

# USING MULTIPLE MEASURES TO INFORM STUDENT PLACEMENT:

Models for Consideration

# OHIO REMEDIATION-FREE STANDARDS

Section 3345.061 (F) Not later than December 31, 2012, the presidents, or equivalent position, of all state institutions of higher education, or their designees, jointly shall establish uniform statewide standards in mathematics, science, reading, and writing each student enrolled in a state institution of higher education must meet to be considered in remediation-free status. The presidents also shall establish assessments, if they deem necessary, to determine if a student meets the standards adopted under this division. Each institution is responsible for assessing the needs of its enrolled students in the manner adopted by the presidents. The board of trustees or managing authority of each state institution of higher education shall adopt the remediation-free status standards, and any related assessments, into the institution's policies. The chancellor shall assist in coordinating the work of the presidents under this division.

# WHAT THIS MEANS “SIMPLIFIED”

- A student deemed “remediation free” in a subject will be eligible to enroll in a college credit-bearing course in that subject, including College Credit Plus (CCP).
- Law went into effect Summer term 2013

# COLLEGE READINESS INDICATORS

- Assessment thresholds to **guarantee** “remediation free” status at any public post-secondary institution in Ohio
- If a student can credibly demonstrate proficiency in the following standards, then they receive a remediation-free guarantee
- [https://www.ohiohighered.org/sites/ohiohighered.org/files/uploads/data/reports/hs-to-college/2012\\_UNIFORM\\_STATEWIDE\\_REMEDIATION\\_FREE\\_STANDARDS%28010913%29.pdf](https://www.ohiohighered.org/sites/ohiohighered.org/files/uploads/data/reports/hs-to-college/2012_UNIFORM_STATEWIDE_REMEDIATION_FREE_STANDARDS%28010913%29.pdf)

# CAO CHARGE TO THE PANEL

1. identify existing models and practices of Multiple Measures Evaluation for Student Placement into courses and academic programs
2. evaluate the effectiveness of the identified models and practices, including outcomes of students placed through the practices
3. identify a core set of measures from which the most effective Multiple Measures Evaluation for Student Placement are derived
4. recommend an array of effective models of Multiple Measures Evaluation for Student Placement to the OACC CAOs for implementation **at each institution's discretion**

# FOUR PRINCIPLES TO GUIDE RECOMMENDATIONS

## -One-

A combination of measures should be considered in determining student placement and support only for students with standardized assessment outcomes **below** the established thresholds in Ohio's Statewide Uniform Remediation-Free Standards

**-Two-**

It is **strongly recommended** that institutional Multiple Measures Practices include high school transcript and high school grade point average (GPA) if the data are available within the recommended shelf life for the measure.

**-Three-**

Multiple Measures Practices should evaluate **student readiness for success in credit-bearing courses** as well as their potential need for co-requisite support.



## FOUR PRINCIPLES CONTINUED

### **-Four-**

Institutions and specific programs within the institution should assure students a minimum period of time for which a particular measure will be accepted (shelf life).

# FIVE CATEGORIES

**Academic History:** Transcripts, GPA, etc...

**Contextual Factors:** Characteristics that contribute to effectiveness – such as socio-economic factors (SES)

**Diagnostic Tests:** ACT, SAT, COMPASS, ACCUPLACER, etc...

**Dispositional Factors:** Behaviors a student can control, such as motivation, attendance, etc...

**Experience Factors:** Skills gained through employment, military service, etc...

| Category         | Measure  | Suggested Minimum Shelf Life Guarantee; could vary by program | Minimum Raw Score (A) | Maximum Raw Score (B) | Multiplier/ Weighted (X) | Maximum Measure Score |
|------------------|--|---|-----------------------|-----------------------|--------------------------|-----------------------|
| Academic History | Content-Specific High School Courses                             | 3.5 calendar years  | A*                    | B*                    | B * X = 100.00           | 100.00                |
| Academic History | High School Grade Point Average, Unweighted                      | 3.5 calendar years  | 1.0                   | 4.0                   | 25.00                    | 100.00                |
| Academic History | High School Transcript Analysis Score, including Course Analysis | 3.5 calendar years  | A*                    | B*                    | B * X = 100.00           | 100.00                |
| Academic History | Previous College Coursework                                      | 3.5 calendar years  | A*                    | B*                    | B * X = 100.00           | 100.00                |
| Academic History | Undergraduate Grade Point Average                                | 3.5 calendar years  | 1.0                   | 4.0                   | 25.00                    | 100.00                |
| Academic History | School Counselor/High School Teacher Recommendations             | 3.5 calendar years  | A*                    | B*                    | B * X = 100.00           | 100.00                |

