

# Recommendations for Solving the Problem of Tenth-Grade Gifted Students' Low Scores on the Pennsylvania Value- Added Assessment System at Norwin High School in Pennsylvania

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Applied Educational Research  
Remote Oral Presentation  
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# Significance of the Study

- Awareness of the underachieving gifted population's educational needs and characteristics
- Test data incorporation
- Increased teacher interventions

# Introduction

- Study limited to Norwin High School
- Underachievement is prevalent within the school
- Influential to student learning and amplifies into negative consequences

# Problem, Purpose, and Central Research Question

- The problem for this study was tenth-grade gifted students failed to meet annual yearly progress and projected growth on the Pennsylvania Value-Added Assessment System (PVAAS).
- The purpose of this study was to provide recommendations to solve the problem of tenth-grade gifted students' low scores on the PVAAS at Norwin High School in Pennsylvania.
- The central research question was “How can the problem of tenth-grade gifted students' low scores on the PVAAS at Norwin High School in Pennsylvania be solved?”

# Literature Review

Related Literature to Underachievement

1. Historical Significance
2. Pennsylvania Value-Added Assessment System
3. Maslow's Hierarchy of Needs
4. Strategies for Improving Low Test Scores
5. Underachievement Characteristics
6. Student Motivation
  - Traditional vs select consumers
  - Intrinsic and extrinsic motivation
  - Perfectionism
  - Mindsets
  - Personality traits
  - Openness and conscientiousness
7. Teacher Interventions
  - Professional development
  - Monitoring progress
  - Instructional practices

# Procedure Overview

- Multimethod research design
- Qualitative Data Collection- Interviews
- Quantitative Data Analysis- Surveys and Document Analysis

# Participant Breakdown

## Teachers

- Purposeful selection
- Nonprobability
- Direct knowledge
- Direct perceptions
- 15 eligible teachers
- Goal: 93% participation

## Case Managers

- Purposeful selection
- Nonprobability
- Direct knowledge
- Direct perceptions
- 3 eligible managers
- Goal: 100% participation

## Administrators

- Purposeful selection
- Nonprobability
- Direct knowledge
- Direct perceptions
- Communication and opportunity control
- Legitimate power
- 3 eligible administrators
- Goal: 66% participation

## Guidance Counselors

- Purposeful selection
- Nonprobability
- Direct knowledge
- Direct perceptions
- 4 eligible counselor
- Goal: 25% participation

# Data Collection

Interviews	Surveys	Documents
Staff at Norwin High School	Staff at Norwin High School	Public Online Resources
Semi-structured	Structured	Semi-structured
Open-ended	Close-ended (Likert Scale)	Pennsylvania Department of Education
Four tenth-grade core subject teachers; One administrator	10 honors level tenth-grade teachers; Three gifted case managers; A guidance counselor; Two administrators	Archival data from PVAAS
60 minutes	Less than 10 minutes	Five hours
13 questions	16 questions (5 demographic & 11 Likert Scale statements)	Archival data from PVAAS
Screening, consent, and demographics	Screening, consent, and demographics	Screening

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# Data Analysis

Interviews	Surveys	Document Analysis
Norwin High School Faculty and Administrator	Norwin High School Faculty, Gifted Case Managers, and Administrators	Public Online Resources
Face-to-face	Online, asynchronous	Online data retrieval
Transcription	Measuring scoring	Archival data
Coding and categorization	Subscale evaluation	Coding and categorization
Themes, key phrases	Comparative analysis	Themes, patterns, and trends

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## Frequency and Average of Survey Responses

Question	Frequency					Average
	5	4	3	2	1	
1. Teachers are frequently involved in Pennsylvania Value-Added Assessment System (PVAAS) data analysis.	2	2	6	6	0	3.0
2. PVAAS data is applied to plan instruction.	0	5	4	5	2	2.8
3. Professional development is tied to the PVAAS identified weaknesses.	0	4	6	5	1	2.8
4. Professional development is geared to teachers' instructional needs.	0	5	8	1	2	3.0
5. During contracted hours of employment, time is given for collaboration between teachers.	1	1	6	4	4	2.4
6. Continuous administrative support is given to teachers to meet students' educational needs.	1	6	5	3	1	3.2
7. Class size is conducive to individualized learning to meet PVAAS growth.	0	5	8	2	1	3.1
8. Teachers are given ample training on the gifted population.	0	2	2	9	3	2.2
9. Teachers are meeting the needs of the gifted population.	0	6	8	2	0	3.3
10. Teachers identify underachieving gifted students.	0	3	10	3	0	3.0
11. When underachieving gifted students are identified, teachers know how to adapt instruction.	0	3	7	5	1	2.8

# Interview Findings

Note. The average for each question was mathematically calculated by multiplying the corresponding Likert scale value by each participant's

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# Interview Findings: Themes and Codes

