Perseus House CS of Excellence

Improvement Plan

07/01/2014 - 06/30/2017

Improvement Revision 2016-2017 : Submitted On 06/28/2016

School Profile

Demographics

1511 Peach Street
Erie, PA 16501
(814)480-5914

Phase:	Improvement Revision 2016-2017
Federal Accountability Designation:	Focus
Title I Status:	Yes
CEO Name:	Nick Viglione
CEO E-mail address:	nviglione@phcse.org

Planning Committee

Name	Role
Jenifer Dildine	Administrator
Dana LaFata	Administrator
Christopher Primavere	Administrator
Nick Viglione	Administrator
Renee Gordon	Building Principal
Mark Amendola	Business Representative
Robert Marz	Business Representative
Ron Pacely	Community Representative
Dan Hanas	Ed Specialist - School Counselor
James Hoffman	High School Teacher - Regular Education
Nicole Lemke	High School Teacher - Regular Education
Jon Miller	High School Teacher - Special Education
John Timmers	Instructional Coach/Mentor Librarian
Jim Gallagher	Intermediate Unit Staff Member
Lisa Panko	Middle School Teacher - Regular Education
Michele Egnot	Parent
Jinina Lee	Parent
Christopher Fortin	Special Education Director/Specialist
Stacey Viglione	Student Curriculum Director/Specialist

Assurances

Title I Schools

Title I Priority or Focus Schools

All Title I Schools required to complete improvement plans must assure to the Pennsylvania Department of Education the school's compliance with the following expectations by developing and implementing an improvement plan or otherwise taking actions that meet the expectations described by the Assurances listed below.

Assurances 1 through 12

The school has verified the following Assurances:

- **Assurance 1**: This School Improvement Plan contains Action Plans that address each reason why this school failed to make Annual Measurable Objectives (AMOs) and/or is identified in the lowest 10% of Title I schools.

- **Assurance 2**: The resources needed for full implementation of the action plans herein documented have been identified and the necessary approvals obtained to allow the procurement and allocation of these resources.

- **Assurance 3**: Documentation of the resources needed for full implementation of the action plans herein documented; including specific, related budgetary information, is available for review upon request by the LEA or SEA.

- **Assurance 4**: If designated as a Priority or Focus School the district has determined whole-school meaningful interventions directly associated with the unmet AMO(s).

- **Assurance 5**: The school improvement plan covers a two-year period.

- **Assurance 6**: The school has adopted and/or continued policies and practices concerning the school's core academic subjects that have the greatest likelihood of improving student achievement.

- **Assurance 7**: High performing LEAs with varied demographic conditions have shown they share common characteristics. The following nine characteristics are embedded in the plan:

    o Clear and Shared Focus

    o High Standards and Expectations

- o Effective Leadership

- o High Levels of Collaboration and Communication

- o Curriculum, Instruction and Assessment Aligned with Standards

- o Frequent Monitoring of Teaching and Learning

- o Focused Professional Development

- o Supportive Learning Environment

- o High Levels of Community and Parent Involvement

- **Assurance 8**: Focus Schools must implement locally developed interventions associated with a minimum of one of the below principles, while Priority Schools must implement all seven:

  - o Providing strong leadership by: (1) reviewing the performance of the current principal; (2) either replacing the principal if such a change is necessary to ensure strong and effective leadership or demonstrating to the State Education Agency that the current principal has a track record in improving achievement and has the ability to lead the turnaround effort; and (3) providing the principal with operational flexibility in the areas of scheduling, staff, curriculum and budget.

  - o Ensuring that teachers are effective and able to improve instruction by: (1) reviewing the quality of all staff and retaining only those who are determined to be effective and have the ability to be successful in the turnaround effort; and (2) preventing ineffective teachers from transferring to these schools.

  - o Redesign the school day, week, or year to include additional time for student learning and teacher collaboration

  - o Strengthen the school's instructional program based on student needs and ensuring that the instructional program is research-based, rigorous, and aligned with state academic content standards.

  - o Use data to inform instruction and for continuous improvement, including providing time for collaboration on the use of data.

  - o Establish a school environment that improves school safety and discipline and addresses other non-academic factors that impact student achievement, such as students' social, emotional and health needs.

  - o Provide ongoing mechanisms for family and community engagement

- **Assurance 9**: The school improvement plan delineates responsibilities fulfilled by the school, the LEA and the SEA serving the school under the plan.

- **Statement 10**: Establish specific annual, measurable targets for continuous and substantial progress by each relevant subgroup, which will ensure all such groups of students, update to align with the new AMOs to close the achievement gap

- **Statement 11**: A mentoring/induction program used with teachers new to the school exists; the essential elements of the mentoring/induction program are documented and the documentation is available for review upon request by LEA or SEA authorities.

- **Statement 12**: All parents with enrolled students will receive an annual notification letter which includes the reasons for its identification as Priority or Focus and the school's plan to improve student achievement.