**\*To Be Determined by Institution**

| Category          | Measure   | Suggested Minimum Shelf Life Guarantee; could vary by program | Minimum Raw Score (A) | Maximum Raw Score (B) | Multiplier/Weighted (X) | Maximum Measure Score |
|-------------------|---|---|-----------------------|-----------------------|-------------------------|-----------------------|
| Contextual Factor | Education and Career Goals                                      | 1.5 calendar years  | A*                    | B*                    | B * X = 100.00          | 100.00                |
| Contextual Factor | Family College History, e.g. First Generation Student           | No Limit  | A*                    | B*                    | B * X = 100.00          | 100.00                |
| Contextual Factor | Declared or Assessed Disability                                 | No Limit  | A*                    | B*                    | B * X = 100.00          | 100.00                |
| Contextual Factor | Family Obligations, Socioeconomic Status, e.g. Pell eligibility | 1.0 calendar years  | A*                    | B*                    | B * X = 100.00          | 100.00                |
| Contextual Factor | Planned Course load and Planned Major                           | 1.0 calendar years  | A*                    | B*                    | B * X = 100.00          | 100.00                |
| Contextual Factor | Planned Employment Hours Per Week                               | 1.0 calendar years  | A*                    | B*                    | B * X = 100.00          | 100.00                |
| Contextual Factor | Years Since Actively Enrolled in High School or College         | 3.0 calendar years  | A*                    | B*                    | B * X = 100.00          | 100.00                |

**\*To Be Determined by Institution**

| Category        | Measure  | Suggested Minimum Shelf Life Guarantee; could vary by program | Minimum Raw Score (A) | Maximum Raw Score (B) | Multiplier/Weighted (X) | Maximum Measure Score |
|-----------------|--|---|-----------------------|-----------------------|-------------------------|-----------------------|
| Diagnostic Test | English Language Attainment for non-native speaker         | No Limit  | A*                    | B*                    | $B * X = 100.00$        | 100.00                |
| Diagnostic Test | Institutional Instrument, e.g. Writing Sample              | 2.0 calendar years  | A*                    | B*                    | $B * X = 100.00$        | 100.00                |
| Diagnostic Test | Skill-specific assessment, e.g. Accuplacer, Writing Sample | 2.5 calendar years  | A*                    | B*                    | $B * X = 100.00$        | 100.00                |

**\*To Be Determined by Institution**

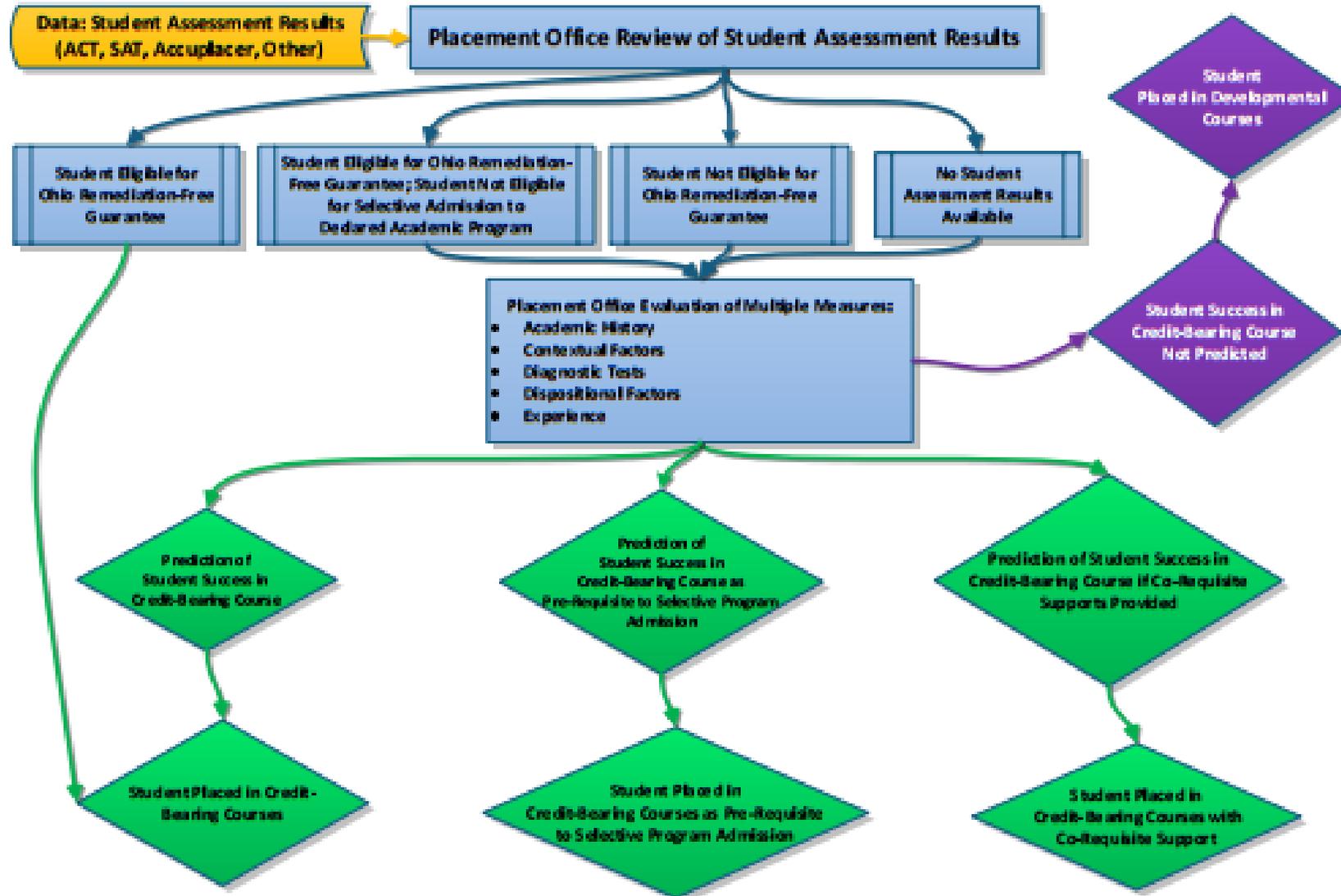
| Category             | Measure  | Suggested Minimum Shelf Life Guarantee; could vary by program | Minimum Raw Score (A) | Maximum Raw Score (B) | Multiplier/ Weighted (X) | Maximum Measure Score |
|----------------------|--|---|-----------------------|-----------------------|--------------------------|-----------------------|
| Dispositional Factor | High School Attendance History                   | 4.0 calendar years  | A*                    | B*                    | B * X = 100.00           | 100.00                |
| Dispositional Factor | Motivation to Attain Postsecondary Credential    | 2.0 calendar years  | A*                    | B*                    | B * X = 100.00           | 100.00                |
| Dispositional Factor | Non-Cognitive Assessment, e.g., Grit Assessment  | 3.5 calendar years  | A*                    | B*                    | B * X = 100.00           | 100.00                |
| Dispositional Factor | Personal Interview or Essay                      | 1.0 calendar years  | A*                    | B*                    | B * X = 100.00           | 100.00                |
| Dispositional Factor | Postsecondary Attainment Motivation              | 2.5 calendar years  | A*                    | B*                    | B * X = 100.00           | 100.00                |
| Dispositional Factor | Self-Reported High School Experience and History | 3.0 calendar years  | A*                    | B*                    | B * X = 100.00           | 100.00                |