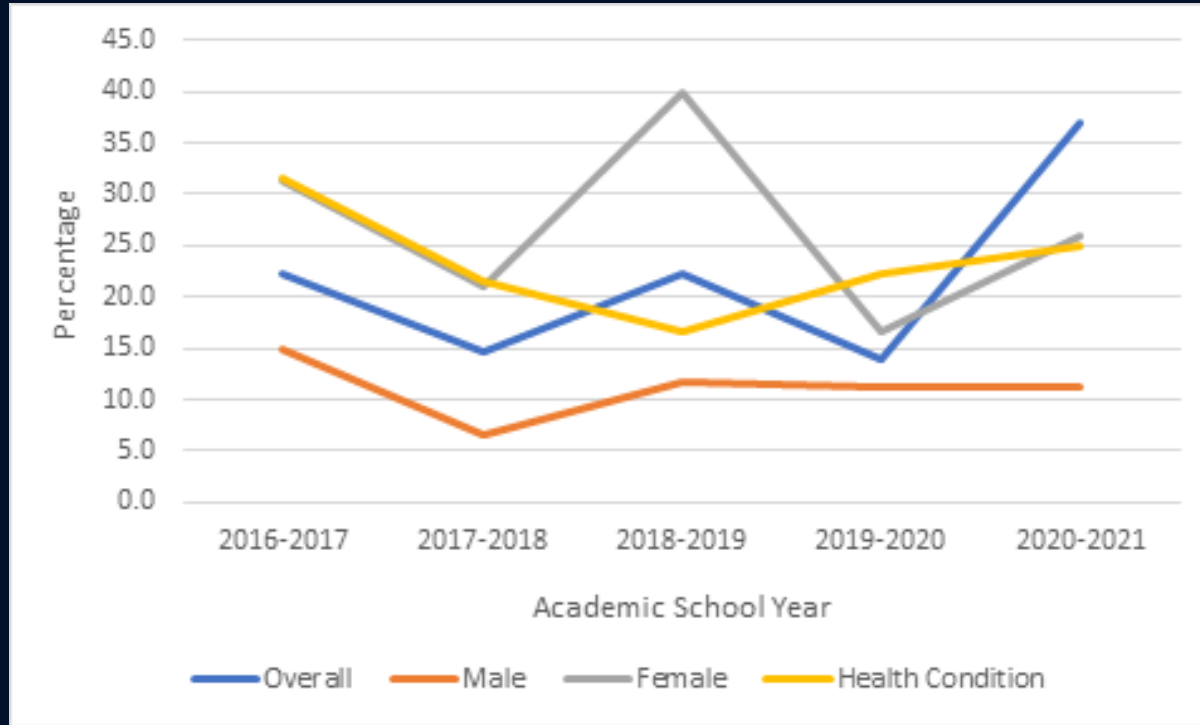
Instructional Strategies	Curriculum	Underachievement Factors
Assessment	Data	Self-handicapping
Interventions	Mastery	Home Assistance
Professional Development	Collaboration	Motivation
		Perfectionism

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# Survey Findings

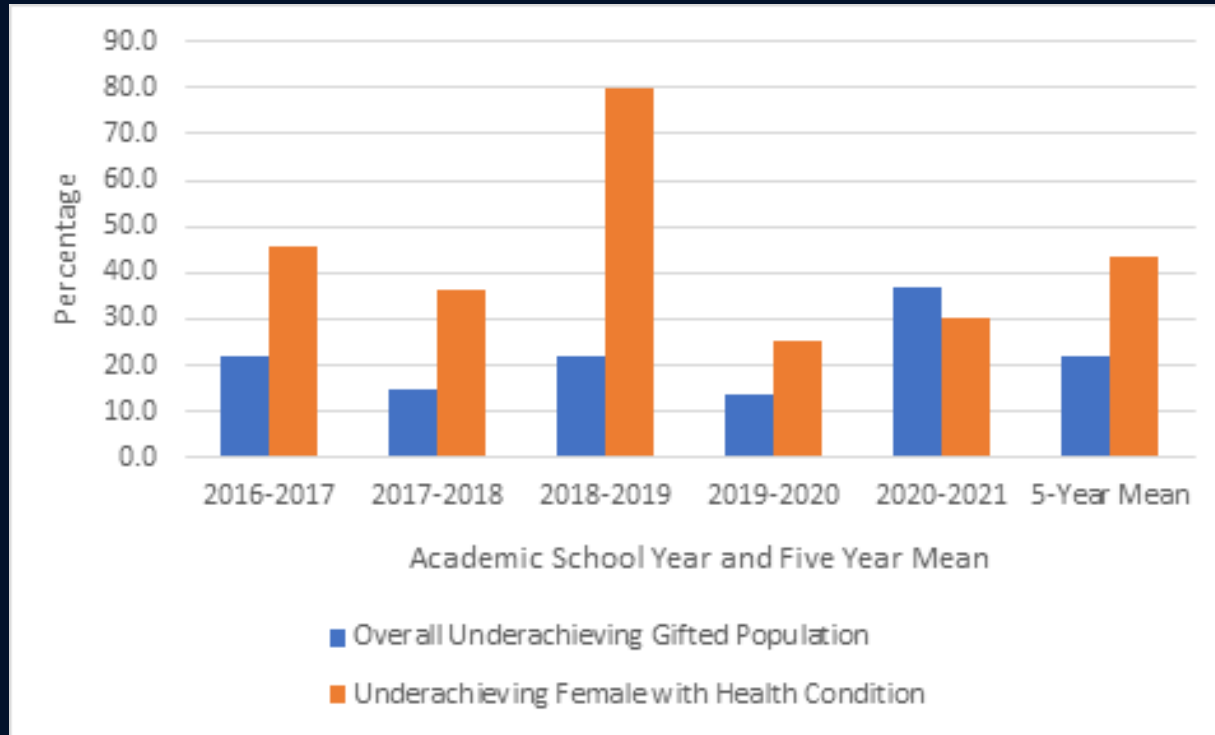
- Questions 2, 3, 5, 8, and 11 received ratings below average marks.
- Questions 8 and 11 were of correlative interest and addressed professional development.
- Questions 2 and 3 were also of correlative interest and addressed the lack of utilization of the Pennsylvania Value-Added Assessment System to plan for instruction or address weaknesses.
- Question 5 stressed the need for collaborative time during contracted hours.
- Veritably, Question 8 averaged the lowest score of 2.2 out of 5.