Assurance 13

The school is communicating with parents regarding school improvement efforts via the following strategies:

- School web site

- School newsletter

- District web page

- WikiSpaces, Yahoo, Facebook, etc.

- Board meeting presentations

- Town hall meetings

- District's annual report

- District report card

- Press releases to local media

- Yearly letter to parents

- Periodic mailings/letters, postcards, etc.

- Short Message Systems (email blasts)

- Invitations to planning (etc.) meetings

- Family Night/ Open House / Back to School Night/ Meet-the-Teachers Night, etc.

- Special all-school evening event to present improvement plan

- Regular Title 1 meetings

- Parent advisory committee meetings

- Parent-Teacher Conferences

- Home-school visits

- Student Handbook

Assurance for Priority Schools (Annually Updated SIP)

The school has indicated the following response to indicate if it has completed an evaluation with the assistance of our Academic Recovery Liaison:

No

Title I Schoolwide program

The school has indicated the following response as to whether or not it intends to run a Title I Schoolwide program :

Yes

A completed Title I Schoolwide program planning addendum is required if the school is running a Title I Schoolwide program.

DOCX file uploaded.

Needs Assessment

School Accomplishments

Accomplishment #1:

CSE has always served a population of students who are at risk for academic failure and functioning 2+ years below grade level. Students enroll in our system with 6+ years of education from other academic systems. PDE SPP is a flawed metric relative to our school's reality, in that we continually receive students significantly behind. SPP scores are primarily based on Keystone or PSSA scoring, and our system does not support the rationale on system overhaul to improve those test scores based on the population of students our Charter was designed to serve. A true measure of our system success is measured by student growth. PVAAS data for 14-15 sy shows that CSE has significantly grown our students in all content areas. The reality of this data provides evidence that CSE provides students a quality educational option. An example of how the SPP is not a fair indicator of our success is found in the following example: CSE may move an entering 11th grade student from a 6th grade level of functioning to a 8th grade level of functioning within a single school year; however, they may still not be proficient on a keystone.

Accomplishment #2:

Dropout rate continues to decline 15% in 12-13 to 14.36% in 13-14. Retention continues to rise from 12-13 58% to 13-14 62%. With the steady increase in retention and decrease in dropout rate, CSE is also seeing growth in credit earned thus leading to academic achievement and success.

Accomplishment #3:

CSE has sustained the positive strategies implemented during the School Improvement Grant ending in the 2012 SY. Those strategies include: monthly teacher/ principal meetings, classroom instructional strategies, and extended year opportunities for students to earn and re-mediate credit.

Accomplishment #4:

Enhanced dual enrollment opportunities. Student dual enrollment opportunities have expanded to include Gannon, Edinboro, and Mercyhurst Universities. The 11-12 sy produced 30 dual enrolled students and 12-13 sy produced 65 dual enrolled students. Of the 31 dual enrollment students in 13-14 sy who took Keystone exams, only 50% passed the Keystones yet all but 2 students earned the grade of A or B in the college level course.

Accomplishment #5:

The English Second Language student population has steadily increased over the last five years. As evidenced by the WIDA Access test required for all English Language Learners, Growth is occurred every year in reading, writing, listening, and the composite every year.

Accomplishment #6:

PVAAS Output: 7th and 8th grades showing consistent evidence of growth Math and Language Arts.

School Concerns

Concern #1:

CSE is in transition to PA core curriculum being delivered in a traditional and blended model delivery process. Two major issues that are of grave concern while working with students at-risk for dropout are: attendance and academic functioning. The curriculum must meet the PA standards, be adapted to a classroom with variance regarding student performance levels, and be manageable for a population who has a history of chronic attendance issues. Attendance rates were in the low 60% range in the first 3 years of operation and are now close to 80%.

Concern #2:

Many CSE students demonstrate growth patterns in the classroom; however, our school is designed to work with the at-risk likely to drop out of school student. Most students are academically behind functioning 2-3 years below grade level. Additionally, many students enroll in our system behind graduation cohort. The percent of students entering CSE high school programming on track with their graduation cohort is as follows: 10-11sy = 31%, 11-12sy = 25%, 12-13sy = 29%, and 13-14sy = 38%. Even when CSE moves a 10th grade student from a 5th grade to an 8th grade academic level, the Keystone test will continue to be extremely challenging.

Concern #3:

Instructional staff works a total of 202 days and receive training in classroom instruction and de-escalation, due to the behavioral issues many of our students bring. The retention of staff is a constant concern, as the transience of staff warrants this approach.

Prioritized Systemic Challenges

Systemic Challenge #1 *(Guiding Question #3)* Ensure that there is a system within the school that fully ensures consistent implementation of a standards aligned curriculum framework across all classrooms for all students.

