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INDIANA'S TEACHER EVALUATION SYSTEM: A FOUR-YEAR ANALYSIS
PRESENTED TO THE INDIANA STATE BOARD OF EDUCATION



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INDIANA TEACHER APPRAISAL SYSTEMS OF SUPPORT (INTASS) STATE BOARD OF EDUCATION RESEARCH REPORT FOR TEACHER EVALUATION PLAN IMPLEMENTATION 2012-13 THROUGH 2015-16

- REPORT IS ONE OF SEVERAL ON TEACHER EVALUATION IN INDIANA SUPPORTED BY THE INDIANA STATE BOARD OF EDUCATION AND THE JOYCE FOUNDATION
- RESEARCH DESIGN EMPLOYED A MULTI-YEAR APPROACH WITH A DATA SET INCLUDING MORE THAN 2,352,964+ STUDENT RECORDS/199,588+ EDUCATOR RECORDS
- DATA SET INCLUDES INDIVIDUAL EDUCATOR AND STUDENT ATTRIBUTES, DISTRICT, SCHOOL, CLASSROOM DEMOGRAPHICS, TEACHER EVALUATION PLAN QUALITY, TEACHER EVALUATION RATINGS AND STUDENT OUTCOMES
- RESEARCH DESIGN INCLUDES MULTIPLE MODELS AND STATISTICAL ANALYSES TO ADDRESS RESEARCH QUESTIONS CONCERNING TEACHER RATINGS, STUDENT OUTCOMES WITH PLAN QUALITY, CLASSROOM, SCHOOL, AND DISTRICTS, AND STUDENT AND EDUCATOR DEMOGRAPHIC VARIABLES

CONTEXT: ACCOUNTABILITY ENVIRONMENT 2012-2016

- SENATE BILL 1 CHANGED EXPECTATIONS FOR EDUCATOR EVALUATION
- CHANGES IN ASSESSMENT, STANDARDS AND ACCOUNTABILITY
- PERVASIVE ISSUES WITH ASSESSMENT ADMINISTRATION
- INCONSISTENCY IN:
 - ✓ TEACHER EVALUATION POLICY & GUIDANCE INTERPRETATION
 - ✓ DEVELOPMENT AND IMPLEMENTATION OF TEACHER EVALUATION PLANS

RESEARCH MODEL COMPONENTS

- DISTRICT, SCHOOL, EDUCATOR, AND STUDENT DEMOGRAPHICS, STUDENT DAYS ATTENDANCE, YEARS OF PLAN IMPLEMENTATION
- STUDENT AND EDUCATOR OUTCOME MEASURES RANGING FROM STUDENT SCALE SCORES, STUDENT PROFICIENCY LEVELS, STUDENT GROWTH PERCENTILES AND BOTH EDUCATOR IGM AND SUMMATIVE RATINGS
- STATE, DISTRICT, CLASSROOM, EDUCATOR, AND STUDENT LEVEL ANALYSES

LEVELS OF SIGNIFICANCE

THE MULTIPLE MODELS AND ANALYSES OFTEN PROVIDED FINDINGS THAT DIFFERED IN CONSISTENCY AND SIGNIFICANCE. THE FOLLOWING SCALE WAS USED TO INTERPRET THE “COLLECTIVE” SIGNIFICANCE * OF SPECIFIC VARIABLES WITH STUDENT AND TEACHER OUTCOMES**:

- ✓ NONE: SIGNIFICANT IN NONE OF THE SPECIFICATIONS & YEARS
- ✓ WEAK: SIGNIFICANT IN 25% OR LESS OF THE SPECIFICATIONS & YEARS
- ✓ MEDIUM: SIGNIFICANT IN 75% OR LESS OF THE SPECIFICATIONS & YEARS
- ✓ STRONG: SIGNIFICANT IN OVER 75% OF THE SPECIFICATIONS & YEARS

*WEAK & MIXED RESULTS WERE NOT FELT TO ALLOW DISCERNIBLE PATTERNS OF SIGNIFICANCE

**1) STUDENT OUTCOMES REFER TO METRICS DERIVED FROM STUDENT ISTEP PERFORMANCE AND 2) TEACHER OUTCOMES REFER TO IGM AND/OR SUMMATIVE RATINGS.