**\*To Be Determined by Institution**

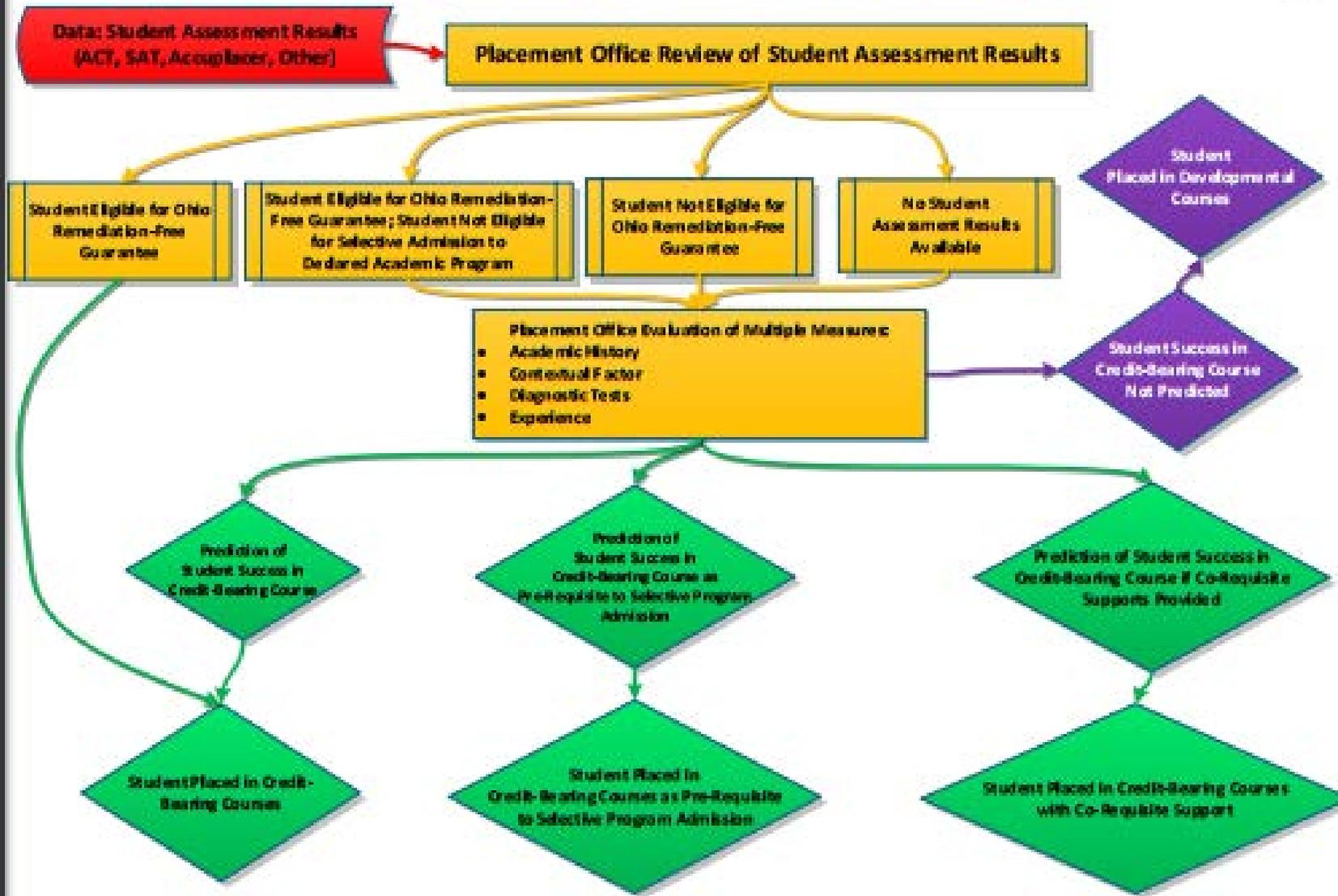
| Category          | Measure   | Suggested Minimum Shelf Life Guarantee; could vary by program | Minimum Raw Score (A) | Maximum Raw Score (B) | Multiplier/ Weighted (X) | Maximum Measure Score |
|-------------------|---|---|-----------------------|-----------------------|--------------------------|-----------------------|
| Experience Factor | Experience: Employment, Military Service, Community Service | 3.0. Calendar Years   | A*                    | B*                    | B * X = 100.00           | 100.00                |