> **Aligned Concerns:**
>
> CSE is in transition to PA core curriculum being delivered in a traditional and blended model delivery process. Two major issues that are of grave concern while working with students at-risk for dropout are: attendance and academic functioning. The curriculum must meet the PA standards, be adapted to a classroom with variance regarding student performance levels, and be manageable for a population who has a history of chronic attendance issues. Attendance rates were in the low 60% range in the first 3 years of operation and are now close to 80%.

Instructional staff works a total of 202 days and receive training in classroom instruction and de-escalation, due to the behavioral issues many of our students bring. The retention of staff is a constant concern, as the transience of staff warrants this approach.

Systemic Challenge #2 *(Guiding Question #4)* Ensure that there is a system within the school that fully ensures consistent implementation of effective instructional practices that meet the needs of all students across all classrooms and aligns with the Pennsylvania Framework for Teaching

Aligned Concerns:

CSE is in transition to PA core curriculum being delivered in a traditional and blended model delivery process. Two major issues that are of grave concern while working with students at-risk for dropout are: attendance and academic functioning. The curriculum must meet the PA standards, be adapted to a classroom with variance regarding student performance levels, and be manageable for a population who has a history of chronic attendance issues. Attendance rates were in the low 60% range in the first 3 years of operation and are now close to 80%.

Instructional staff works a total of 202 days and receive training in classroom instruction and de-escalation, due to the behavioral issues many of our students bring. The retention of staff is a constant concern, as the transience of staff warrants this approach.

Systemic Challenge #3 *(Guiding Question #1)* Ensure that there is a system in the school and/or district that fully ensures the principal is enabled to serve as a strong instructional leader who, in partnership with the school community (students, staff, parents, community, etc.) leads achievement growth and continuous improvement within the school.

Aligned Concerns:

Instructional staff works a total of 202 days and receive training in classroom instruction and de-escalation, due to the behavioral issues many of our students bring. The retention of staff is a constant concern, as the transience of staff warrants this approach.

Systemic Challenge #4 *(Guiding Question #6)* Ensure that there is a system within the school that fully ensures a safe and supportive environment for all students.

Aligned Concerns:

Instructional staff works a total of 202 days and receive training in classroom instruction and de-escalation, due to the behavioral issues many of our students bring. The retention of staff is a constant concern, as the transience of staff warrants this approach.

Improvement Plan

Action Plans

Goal #1: Ensure that there is a system within the school that fully ensures consistent implementation of a standards aligned curriculum framework across all classrooms for all students.

Related Challenges:

- Ensure that there is a system within the school that fully ensures consistent implementation of effective instructional practices that meet the needs of all students across all classrooms and aligns with the Pennsylvania Framework for Teaching

Indicators of Effectiveness:

Type: Annual

Data Source: School Performance Profile (SPP)

Specific Targets: Indicators of effectiveness will be determined by this year's baseline data. Students performing significantly behind in academics make up this school's population. Immediate indicators of effectiveness for this population will be found in annual PVAAS growth measure ratings within the School Performance Profile (school years 14-15, 15-16, and 16-17, indicating rating colors of Green or Blue which show a minimum of one year's growth.

Type: Interim

Data Source: Quarterly Report Cards

Specific Targets: Quarterly credits will demonstrate the number of students who understand and comprehend the delivered curriculum.

CSE will look at the number of students who are earning honor role cards.

Type: Interim

Data Source: Scholastic Reading Inventory (SRI) and Scholastic Phonic Inventory (SPI) scores

Specific Targets: SRI & SPI testing in September and May will show the increase in growth represented by lexile scores.

Strategies:

Online Learning Opportunities

Description: On average, students in online learning conditions perform modestly better than those receiving face-to-face instruction. This is based upon a small number of studies and caution is required in transferring findings to the K-12 population because the results are derived for the most part from studies in other settings (e.g. medical training, higher education). http://www2.ed.gov/rschstat/eval/tech/evidence-based-practices/finalreport.pdf

SAS Alignment: Instruction, Materials & Resources

Re-aligning Curriculum

Description:

The school will re-align the curriculum to meet PA Core standards. As PDE has changed its identification of accepted standards, the curriculum must meet these demands. Additionally, with the adaptation of state assessment and Keystone exams a school wide re-alignment is warranted. This strategy aligns itself with he overall goal of a standards aligned curriculum across all classrooms. Work will be completed by July 2015, with the understanding that curriculum is a fluid process and monitoring for needed change is a constant.

CSE has met the initial objective of re-aligning the curriculum. The process will continue to update and enhance the re-alignment. Additionally, securing the re-aligned curruclum on-line will allow easy access for all staff members.

SAS Alignment: Standards, Curriculum Framework, Instruction, Materials & Resources

On-line Learning Opportunities

Description:

CSE will develop an on-line (Blended Based) curriculum that will incorpporate and meet the expectations from PDE. This particular strategy is a PDE recognized strategy and would not allow for the expansion on how this fits into the larger goal in this section. Once the blended strategy is ready for student consumption, students will be able to move at a pace that meets their academic needs. Because the curriculum will be created and aligned to state standards, and support PSSA and Keystone testing, the goal will be targeted and remain the focus of the action.