STUDENT DEMOGRAPHICS, STUDENT OUTCOMES AND TEACHER EVALUATION RATINGS

- THERE IS A NEGATIVE RELATIONSHIP BETWEEN STUDENT FREE AND REDUCED LUNCH STATUS, RACIAL/ETHNIC MINORITY GROUP MEMBERSHIP, AND STUDENT OR TEACHER OUTCOMES.
- THERE IS A POSITIVE RELATIONSHIP BETWEEN STUDENT ATTENDANCE AND STUDENT OR TEACHER OUTCOMES.
- HAVING AN IEP IS NEGATIVELY ASSOCIATED WITH ISTEP SCORES AND SUMMATIVE RATINGS.
- THERE IS A NEGATIVE RELATIONSHIP BETWEEN LIMITED ENGLISH PROFICIENT AND ISTEP SCORES BUT A POSITIVE RELATIONSHIP WITH ISTEP GROWTH.
- THERE IS NOT A DISCERNIBLE RELATIONSHIP BETWEEN DISTRICT GROWTH WEIGHT, STUDENT DEMOGRAPHICS AND STUDENT OR TEACHER OUTCOMES.

TEACHER DEMOGRAPHICS, STUDENT OUTCOMES AND TEACHER EVALUATION RATINGS

- THERE IS NO RELATIONSHIP BETWEEN TEACHER RACE/ETHNICITY AND STUDENT OR TEACHER OUTCOMES.
- THERE ARE POSITIVE RELATIONSHIPS BETWEEN TEACHER SALARY, STUDENT PRIOR ISTEP SCORES AND ATTENDANCE WITH STUDENT AND TEACHER OUTCOMES.
- TEACHER YEARS OF EXPERIENCE HAVE DIFFERENT RELATIONSHIPS WITH STUDENT AND TEACHER OUTCOMES.
- TEACHER GENDER, GRADE ASSIGNMENTS HAVE DIFFERENT RELATIONSHIP WITH STUDENT AND TEACHER OUTCOMES.
- THERE IS NO DISCERNIBLE RELATIONSHIP WITH DISTRICT GROWTH WEIGHT, TEACHER DEMOGRAPHICS AND STUDENT OR TEACHER OUTCOMES.

DISTRICT DEMOGRAPHICS, STUDENT OUTCOMES AND TEACHER EVALUATION

- THERE IS NO DISCERNIBLE RELATIONSHIP WITH DISTRICT GROWTH WEIGHT, DISTRICT DEMOGRAPHICS, AND STUDENT OR TEACHER OUTCOMES
- THERE IS A STRONG RELATIONSHIP BETWEEN DISTRICT STUDENT OUTCOMES INCLUDING PRIOR YEAR ISTEP SCORES AND TEACHER OUTCOMES
- THERE IS A RELATIONSHIP BETWEEN DISTRICT FREE AND REDUCED LUNCH, IGM RATINGS AND SUMMATIVE RATINGS

PRINCIPAL CHARACTERISTICS, STUDENT OUTCOMES AND TEACHER EVALUATION RATINGS

- PRINCIPALS RATED EFFECTIVE RATE THEIR TEACHERS LOWER THAN PRINCIPALS RATED HIGHLY EFFECTIVE
- PRINCIPALS RATED NEEDS IMPROVEMENT RATE THEIR TEACHERS LOWER THAN PRINCIPALS RATED HIGHLY EFFECTIVE
- PRINCIPALS RATED INEFFECTIVE RATE THEIR TEACHERS LOWER THAN PRINCIPALS RATED HIGHLY EFFECTIVE
- THERE IS NO DISCERNIBLE RELATIONSHIP WITH DISTRICT GROWTH WEIGHT AND STUDENT OR TEACHER OUTCOMES
- PRINCIPAL GENDER, ETHNICITY OR EXPERIENCE HAVE NO SIGNIFICANT RELATIONSHIP WITH TEACHER RATINGS

CLASSROOM COMPOSITION AND STUDENT AND TEACHER OUTCOMES

COMPARING FOURTH AND FIFTH GRADE CLASSROOMS WITH HIGH FREE AND REDUCED LUNCH VERSUS LOW FREE AND REDUCED LUNCH SHOWS:

- ✓ THERE IS A STRONG RELATIONSHIP WITH THE PROPORTION OF STUDENTS ON FREE AND REDUCED LUNCH IN A CLASSROOM AND STUDENT AND TEACHER OUTCOMES.
- ✓ TEACHERS IN CLASSROOMS WITH HIGHER PERCENTAGES OF STUDENTS ON FREE AND REDUCED LUNCH HAVE LOWER IGM AND SUMMATIVE RATINGS.