# Document Findings



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# Document Findings



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# Recommendations

The central research question was “How can the problem of low scores on the Pennsylvania Value-Added Assessment System amongst the tenth-grade gifted population be solved at Norwin High School?”

- Recommendation 1: Provide professional development targeting the gifted population
- Recommendation 2: Establish a professional networked improvement team at Norwin High School
- Recommendation 3: Equip teachers with strategies for incorporating Pennsylvania Value-Added Assessment System data to identify at-risk gifted students and improve underachievement

# Roles and Responsibilities of Stakeholders: Professional Development

Administrators	Teachers
Defining the function, goals, and roles	Attend all three professional development pieces of training
Ensure quality and operational effectiveness	
Facilitate professional development	
Look to educational theory, current research, best practices, and present underachievement factors	

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# Roles and Responsibilities of Stakeholders: Professional Networked Learning Team

Administrators	Teachers
Act as facilitators and accountability partners to establish the team's purpose, goals, and objectives	Assist the administrative team with establishing the team's purpose, goals, and objective
Monitor the discussions	Dichotomize current instructional practices and the curriculum
Guide the team through building trust and collaborating as a team	Conduct four main cyclical processes to ensure legitimacy and respect for their work
	Develop the related knowledge, skillsets, and attitudes
	Receive professional support and advice
	Observe others' lessons to improve academic practice and participate in the post-lesson dialogue
	Examine why the gifted female population underperformance rates were elevated compared to the male population
	Analyze how health impairments impact student achievement and what can be done to combat such trends from the researcher's document analysis findings

# Roles and Responsibilities of Stakeholders: Pennsylvania Value-Added Assessment System Incorporation

Administrators	Teachers
Oversee the data reports and formulate a district plan	Attend the initial delivery of PVAAS data
Collect, analyze, and present the overall grade-level data to the staff	Learn about the data collection system and how to interpret the results
Train the teachers on how to interpret the data	Identify the individual underachieving students
share data trends	Collaborate with the assistance of the administrative team to unravel why these tenth-grade students with high intelligence capabilities are falling behind
Expand upon their understanding of the Pennsylvania Value-Added Assessment System	
Plan and orchestrate a professional development exclusively on Pennsylvania Value-Added Assessment System	
Assist staff members with the organizational aspects, the high workload of a new initiative, and the time constraints of adding additional staff expectations	Receptive to a new method of data incorporation
	Prepare new instructional strategies
	Continuously reflection on progress monitoring cycle by evaluating the building, teacher-specific, and elective data

# Implications of the Solution

- Improved staff knowledge of gifted education, intervention strategies, and data integration
- Collaboration between staff members
- Student growth on the Pennsylvania Value-Added Assessment System

## Evaluation Plan

- Continuous Progress Monitoring for students
- PVAAS fall data

# Summary

- Goal of the educational report study was to identify factors impacting tenth-grade gifted students' performance on the Pennsylvania Value-Added Assessment System at Norwin High School
- Through the literature review, interviews, an online Google survey, and a document analysis revealed the importance of providing professional development, forming a professional networked learning team, and enveloping Pennsylvania Value-Added Assessment System incorporation at Norwin High School.

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