SAS Alignment: Standards, Assessment, Curriculum Framework, Instruction, Materials & Resources

Implementation Steps:

Re-align Curriculum & On-line (Blended Based) - Planning

Description:

CSE will evaluate the needs of the district with regards to the current on-line learning programming and curriculum. Planning for upcoming school year will occur during the summer for the offerings, classes and any updates/improvements needing addressed for the upcoming school year.

Evidence for this step will include planning documents, in-service schedule, and curriculum maps

Start Date: 6/30/2015   **End Date:** 8/1/2015

Program Area(s): Student Services, Educational Technology

Supported Strategies:

- Online Learning Opportunities
- Re-aligning Curriculum

Re-align Curriculum & On-line (Blended Based) - Professional Develpoment

Description:

To ensure that all staff have a thorough knowledge base for understanding the school's standards aligned curriculum framework, in-service is warranted.

Topic areas will include: SAS portal (including ESL overlays), PA Core, curriculum sequence standards based assessment, and grading.

Indicators of effectiveness Include:

- Lesson Plans
- Enhanced staff knowledge base, evidenced in Principal meetings
- PVAAS scores from PDE Performance Profile will show a year or more growth

Start Date: 8/15/2014 **End Date:** 6/21/2017

Program Area(s): Professional Education, Teacher Induction, Special Education

Supported Strategies:

- Online Learning Opportunities
- Re-aligning Curriculum

On-line (Blended Based) - Implementation

Description:

The school will continue to revise the curriculum to meet PA Core standards. In this process, blended based learning opportunities will continue to be offered to afford students the opportunity for on-line instruction.

Indicators of implementation include:

- Hard copies of the curriculum sequence will be on file (showing connectivity to PA Core standards)
- teacher gradebook reflect a standards based approach
- school report cards reflect standard based grading.

Start Date: 8/15/2014 **End Date:** 6/15/2017

Program Area(s): Special Education, Student Services, Educational Technology

Supported Strategies:

- Online Learning Opportunities

Re-align Curriculum & On-line (Blended Based) - Implementation

Description:

Administration and instructors will re-align the course maps to meet the new PA Core standards. The action step will include various in-service times where staff will be provided focused time devoted to creating new academic maps and assessments.

- Hard copies of the curriculum maps will be on file (showing connectivity to PA Core standards)
- documentation of in-service initiatives.

    Monitoring and assessing re-aligned curriculum will be completed on an annual basis.

- A yearly evaluation of the re-aligned curriculum will be completed each summer, for modification or additions.

    CSE curriculum will be available on-line to all staff.

- To complete this step, both internal and external management systems will be researched. This step will be completed within the life of this SIP.

    Start Date: 8/15/2014   **End Date:** 6/15/2017

    Program Area(s): Professional Education, Teacher Induction, Special Education, Student Services, Gifted Education, Educational Technology

    Supported Strategies:

- Online Learning Opportunities
- Re-aligning Curriculum

On-line (Blended Based) - Monitoring

Description:

On Line Learning is monitored regularly to ensure students are making progress and completing assignments.

Start Date: 4/28/2015   **End Date:** 7/1/2017

Program Area(s): Student Services, Educational Technology

Supported Strategies:

- Online Learning Opportunities

Re-align Curriculum - Monitoring

Description:

During the summer break, the curriculum binders will be reviewed to ensure the following:

1. All course offerings are listed

2. All courses are following the standards and requried sequences from PDE.

Start Date: 6/25/2015   **End Date:** 6/25/2017

Program Area(s): Special Education, Gifted Education, Educational Technology

Supported Strategies:

- Re-aligning Curriculum

Re-align Curriculum & On-line (Blended Based) - Evaluation

Description:

Evaluation for this step includes a formal summer evaluation of the curriculum, credits earned, feedback from staff and cross comparing it to the PDE standards.

Evidence of this step includes the documentation for the items above, during the summer evaluation.

Start Date: 6/25/2015   **End Date:** 6/25/2017

Program Area(s): Teacher Induction, Special Education, Student Services, Gifted Education, Educational Technology

Supported Strategies:

- Online Learning Opportunities

- Re-aligning Curriculum

Goal #2: Ensure that there is a system within the school that fully ensures consistent implementation of effective instructional practices that meet the needs of all students across all classrooms and aligns with the Pennsylvania Framework for Teaching

Related Challenges:

- Ensure that there is a system within the school that fully ensures consistent implementation of effective instructional practices that meet the needs of all students across all classrooms and aligns with the Pennsylvania Framework for Teaching

Indicators of Effectiveness:

Type: Interim

Data Source: Scholastic Reading Inventory (SRI)

Specific Targets: School targets are focused on improving student growth scores by a minimum of one year. SRI scores will show a years worth of growth by an increase from September pretest scores to May post-test scores of 75 points on lexile ratings. 75 points is equivalent to a year's worth of academic growth.