CLASSROOM COMPOSITION AND STUDENT PERFORMANCE

- **FOURTH AND FIFTH GRADE CLASSROOMS FREE AND REDUCED LUNCH DISTRIBUTION DECILE COMPARISONS**
 - ✓ SEPARATING THE DISTRIBUTION OF FOURTH AND FIFTH GRADE CLASSROOMS BY DECILES SHOWS THERE ARE “BREAK” POINTS IN CLASSROOM COMPOSITION WHERE IDENTIFIABLE DIFFERENCES IN STUDENT PERFORMANCE ARE ASSOCIATED WITH PERCENTAGES OF STUDENTS ON FREE AND REDUCED LUNCH.
- **DECILE COMPARISONS OF CLASSROOMS BY % OF FREE AND REDUCED LUNCH:**
 - ✓ DECILE COMPARISONS SHOW DISTINCT DIFFERENCES BETWEEN CLASSROOMS BASED ON PERCENT OF STUDENTS ON FREE AND REDUCED LUNCH.
 - ✓ THERE IS A POINT BEYOND WHICH INCREASING FRL HAS NO CORRESPONDING DECREASE IN STUDENT OUTCOMES- TYPICALLY AROUND THE 7TH DECILE OR 65%.
 - ✓ CLASSROOMS IN THE SECOND DECILE (18% - 28.5% FRL) HAVE STATISTICALLY LOWER IGM SCORES THAN CLASSROOMS IN THE FIRST DECILE (0% - 18%).
 - ✓ CLASSROOMS WITH 65% OR MORE OF STUDENTS ON FREE AND REDUCED LUNCH SHOW NO STATISTICALLY SIGNIFICANT DIFFERENCES.
 - ✓ THIS SUGGESTS THERE MAY BE IMMEDIATE DETECTABLE EFFECTS ON IGM SCORES ARISING FROM LOW SES STUDENTS PRESENCE IN A CLASSROOM, BUT THE EFFECT OF ADDITIONAL LOW SES STUDENTS TAPERS OFF AS THE PROPORTION GROWS.

IGM RATINGS AND SUMMATIVE RATINGS

	2013 Percent of Teachers	2014 Percent of Teachers	2015*Percent of teachers
Summative rating of Effective with an IGM ratings of Ineffective	13%	11%	12%
Summative rating of HE with an IGM ratings of Ineffective	5%	4%	6%
Summative rating of Effective with an IGM rating of Needs Improvement	29%	33%	33%
Summative rating of HE with an IGM rating of Needs Improvement	19%	16%	23%

PLAN QUALITY, PLAN COMPONENTS, STUDENT OUTCOMES AND TEACHER RATINGS

- THE SIX DISTRICTS RECOGNIZED FOR THEIR PLAN QUALITY ALSO HAD BETTER STUDENT GROWTH
- THERE IS A MEDIUM TO STRONG RELATIONSHIP BETWEEN PLAN QUALITY AND TEACHER SUMMATIVE RATINGS FOR DISTRICTS.
- THERE IS A STRONG RELATIONSHIP BETWEEN PRIOR YEAR STUDENT ISTEP SCORES AND TEACHER RATINGS FOR DISTRICTS.

TEACHER MOBILITY AND EVALUATION RATINGS

- THERE IS NO RELATIONSHIP BETWEEN TEACHER MOBILITY AND WHETHER OR NOT TEACHERS ARE IN AN ACCOUNTABILITY GRADE OR SUBJECT AREA.
- TEACHERS TEND TO MOVE FROM DISTRICTS WITH HIGH PERCENTAGES OF STUDENTS ON FREE AND REDUCED LUNCH TO DISTRICTS WITH LOWER PERCENTAGES OF STUDENTS ON FREE AND REDUCED LUNCH.
- THERE IS NOT AN ASSOCIATION WITH TEACHER MOBILITY FROM DISTRICTS WITH HIGHER PERCENTAGES OF STUDENTS ON FREE AND REDUCED LUNCH TO DISTRICTS WITH LOWER PERCENTAGES OF STUDENT ON FREE AND REDUCED LUNCH AND CHANGES IN IGM RATINGS.
- THERE IS A RELATIONSHIP BETWEEN MOVEMENT FROM DISTRICTS WITH HIGH PERCENTAGES OF STUDENTS ON FREE AND REDUCED LUNCH TO DISTRICTS WITH LOWER PERCENTAGES OF STUDENTS ON FREE AND REDUCED LUNCH AND SUMMATIVE TEACHER EVALUATION RATINGS.
- MORE EXPERIENCED TEACHERS ARE LESS LIKELY TO MOVE DISTRICTS.

