online at wileyonlinelibrary.com/journal/ir

Wiley is a founding member of the UN-backed HINARI, AGORA, and OARE initiatives. They are now collectively known as Research4Life, making online scientific content available free or at nominal cost to researchers in developing countries. Please visit Wiley's Content Access - Corporate Citizenship site: <http://www.wiley.com/WileyCDA/Section/id-390082.html>

Printed in the USA by The Sheridan Group.

Address for Editorial Correspondence: Editor-in chief, John F. Ryan, *NEW DIRECTIONS FOR INSTITUTIONAL RESEARCH*, Email: jfryan@uvm.edu

Abstracting and Indexing Services

The Journal is indexed by Academic Search (EBSCO Publishing); Academic Search Alumni Edition (EBSCO Publishing); Academic Search Elite (EBSCO Publishing); Academic Search Premier (EBSCO Publishing); ERA: Educational Research Abstracts Online (T&F); ERIC: Educational Resources Information Center (CSC); Higher Education Abstracts (Claremont Graduate University); Professional Development Collection (EBSCO Publishing).

Cover design: Wiley

Cover Images: © Lava 4 images | Shutterstock

For submission instructions, subscription and all other information visit:

wileyonlinelibrary.com/journal/ir

THE ASSOCIATION FOR INSTITUTIONAL RESEARCH (AIR) is the world's largest professional association for institutional researchers. The organization provides educational resources, best practices, and professional development opportunities for more than 4,000 members. Its primary purpose is to support members in the process of collecting, analyzing, and converting data into information that supports decision making in higher education.

CONTENTS

EDITORS' NOTES <i>Xueli Wang</i>	7
1. Advancing a New Critical Framework for Transfer Student Research: Implications for Institutional Research <i>Frankie Santos Laanan, Dimpal Jain</i> This chapter uses critical lenses to (re)conceptualize transfer research to answer complex questions about diverse transfer students.	9
2. Narratives of Success: A Retrospective Trajectory Analysis of Men of Color Who Successfully Transferred from the Community College <i>Marissa Vasquez Urias, Vannessa Falcon, Frank Harris III, J. Luke Wood</i> A narrative approach to inquiry tells the experiences of men of color who successfully transferred and challenges deficit-oriented perspectives on men of color.	23
3. International Students in Transition: International Community College Transfer Students in a Texas Research University <i>Yi Leaf Zhang</i> This chapter provides a portrait of international transfer students and poses future research questions for better understanding this rising transfer subpopulation.	35
4. Upward Transfer in STEM Fields of Study: A New Conceptual Framework and Survey Instrument for Institutional Research <i>Xueli Wang</i> A new conceptual framework and its associated survey instrument set the stage for future research on transfer from 2-year to 4-year institutions in STEM fields of study.	49
5. Shining Light on Higher Education's Newest Baccalaureate Degrees and the Research Needed to Understand Their Impact <i>Debra D. Bragg, Maria Claudia Soler</i> Drawing upon their national studies on Applied Baccalaureate degrees, the authors identify methods and measures to improve future research on these newly developing baccalaureate degrees.	61

6. Reverse Credit Transfer: Recognizing and Measuring Transfer Student Success	73
<i>Jason L. Taylor</i> Research findings from <i>Credit When It's Due</i> illuminate the potential benefits and risks of reverse credit transfer, and point to new metrics to recognize reverse transfer credits.	
7. Multiple Paths to Success: Degree Completion of 4-Year Starters Taking Various Pathways	87
<i>Dai Li</i> An institutional research director uses an in-depth analysis of student enrollment data to reveal the potential contribution of “transfer-return” to degree completion.	
8. Student Flow and Success at 2- and 4-Year Broadly Accessible Institutions	103
<i>Gloria Crisp</i> This chapter charts the movement across institutions of varying selectivity among a national postsecondary cohort, shedding particular light on transfer in and out of broadly accessible institutions.	
9. The Evolving Landscape of Transfer Research: Reconciling What We Know in Preparation for a New Era of Heightened Promise and Complexity	115
<i>Xueli Wang, Kelly Wickersham, Ning Sun</i> This volume-culminating chapter critically analyzes the overall body of transfer research, including highlights from this volume and recommendations for institutional researchers and higher education scholars.	
INDEX	123