Type: Annual

Data Source: Pennsylvania Value Added Assessments (PVAAS)

Specific Targets: Charter School of Excellence will show scores of 70 or more each year from school year 14-15 to school year 17-18. Data will be identified at the conclusion of each academic year, once PDE releases the annual School performance Profile.

Strategies:

Graphic Organizers and Note Taking

Description:

Using Robert Marzano's research based practices will support effective instructional practices across all classrooms. All teachers will utilize these research based approaches in the classroom setting, ensuring that effective instructional strategies will be delivered to all students.

SAS Alignment: Assessment, Curriculum Framework, Instruction, Materials & Resources

Data Analysis Procedures, Data-Informed Instruction, Data Teams & Data Warehousing Using Student Achievement Data to Support Instructional Decision Making.

Description:

PDE Recognized Strategy.

Instructional teams who use relevant student achievmeent data to drive instruction are aligned to various strategies related to the acquisition, analysis, and application of student data. (Source: http://ies.ed.gov/ncee/wwc/pdf/practice_guides/dddm_pg_092909.pdf). Through incorporating data decision making into the instructional practice, all classrooms will be delivering the appropriate content and correct instructional approach to support student learning. The CSE will impiment the following action steps needed for this strategy to be delivered effectively and positively impact student achievement.

SAS Alignment: Standards, Assessment, Curriculum Framework, Instruction, Materials & Resources

Assessment Design: Depth of Knowledge

Description:

CSE will begin to focus on assessment designs and focal points for instructional staff to maintain a sound delivery of instructional assessment. All classrooms will utilize Norman Webb's Depth of Knowledge (DOK) framework to ensure that assessments provide insight into complex retention, understanding, and comprehension for curriculum delivery. Each Classsroom will have a DOK visual to promote and prompt this new strategy. Additionally, CSE will continue to secure training from IU 5 to deliver to instructional staff as well as our new instructional coach position, who will support the teaching staff with application of the DOK model.

SAS Alignment: Standards, Assessment, Curriculum Framework, Instruction, Materials & Resources

Implementation Steps:

Graphic Organizers/ Note Taking & Data Analysis - Planning

Description:

CSE will hold planning meetings with a staffing pattern that includes representatives from administration, support staff and teachers. This team will have the responsibility to ensure the goal is met, the strategies in effect, and the action steps are being met. The planning meetings will gather quarterly to review the current operations and discuss how the identified strategies will continue to move toward meeting the goal objective.

Indicators of Implementation:

- Meeting minutes
- sign in sheets
- Examples of student work from each site location
- Lesson Plans
- Yearly monitoring and assessment for SIP

Start Date: 8/15/2014   **End Date:** 6/15/2017

Program Area(s): Professional Education, Special Education, Student Services, Educational Technology

Supported Strategies:

- Graphic Organizers and Note Taking

- Data Analysis Procedures, Data-Informed Instruction, Data Teams & Data Warehousing Using Student Achievement Data to Support Instructional Decision Making.

DOK: Professional Education

Description:

CSE will provide training to all instructional staff regarding Webb's Depth of Knowledge design.

Start Date: 6/1/2016   **End Date:** 7/31/2017

Program Area(s): Professional Education, Teacher Induction, Special Education

Supported Strategies:

- Assessment Design: Depth of Knowledge

Graphic Organizers/ Note Taking & Data Analysis - Professional Education

Description:

The CSE instructional staff will be educated in the areas of data driven instructional decision making. Topic areas for instruction include: effective use of curriculum, assessment strategies, PDE-SAS site, graphic organizers and note taking, re-aligning of curriculum delivery to PDE identified standards.

Indicator of Implemenation:

- Sign in sheets
- in-service schedules
- Principal supervision.

Start Date: 8/15/2014   **End Date:** 6/30/2017

Program Area(s): Professional Education, Teacher Induction, Special Education, Educational Technology

Supported Strategies:

- Graphic Organizers and Note Taking

- Data Analysis Procedures, Data-Informed Instruction, Data Teams & Data Warehousing Using Student Achievement Data to Support Instructional Decision Making.

DOK Implementation

Description:

Instructional staff will use the DOK framework to create assessments.

Start Date: 9/1/2016   **End Date:** 6/10/2017

Program Area(s): Professional Education, Teacher Induction, Special Education

Supported Strategies:

- Assessment Design: Depth of Knowledge

Data Analysys - Implementation

Description:

Additional training from IU5 will be utilized to support enhanced understanding for data and how to transition the use of identifying, synthesizing and applying correct data outcomes into direct instruction.

Specific trainings will be facilitated to enhance the building Principals skill sets in the area of monitoring data informed decision making, relevant to their teachers instructional strategies.