**\*To Be Determined by Institution**

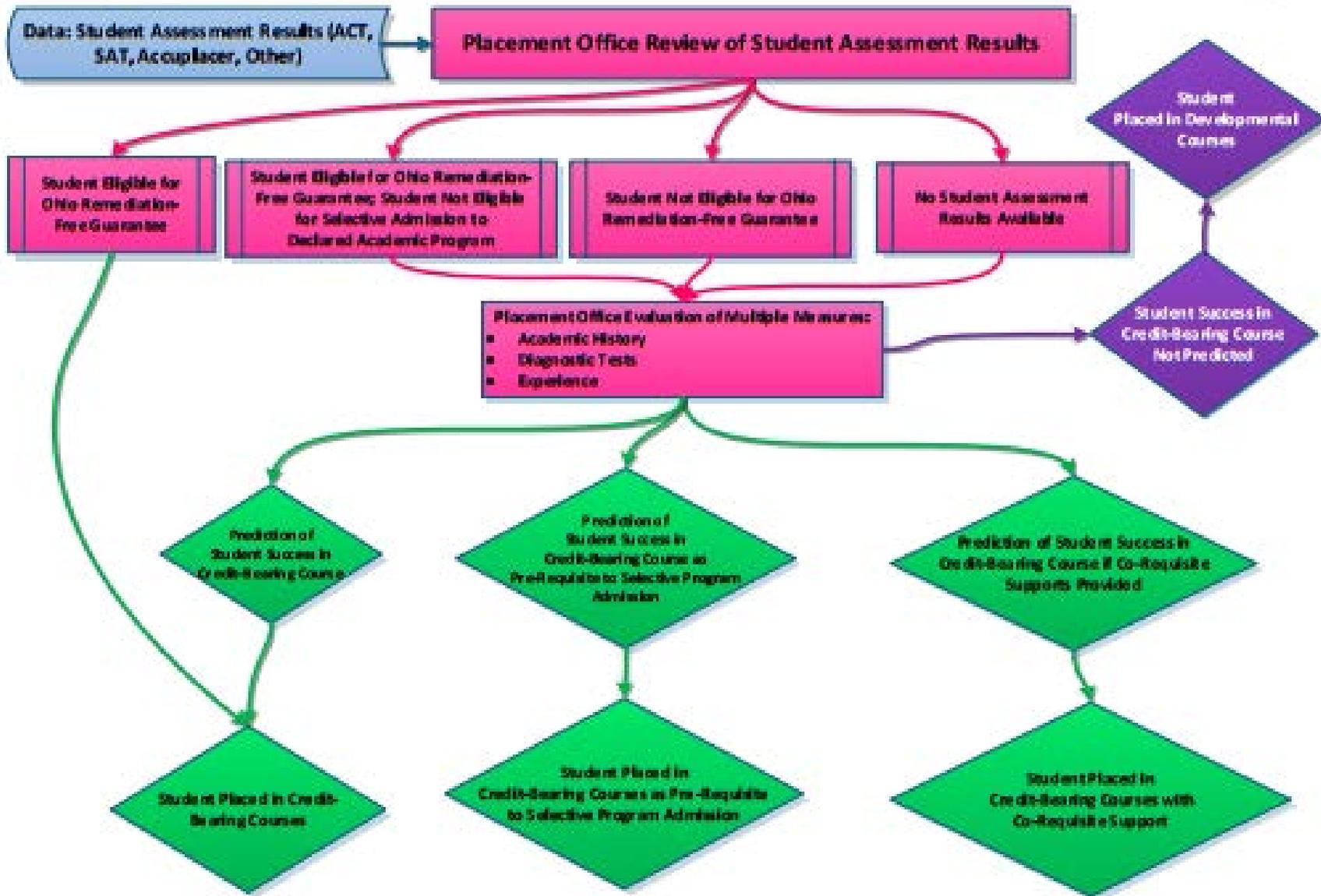
## Ohio Community College Student Placement Process – Model A