RECOMMENDATIONS MANAGEMENT & IMPLEMENTATION

- ENSURE DATA INTEGRITY IN ORDER FOR VALID RESEARCH-BASED DECISION MAKING FOR POLICY AND GUIDANCE.
- ENSURE EXPLICIT GUIDANCE ON ASSIGNING STUDENTS TO TEACHERS FOR ACCOUNTABILITY AND INCLUDE THIS IN THE MONITORING PROCESS.
- ENSURE VENDOR MANAGEMENT AND COMPETENCE WITH IMPACTFUL PENALTIES ENFORCED FOR LACK OF PERFORMANCE.
- ESTABLISH AN EFFECTIVE MONITORING SYSTEM THAT INCLUDES AN ANALYSIS OF TEACHER EVALUATION RATINGS AND STUDENT OUTCOMES TO INFORM STATE SUPPORT FOR TEACHER DEVELOPMENT.

RECOMMENDATIONS

GROWTH MODEL

- REVIEW THE CURRENT GROWTH MODEL TO ENSURE THAT STUDENT CHARACTERISTICS ARE EFFECTIVELY ACCOUNTED FOR WHILE MAINTAINING HIGH EXPECTATIONS FOR ALL STUDENTS.
- CONSIDER EXPLORING A TEACHER EVALUATION GROWTH MODEL THAT LOOKS AT LIKE CLASSROOM COMPARISONS AS THE BASIS FOR THE IGM RATING.
- CONSIDER EXPLORING A TEACHER EVALUATION CLASSROOM GROWTH MODEL THAT LOOKS AT GROWTH BASED UPON A CLASSROOM METRIC OTHER THAN STUDENT GROWTH PERCENTILES.

RECOMMENDATIONS

TECHNICAL SUPPORT FOR PLAN DEVELOPMENT AND IMPLEMENTATION

- PROVIDE ONGOING TRAINING AND SUPPORT TO ENSURE INTER- RATER CONSISTENCY IN THE TEACHER EVALUATION PROCESS.
- ELEVATE PRINCIPAL AND SUPERINTENDENT EVALUATION QUALITY ASSURANCE TO THE SAME LEVEL OF IMPORTANCE AS TEACHER EVALUATION.
- ESTABLISH A SET OF CRITERIA BASED UPON RESEARCH FINDINGS TO EVALUATE PLAN DEVELOPMENT AND PLAN IMPLEMENTATION.
- ESTABLISH INCENTIVES FOR DISTRICTS TO ENGAGE IN A TEACHER EVALUATION PROCESS THAT FOCUSES ON TEACHER DEVELOPMENT THROUGH PROFESSIONAL DEVELOPMENT.
- ESTABLISH A PROCESS TO ENSURE THAT TEACHERS ARE INVOLVED IN TEACHER EVALUATION AS A COLLABORATIVE PROCESS.
- CONSIDER ESTABLISHING STATE PROVIDED INCENTIVES FOR TEACHERS TO ACCEPT TEACHING ASSIGNMENTS IN DISTRICTS AND CLASSROOMS WITH HIGH PERCENTAGES OF STUDENTS ON FREE AND REDUCED LUNCH.
- PROVIDE STATE SUPPORT FOR PROFESSIONAL DEVELOPMENT IN CULTURALLY RESPONSIVE INSTRUCTION.

FUTURE RESEARCH AGENDA

- CONDUCT MORE COMPREHENSIVE RESEARCH ON THE RELATIONSHIP BETWEEN HIGH QUALITY PLAN IMPLEMENTATION, TEACHER EVALUATION EXPERIENCES AND STUDENT OUTCOMES.
- ENGAGE IN QUALITATIVE RESEARCH TO DOCUMENT AND INCORPORATE EDUCATOR EXPERIENCES INTO THE ANALYSIS OF TEACHER EVALUATION PROCESSES AND OUTCOMES.
- EVALUATE THE EFFECTIVENESS OF TECHNICAL ASSISTANCE AND SUPPORT ON THE TEACHER EVALUATION PROCESS IN INDIANA.
- CONDUCT RESEARCH ON THE INTER-RELATIONSHIPS OF CLASSROOM, SCHOOL AND DISTRICT CHARACTERISTICS ON TEACHER EVALUATION AND STUDENT OUTCOMES.
- CONDUCT RESEARCH ON SCHOOL AND DISTRICT RESOURCES AND SUPPORTS ON TEACHER EVALUATION AND STUDENT OUTCOMES.
- CONDUCT RESEARCH ON THE DIFFERENTIAL IMPACT OF TEACHER EVALUATION ON IGM VS. NON-IGM TEACHERS.
- PROVIDE FUNDS FOR DISTRICTS TO ENGAGE IN A STATE SUPPORTED PILOT PROJECT TO REVISE AND IMPROVE THE TEACHER EVALUATION PROCESS.

A MULTI-DISCIPLINARY RESEARCH TEAM

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QUESTIONS?