Indicators of Implementation:

- Sign in sheets
- Documentation of the outcomes by each instructional team
- Lesson plans will have the instructional plan mapped out based on the outcome data
- Sign in sheets for all supplemental trainings
- Principals will craft a year-end report relative to their monitoring and assessment for building wide data informed decision making. The report will identify: what they have done to ensure proper support to their staff and what gains have been attributed to this specific strategy.
- o Note: at the beginning of the 15-16 sy, a formal template for this year-end report will be created based on the 14-15 baseline year.

Start Date: 8/15/2014   **End Date:** 6/15/2017

Program Area(s): Professional Education, Teacher Induction, Student Services

Supported Strategies:

- Data Analysis Procedures, Data-Informed Instruction, Data Teams & Data Warehousing Using Student Achievement Data to Support Instructional Decision Making.

Graphic Organizers/ Note Taking - Implementation

Description:

All classrooms in the CSE will utilize these two strategies each week during the school year. The instructional staff will have the flexibility to utilize a format that meets their needs, and deliver to each of their classrooms at least 1x per week.

Evidence for this step will be found within the lesson plans, in discussion with their principals, and through student work.

Start Date: 6/25/2015   **End Date:** 6/25/2017

Program Area(s): Teacher Induction, Special Education, Gifted Education, Educational Technology

Supported Strategies:

- Graphic Organizers and Note Taking

DOK Monitoring

Description:

Principals and instructional coach will monitor the utilization and accuracy of fidelity for DOK framework in each classroom at CSE.

Start Date: 9/1/2016   **End Date:** 6/9/2017

Program Area(s): Professional Education, Special Education

Supported Strategies:

- Assessment Design: Depth of Knowledge

Data Analysys - Monitoring

Description:

Teachers will be required to demonstrate how they are making data driven decision making into their classrooms. Each quarter teachers will discuss how the data sets they are using to make data driven decisions regarding their instruction are made with their content area peers and administration. This meeting will ensure that teachers are looking at data sets that are relevant to their instructional delivery. Each semester the various curriculum teams will report out during a building level meeting their findings regarding data trends and how they incorporated those findings to drive their instruction. Data sets are not limited to but may include: outcomes from classroom assessments, PSSA/ Keystone scores, CDT's, and PVAAS.

Indicators of Implementation:

- Lesson plans will be crafted to support data findings
- quarterly curriculum team meeting minutes
- Semester presentation
- Principal supervision
- PVAAS training w/ sign in sheets
- In-service time dedicated to training and use of newly learned skills from specific trainings, i.e IU5 CDT training

Start Date: 8/15/2014   **End Date:** 6/15/2017

Program Area(s): Professional Education, Teacher Induction, Special Education, Student Services, Educational Technology

Supported Strategies:

- Data Analysis Procedures, Data-Informed Instruction, Data Teams & Data Warehousing Using Student Achievement Data to Support Instructional Decision Making.

Graphic Organizers/ Note Taking - Monitoring

Description:

Teachers will incorporate graphic organizers and note taking strategies in all academic classrooms. Teachers will include these strategies in their lesson plans and within their instructional delivery.Teachers meet individually with their Principal on a monthly basis for supervision. During these meetings, teachers will be required to bring an example of how students have used these strategies for the previous month. Additionally, teachers will be required to share with their curriculum teams examples of how students have effectively used these concepts to enhance their academic performance.

Indicators of Implemenation:

- Lesson plans
- Principal Teacher meeting documentation
- Minutes from curriculum teams

Start Date: 8/15/2014   **End Date:** 6/15/2017

Program Area(s): Professional Education, Teacher Induction, Special Education, Student Services

Supported Strategies:

- Graphic Organizers and Note Taking

DOK Evaluation

Description:

Evaluation for DOK utilization will be found through evaluating random classroom assessments throughout the year and creating semester final assessments with built in DOK compliance.

Start Date: 9/1/2016   **End Date:** 6/9/2017

Program Area(s): Professional Education, Special Education

Supported Strategies:

- Assessment Design: Depth of Knowledge

Graphic Organizers/ Note Taking & Data Analysis - Evaluation

Description:

Analysis for this goal will be held at the end of each academic year. A Data Quality Review (DQR), team will facilitate the analysis and include administration and content area teachers. Analysis will include exploration into the overarching goal, the identified strategies, and the follow through for the action steps. Analysis will include a review of student earned academic credit, pre and post district wide test scores, CDT growth, Keystone and PVAAS

data. The findings and recommendations from the team will be included in a formal report that will be submitted to the CEO.

Indicators of Implementation:

- Sign in sheets
- Principal input for utilization of graphioc organizers and note taking
- Outcomes report
- DQR will provide possible correlation to the success outcomes and the identified strategies

Start Date: 8/15/2014 **End Date:** 6/15/2017

Program Area(s): Professional Education, Special Education, Student Services, Educational Technology

Supported Strategies:

- Graphic Organizers and Note Taking

- Data Analysis Procedures, Data-Informed Instruction, Data Teams & Data Warehousing Using Student Achievement Data to Support Instructional Decision Making.