## Ohio Community College Student Placement Process – Model B

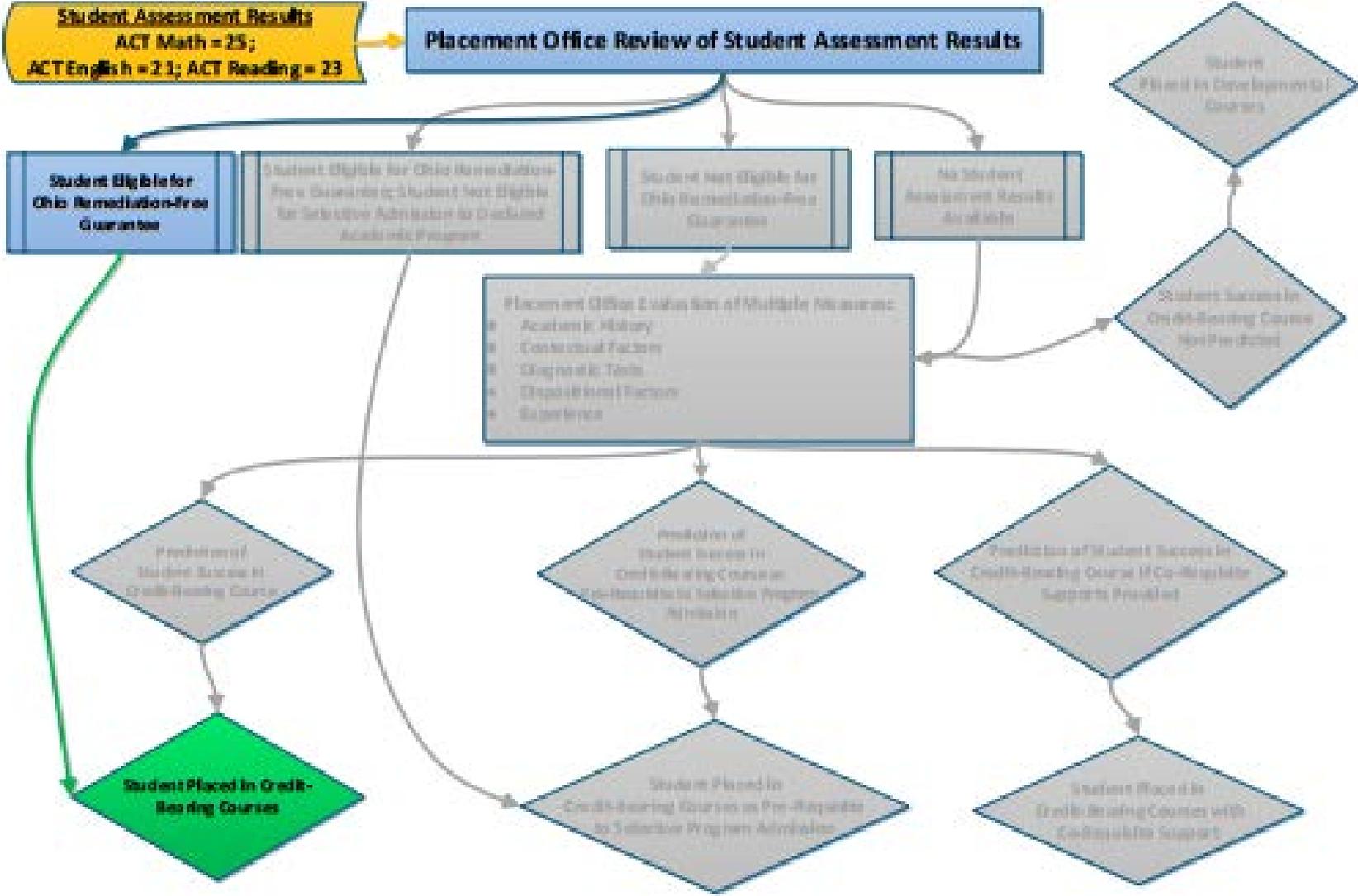


## Ohio Community College Student Placement Process – Model C

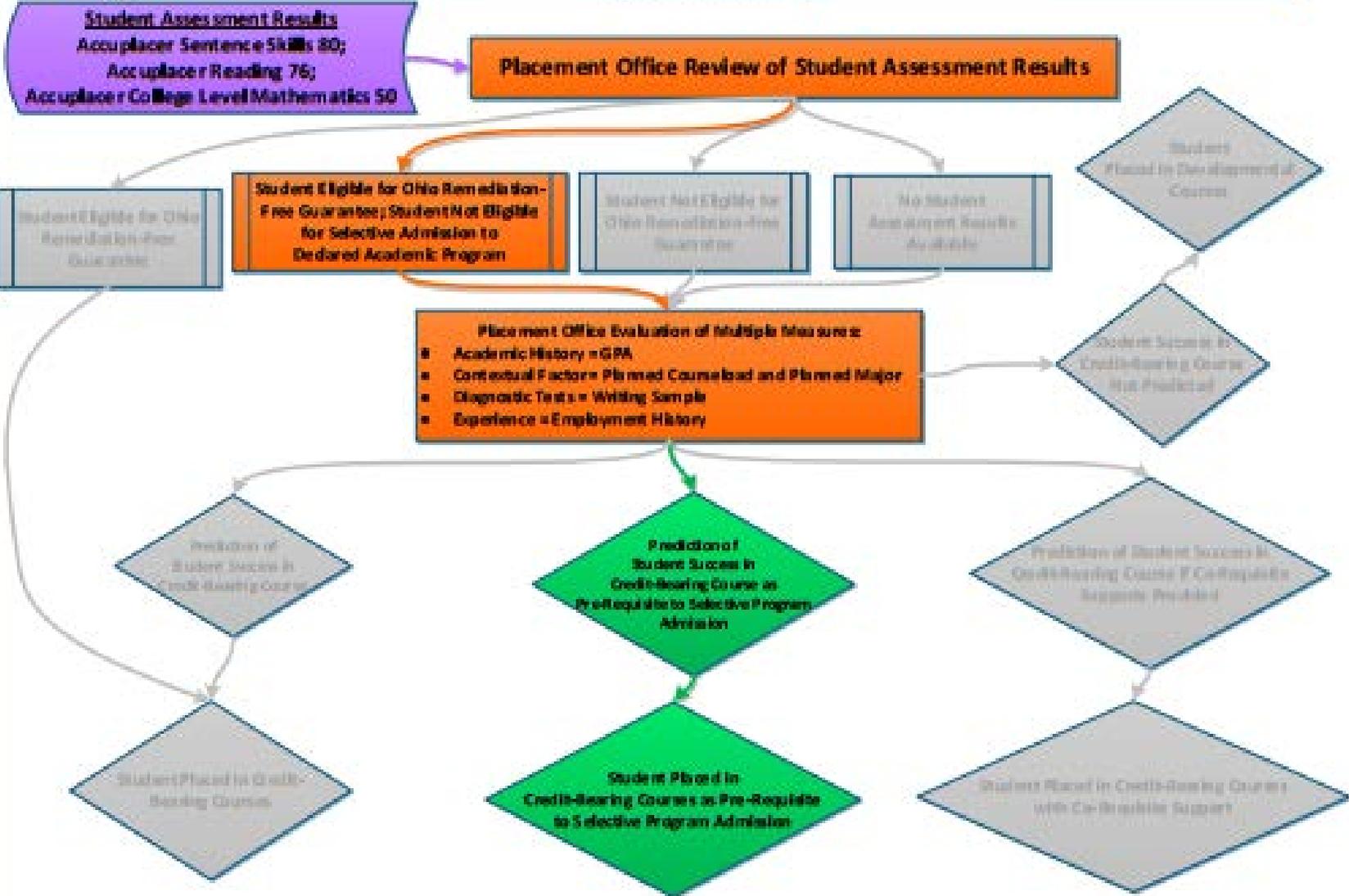


Abraham Lincoln Community College Student Placement Process

Student: Ruby Dee



**James A. Garfield Community College's Student Placement Process**  
**Student: Drew Carey**



Warren G. Harding Community College Student Placement Process  
 Student: Katie Holmes

Student Assessment Results  
 ACT Reading 23; ACT English 19;  
 ACT Mathematics 23 (Results from 2004)

Placement Office Review of Student Assessment Results

Student Eligible for Ohio Remediation-Free Guarantee

Student Eligible for Ohio Remediation-Free Guarantee; Student Not Eligible for Selective Admission to Onward Academic Program