EDITOR'S NOTE

As a prominent part of postsecondary attendance patterns, transfer among institutions of higher education has generated perennial interest from scholars, institutional researchers, and policy makers. This volume provides updated scholarship on enduring topics in the literature and examines emerging issues pertaining to transfer. Despite the copious research devoted to transfer patterns and students who transfer, this line of research is thronged with conceptual, methodological, and data challenges that warrant continued and more nuanced attention. The nine chapters in this volume set out to offer fresh perspectives and approaches to answer this call.

The volume is organized around two broad, interconnected ways to conceptualize transfer. The first examines students who transfer and the second deals with transfer as a complex postsecondary pathway. Primarily centering on students, Chapters 1–3 are of particular use as institutional researchers seek to understand the nuanced experiences and success of the diverse and evolving transfer student population. Chapter 1 addresses how critical lenses can be used to understand today's transfer students, such as cultural capital, critical race theory, and community cultural wealth, in order to (re)conceptualize the framework of transfer student capital. Further challenging the deficit-oriented approach, Chapter 2 offers rich narratives of 15 community college men of color who successfully transferred to 4-year institutions. Chapter 3 focuses on an equally important but relatively new subpopulation, international transfer students, and provides national and specific institutional analyses of international transfer students' experiences and enrollment trends in American colleges and universities. Intersecting both transfer students and transfer as a pathway, Chapter 4 delves into a new conceptual framework for studying transfer in STEM fields of study, an emerging national priority in broadening STEM participation. A validated survey instrument based on the conceptual framework is presented as a viable data-collection tool for institutional researchers and higher education scholars interested in similar topics.

Chapters 5–8 further explore transfer as a postsecondary pathway, bringing to light the increasingly complex and blurring ways in which transfer occurs. Institutional researchers may find these chapters illuminating in regard to how to measure and assess transfer pathways within the larger scheme of postsecondary completion. In Chapter 5, the authors document the controversial expansion of Applied Baccalaureate degrees through transfer agreements between community colleges and universities as well as

through community colleges conferring their own baccalaureate degrees. Chapter 6 discusses the implications of new policies that facilitate the reverse transfer of credits for the purpose of conferring associate degrees to community college transfer students who are pursuing a baccalaureate degree. Drawing upon an analysis of institutional research data, Chapter 7 examines mixed attendance and transfer patterns of first-time degree-seeking students at a 4-year institution, and indicates that complex transfer patterns can be beneficial to the students as long as the transfer serves students' educational goals effectively. Chapter 8 zeroes in on the varying selectivity of both the sending and receiving institutions of transfer students, and describes student flow among a national cohort of students who transferred to and from institutions of varying selectivity. The volume culminates with Chapter 9, a critical analysis of established and emerging lines of transfer research, based on which future directions for institutional research and higher education scholarship are put forward. Engaging empirical research, perspectives, and case analysis from higher education scholars and institutional researchers, this volume offers renewed conceptual and methodological insights that inform future research on transfer, along with concrete recommendations for institutional researchers.

Xueli Wang
Editor

XUELI WANG is Associate Professor of Educational Leadership and Policy Analysis at the University of Wisconsin-Madison. Her areas of expertise include pathways and success of students beginning at 2-year colleges, undergraduate STEM education, and assessment in higher education.

I This chapter explores how critical lenses can be used to conduct transfer research and proposes a new methodological approach to understand the complex experiences and success of diverse transfer students.