Goal #3: Ensure that there is a system within the school that fully ensures a safe and supportive environment for all students.

Related Challenges:

- Ensure that there is a system within the school that fully ensures consistent implementation of effective instructional practices that meet the needs of all students across all classrooms and aligns with the Pennsylvania Framework for Teaching

Indicators of Effectiveness:

Type: Annual

Data Source: Daily Attendance Rates

Specific Targets: Rates will show an annual increase of 10% beginning in School year 14-15 through school year 16-7

Type: Annual

Data Source: Number of central enrollments completed

Specific Targets: 100% of all newly enrolled students will complete the central enrollment process within 1 month from their enrollment date, beginning school year 14-15.

Type: Annual

Data Source: Graduation and drop out rate

Specific Targets: Rates will show an annual increase of 10% as compared to the previous academic year, starting in school year 14-15 through school year 16-17.

Type: Interim

Data Source: Student attendance

Specific Targets: Intervention strategies from the Truancy Elimination Plan will create the following targets: improved classroom attendance, decreased behavioral concerns, and an increase in earned academic credit.

Strategies:

Central Enrollment, a series of assessments for newly enrolled students to address barriers to learning

Description:

Central Enrollment is a process where all newly enrolled students are given a series of assessments to identify their deficiencies. Many CSE students enroll with earned academic credit in areas of algebra or language arts, yet have difficulties with addition and subtraction and are reading more than two years below grade level. A significant amount of CSE students have life situations that become barriers to attending school. A large number of CSE students have mental health or drug related issues that exist within their immediate families or neighborhoods. Many students live in homes that are considered

to be in the poverty status. Central enrollment provides academic assessments in reading and math via CDT's, medical assessments from the nurse, and biopsycho-social assessments from a master level counselor. This model is an expansion from the PDE recognized student assistance program. When barriers are identified they are addressed with either internal or external referrals, whichever the need demands. When student barriers are overcome, student achievement and graduation are more likely.

SAS Alignment: Assessment, Materials & Resources, Safe and Supportive Schools, Standards, Curriculum Framework, Instruction

Enrichment Instructional Opportunities

Description:

PDE Recognized Strategy.

An effective strategy to increase academic achievement is to provide at-risk students more opportunities to complete coursework, either in a remedial or new course setting. This strategy is one of 6 drop-out prevention strategies in the Dropout Prevention model, endorsed by PDE. "WWC identifies 6 dropout prevention strategies for which empirical evidence exists that indicates the strategies reduce dropout rates. (Source:http://ies.ed.gov/ncee/wwc/pdf/practice_guides/dp_pg_090308.pdf)". Charter School of Excellence will offer before and after school tutoring as well as an extended year program to enhance enrichment opportunities for all students. By supporting students and providing them with additional time to achieve, the likliehood that they will remain in school and graduate increases.

SAS Alignment: Standards, Assessment, Curriculum Framework, Instruction, Materials & Resources, Safe and Supportive Schools

Implementation Steps:

Central Enrollment - Planning

Description:

Annual, quarterly and as needed planning meetings for Central Enrollment will occur. Topics for meetings will include maintaining appropriate protocols and up to date paperwork. Additional topic areas may include staffing pattern,

needs of students, review of current applicants, and building protocols. A well crafted plan for Central Enrollment, will enhance efficiency for meeting student needs through a process that breaks down the barriers for learning. When learning takes place graduation rates will rise.

Indicators of Implementation:

- Meeting Minutes
- Sign in sheets

Start Date: 8/15/2014   **End Date:** 6/15/2017

Program Area(s): Special Education, Student Services, Gifted Education, Educational Technology

Supported Strategies:

- Central Enrollment, a series of assessments for newly enrolled students to address barriers to learning

Enrichment Opportunities - Planning

Description:

An initial administrative district wide planning meeting will be held in February for the following summer enrichment opportunity, via extended school year. The goal of this planning meeting is to map big picture logistics and create a plan for future building planning meetings. This action step supports quality enrichment opportunities for students to access.

Indicators of Implementation:

- Meeting minutes
- Sign in-sheets

Start Date: 8/15/2014   **End Date:** 6/15/2017

Program Area(s): Professional Education, Special Education, Gifted Education

Supported Strategies:

- Enrichment Instructional Opportunities

Central Enrollment - Professional Development

Description:

Annually professional development will occur for staff whose roles are a part of the Central Enrollment Team. All staff will be informed of any updates to the process for each school year. Staff districtwide will be inserviced on the importance of Central Enrollment components district wide.

Start Date: 6/30/2015   **End Date:** 7/1/2017

Program Area(s): Professional Education, Student Services, Educational Technology

Supported Strategies:

- Central Enrollment, a series of assessments for newly enrolled students to address barriers to learning

Enrichment Opportunities - Professional Development

Description:

CSE is constantly reviewing and revising what opportunities have been effective for students' needs. When new pieces are added to these opportunities, staff would be trained during an inservice and or building staff meeting depending on need. Tutorial and extended year would be met on annually to revise and then inform staff of potential necessary changes for the students' betterment and ultimately their success at CSE. Professional Develpment of these opportunites would occur as needed.