Student Not Eligible for Ohio Remediation-Free Guarantee  
 Due to Shelf Life of Results

No Student Assessment Results Available

Placement Office Evaluation of Multiple Measures:  
 • Academic History = Previous College Coursework  
 • Diagnostic Tests = Writing Assessment  
 • Experience = Employment History

Student Placed in Developmental Courses

Student Success in Credit-Bearing Course Not Predicted

Prediction of Student Success in Credit-Bearing Courses

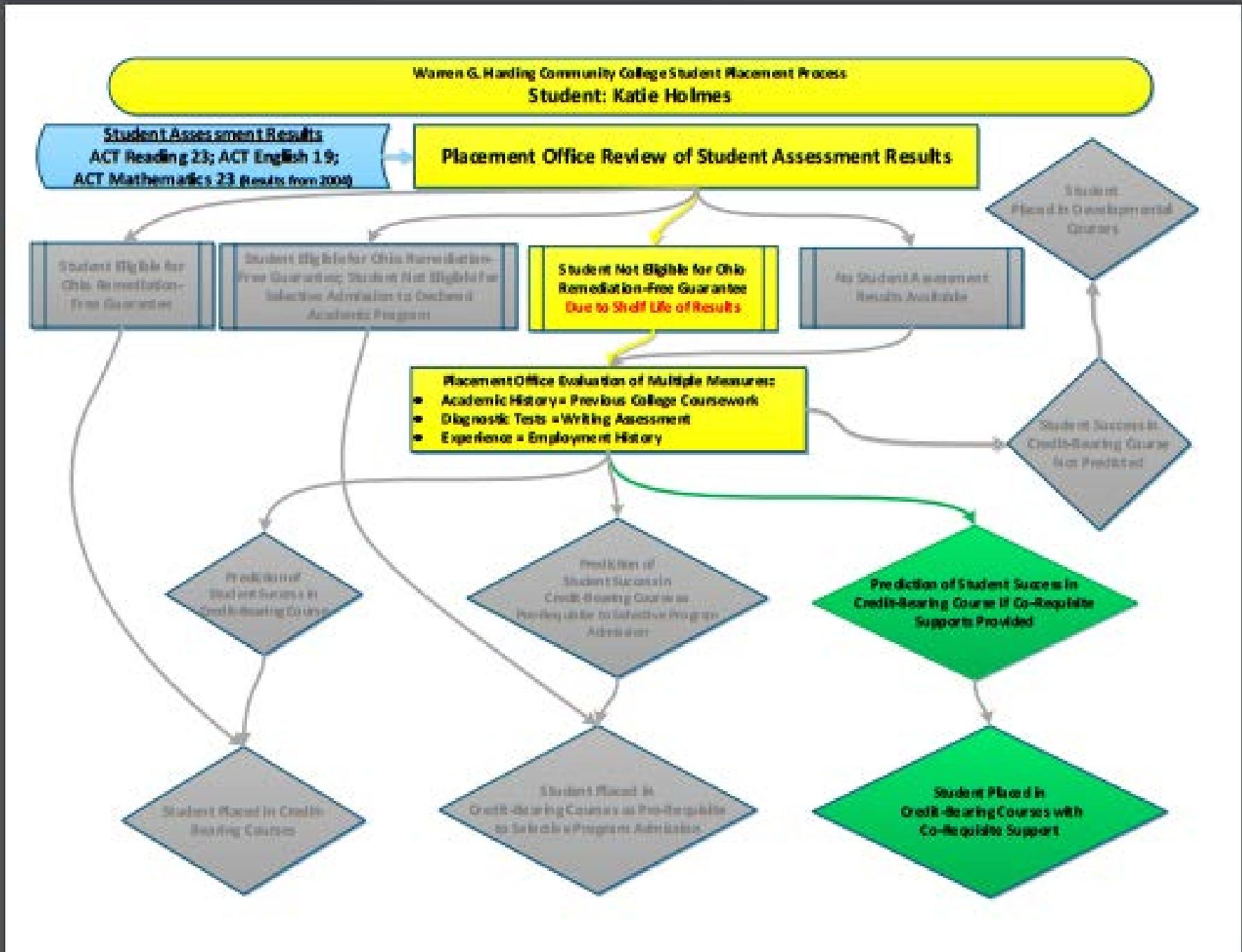
Prediction of Student Success in Credit-Bearing Courses as Permissible for Selective Program Admission

Prediction of Student Success in Credit-Bearing Course if Co-Requisite Supports Provided