Advancing a New Critical Framework for Transfer Student Research: Implications for Institutional Research

Frankie Santos Laanan, Dimpal Jain

The over 1,100 public 2-year institutions have become the college of choice to begin postsecondary education, especially among first-generation, low-income, and other historically underserved students (American Association of Community Colleges [AACC], 2016). For students who aspire to complete a bachelor's degree, developing knowledge and expertise about the transfer process can be a daunting experience. Numerous studies have been conducted with different methodological approaches and various theoretical frameworks to address the study of transfer (Crisp, Carales, & Nuñez, 2016; Wang, Wickersham, & Sun, Chapter 9). However, there are many challenges in studying the experiences of diverse community college students. For some researchers, using a longitudinal design to investigate students' experience at the community college and eventual transfer and performance is a preferred research approach. Another method is the use of a cross-sectional design where students are administered surveys and asked to reflect on their prior and current experiences. Conversely, other researchers employ qualitative approaches to understand how students make meaning of their transfer experiences.

In the last decade, there has been a wave of research conducted by scholars who employ critical lenses to understand community college transfer students from qualitative and quantitative approaches (Crisp & Nuñez, 2014; Harris & Wood, 2013; Jackson, 2013; Jain, Herrera, Bernal, & Solórzano, 2011; Laanan, Starobin, & Eggleston, 2010; Zamani-Gallaher & Choudhuri, 2016). However, only recently have scholars advanced new ways to conceptualize, operationalize, and measure the complex social, academic, pre- and posttransfer experiences of first-generation, low-income, and underserved transfer students of color critically.

This chapter contributes to the knowledge base and also makes recommendations for designing and implementing critical and innovative research approaches to the study of transfer students. The objectives are threefold: (a) to review and synthesize past community college transfer research; (b) to advance a new methodological approach to transfer research that centers on critical lenses such as cultural capital, critical race theory, and community cultural wealth; and (c) to explore implications for institutional research (IR). With the use of multiple theoretical lenses from sociology, psychology, ethnic studies, and organizational theory, the authors advance a (re)conceptualized framework of transfer that challenges traditional forms of transfer student research.

Studying Transfer Students: Research Designs and Methodological Approaches

In the last two decades, the growing accountability demands by higher education stakeholders require institutions to demonstrate institutional effectiveness and student success, resulting in a marked increase in developing, designing, and implementing research and evaluation approaches to understand the complex transfer process. Although not an exhaustive review, the next section highlights key studies that have helped shape our conceptualization of a model that centers the complex transfer process for diverse students.

Quantitative Approaches. Quantitative studies on transfer students can be organized into two major categories: (a) studies using national data sets, and (b) studies using survey instruments and institution-level data.

National data sets. Many quantitative studies have utilized the Beginning Postsecondary Students (BPS) Longitudinal Study. For example, LaSota and Zumeta (2015) investigated the relative significance in upward transfer of individual and institutional factors for different groups of students. This study accounted for state policy contexts of variable support for improved articulation and transfer between 2-year and baccalaureate-granting colleges. Crisp and Delgado (2014) utilized BPS: 04/09 to measure the impact of developmental education on the likelihood of community college students' persistence and vertical transfer.

Another national data set in the literature is the National Educational Longitudinal Study (NELS) and its supplementary Postsecondary Education Transcript Study (PETS). Wang (2012) utilized NELS: 88/2000 and PETS to identify factors to explain transfer to 4-year institutions among baccalaureate aspirants beginning at community colleges. Another study by Melguizo and Dowd (2009) compared the effect of being a community college transfer student as opposed to a "rising junior" in a 4-year college on bachelor's degree attainment. In addition, Wang (2009) identified factors that predict baccalaureate attainment and college persistence among

community college transfer students. The studies utilizing these data sets contribute uniquely to our understanding of community college students given the national representativeness of their student samples, longitudinal design, and use of results for policy-relevant implications about educational processes and outcomes of students. Given the comprehensive nature of the variables in each data set, researchers are able to design rigorous studies and employ multivariate statistical techniques to measure various student outcomes (e.g., transfer, persistence, and vertical transfer).