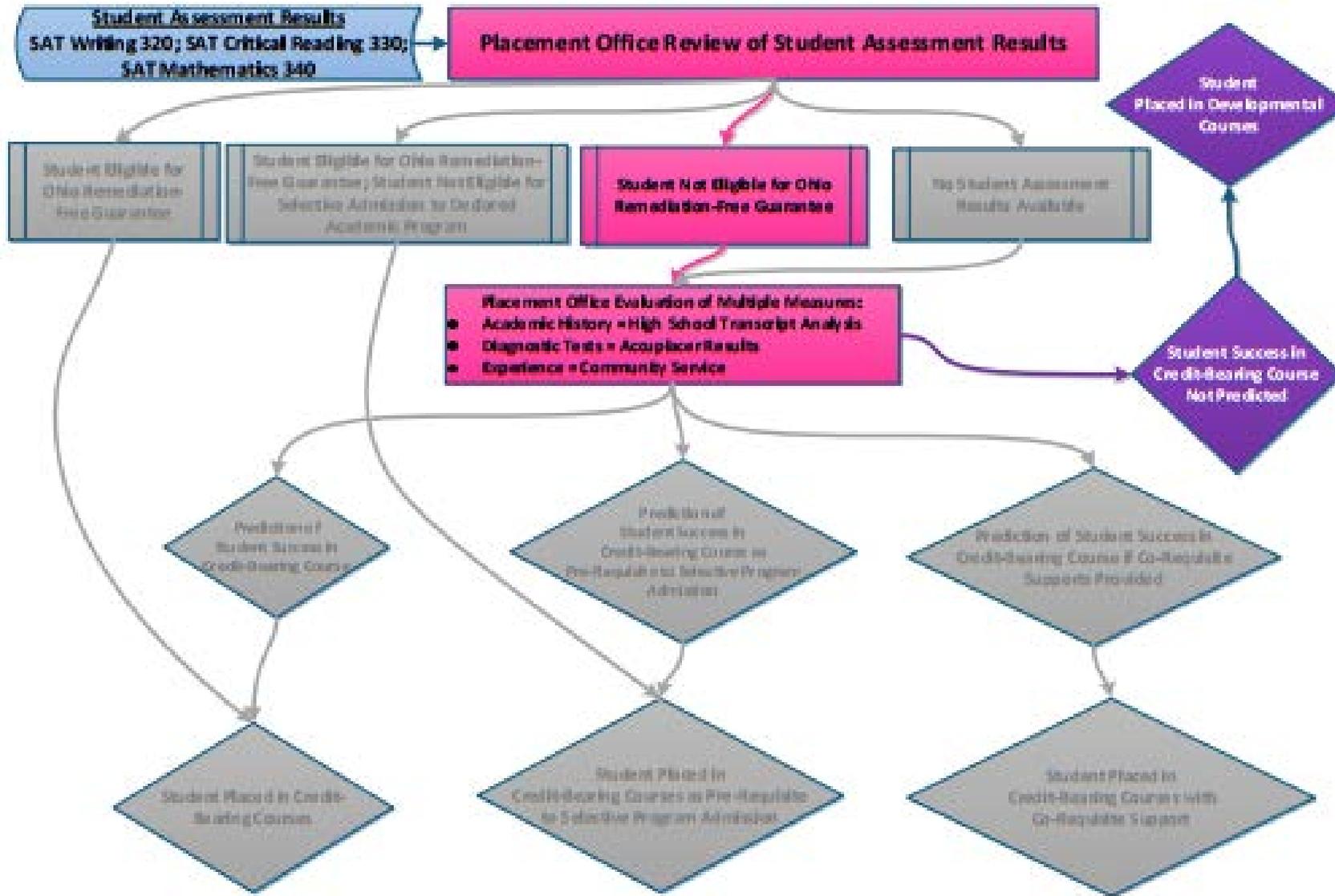
Student Placed in Credit-Bearing Courses

Student Placed in Credit-Bearing Courses as Pre-Requisite to Selective Program Admission

Student Placed in Credit-Bearing Courses with Co-Requisite Support



Thomas Jefferson Community College Student Placement Process  
 Student: Nancy Cartwright



# REFERENCES

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Duffy, M., Schott, A., Beaver, J., & Park E. (2014). Tracing the development of multiple measures for college placement across states and systems: Analysis of three state systems. *Research for Action*. <http://www.researchforaction.org/wp-content/uploads/2016/01/RFA-Gates-Multiple-Measures-Phase-1-March-2014.pdf>

Morrissey, S. & Liston, C. (2012). Reconsidering how to place students enrolling in North Carolina's community colleges. *North Carolina Community College System Office*. <http://www.successnc.org/sites/default/files/initiative-docs/Multiple%20Measures%20Policy%20Brief.pdf>

Ngo, F., Kwon, W. (2015). Using Multiple Measures to Make Math Placement Decisions: Implications for Access and Success in Community Colleges, *Research in Higher Education*, 56, 442-470.

The Research and Planning Group for California Community Colleges (2015). *Multiple measures high school variables model summary – Phase 1*. <https://regroup.org/system/files/MultipleMeasuresAssessmentProjectSpring2015StatusReportFinal2015-0905.pdf>

QUESTIONS, COMMENTS?