Survey design and institutional studies. A more common approach in quantitative scholarship on transfer is the development and use of survey research. Several studies utilized the Laanan-Transfer Students' Questionnaire (L-TSQ). The L-TSQ was developed by Laanan (1998) and further modified to reduce the number of survey items (Laanan et al., 2010; Moser, 2012). The L-TSQ assesses transfer students' community college and university experiences and identifies factors that predict their academic and social adjustment. The multidimensional scales advanced by Laanan (1998) have been validated with confirmatory factor analysis (Young & Litzler, 2013) to understand the complex transfer adjustment process better. In an earlier study by Laanan and colleagues (2010), the authors utilized a shorter version of the L-TSQ and applied a trifold theoretical framework: (a) model of student learning and cognitive development, (b) human capital theory, and (c) notion of transfer as student retention in postsecondary education.

More recently, a study by Lopez and Jones (2016) sought to determine academic and social adjustment factors that influenced the success of STEM students. Specifically, the authors investigated factors that predicted academic adjustment and cumulative GPA for community college transfer students in STEM fields. Jackson and Laanan (2014) utilized the L-TSQ and examined the socialization factors that impact the transition and adjustment experiences of community college transfer students in STEM disciplines. Moser (2012, 2013) re-examined the L-TSQ and advanced new constructs to understand transfer student capital better.

Administrative data sets. A growing research design is the use of administrative data sets maintained either at the institution or at the statewide level to study transfer. Dietrich and Lichtenberger (2015) utilized data from the Illinois high school graduating class of 2003. With the use of propensity score matching techniques, the authors tested the community college penalty assumption. Bahr (2012) conducted an event history analysis to investigate lateral transfer based on data from the Chancellor's Office of the California Community Colleges (COCCCs) from Fall 2002 to Summer 2009. In another study, Bahr (2009) explored the occurrence and frequency of lateral transfer in California and its effect on students' completion of a credential. Finally, with the use of cluster analysis, Bahr (2010) developed a typology of community college students in California and identified six

clusters of behaviors: transfer, vocational, drop-in, noncredit, experimental, and exploratory.

Combining survey and student records. Recent studies have utilized both survey and student records to measure and evaluate the success of transfer students. Gaalswyk (2014) conducted a study connecting academic records and data from the L-TSQ of over 600 transfer students. Specifically, Gaalswyk (2014) sought to investigate differences between transfer students choosing STEM and non-STEM related majors, to provide insight into the switching between non-STEM and STEM majors, and to examine academic adjustment.

Qualitative Approaches. Scholars have also studied transfer with the use of qualitative approaches to explore transfer students' lives from an experiential perspective and to understand the lived experiences of students in order to illuminate the nuanced and intersectional nature of their college life (see Vasquez Urias, Falcon, Harris, and Wood, Chapter 2, as an example). Moreover, qualitative researchers are interested in an in-depth scope of a study, instead of making generalizations to a larger population. Thus, they aim to provide a thorough account of a particular community or phenomena (Maxwell, 1996). Although qualitative research can add a textured and rich description to community college studies, it is often underutilized by the higher education researcher community (Howe & Eisenhart, 1990).

With the use of critical race theory (CRT) as a theoretical perspective, Jain (2010) examined women leaders of color and perceptions of transfer. A few years later, Jain et al. (2011) advanced a framework of a "transfer receptive culture" (TRC) and proposed five elements that examine transfer from a 4-year perspective concentrating on pre- and posttransfer efforts led by the baccalaureate-granting institution. Ellis (2013) also explored perceptions of students who successfully transferred to the University of Texas system by conducting focus groups with 68 individuals. The importance of effective and meaningful collaboration was a recommendation to improve the transfer process.

A topic that has received attention is the experience of students in the STEM pathway or in STEM disciplines at the 4-year institution (Starobin, Smith, & Laanan, 2016). Allen and Zhang (2016) examined motivations and learning experiences of adult learners in STEM disciplines. Jackson (2013) explored the impact of support systems on the experiences of female community college transfer students in STEM majors. Packard and Jeffers (2013) utilized phenomenology to understand advising and progress in the community college STEM transfer pathway.

Other studies explored students' experiences in community colleges prior to transferring to a 4-year institution (Zhang & Ozuna, 2015). A study by Wilson (2014) utilized Padilla's model of minority student success and components of Yosso's (2005) community and cultural wealth model to explore the experiences of African American community college students at a research university. Dowd, Pak, and Bensimon (2013) utilized a life history