Start Date: 6/30/2015   **End Date:** 6/30/2017

Program Area(s): Professional Education

Supported Strategies:

- Enrichment Instructional Opportunities

Central Enrollment - implementation

Description:

Central Enrollment is a process that began in the CSE district during the transformation model. Central Enrollment includes key components as the following: classroom diagnostic tools, CDTs, in both language arts and math, medical piece and the biopsycosocial which is completed within the first month of a student's enrollment at CSE>

Start Date: 8/25/2014   **End Date:** 6/30/2017

Program Area(s): Special Education, Student Services, Educational Technology

Supported Strategies:

- Central Enrollment, a series of assessments for newly enrolled students to address barriers to learning

Enrichment Opportunities - Implementation

Description:

Provide academic support and enrichment to improve academic performance. Students have the option to come before or after school to receive remedial support on their currently scheduled courses. Student sign in sheets will be evidence of implementation. Students who are behind in grade level will be invited to summer enrichment courses. Summer enrichment will include a 5 week extended year academic program, where students may either complete outstanding assignments or begin a new credited course.

Indicators of Implementation:

- Student rosters
- Earned academic credit
- Enrichment opportunity attendance rates

Start Date: 8/15/2014   **End Date:** 6/15/2017

Program Area(s): Special Education, Student Services, Educational Technology

Supported Strategies:

- Enrichment Instructional Opportunities

Central Enrollment - Monitoring

Description:

Throughout the year, within the first month of enrollment, building staff complete their part for the Central Enrollment process. At that time, staff implement and address any needs students may mention during this process. When the stafff are completed with the Central Enrollment Checklists, those are forwarded to Coordinator of Central Enrollment for tracking purposes. This process if monitored by the Coordinator of Central Enrollment throughout the school year.

Start Date: 4/28/2015   **End Date:** 6/30/2017

Program Area(s): Special Education, Student Services, Educational Technology

Supported Strategies:

- Central Enrollment, a series of assessments for newly enrolled students to address barriers to learning

Enrichment Opportunities - Monitoring

Description:

All students at CSE are given the opportunity to participate in before and after school tutorial. The need for this is indicated by report cards and grades. Staff review report cards and students not meeting satisfactory grades are participating the tutorial sessions. Students are also encouraged to participate annually in the extended year offered by CSE to help recover some of those credits.

Start Date: 8/25/2014   **End Date:** 6/30/2017

Program Area(s): Student Services

Supported Strategies:

- Enrichment Instructional Opportunities

Enrichment Opportunities - Evaluation

Description:

An annual administrator analysis meeting will be held in August to review extended year and before/after school tutoring opportunities. Analysis will be focused on participation rate, attendance and earned academic credit. Through the formal annual meeting CSE will gain an understanding for the effectiveness of this action step. Analysis meetings will also occur via the classroom teacher and their ability to interpret formative assessments. Data will be utilized to suggest student participation in before/after school tutoring. Through teacher summative assessments, recommendations will be submitted to the building principal for the enrichment opportunity found in extended year.

Indicators of Implementation:

- Sign in sheets
- Recommendation lists
- Meeting minutes.
- Earned academic credit

Start Date: 8/15/2014   **End Date:** 6/15/2017

Program Area(s): Special Education, Student Services, Gifted Education, Educational Technology

Supported Strategies:

- Enrichment Instructional Opportunities

Central Enrollment - Evaluation

Description:

Data from the student checklists will be reviewed by the Central Enrollment (CE) Coordinator and graphed quarterly for data review with the CE team and CSE admin. Data will be analyzed to explore timeliness of assessment completion, course scheduling, counseling support services, and medical interventions. The cumulative data will then be viewed in an annual summer meeting, to modify operations and meet the demands for the upcoming school year.

Indicators of Implementation:

- The student check lists
- Graphed data outcomes
- Meeting minutes.

Start Date: 8/15/2014   **End Date:** 6/15/2017

Program Area(s): Special Education, Student Services, Gifted Education, Educational Technology

Supported Strategies:

- Central Enrollment, a series of assessments for newly enrolled students to address barriers to learning

Appendix: Professional Development Implementation Step Details

LEA Goals Addressed:	Ensure that there is a system within the school that fully ensures consistent implementation of a standards aligned curriculum framework across all classrooms for all students.	Strategy #1: Online Learning Opportunities Strategy #2: Re-aligning Curriculum

Start	End	Title	Description
8/15/2014	6/21/2017	Re-align Curriculum & On-line (Blended Based) - Professional Develpoment	To ensure that all staff have a thorough knowledge base for understanding the school's standards aligned curriculum framework, in-service is warranted. Topic areas will include: SAS portal (including ESL overlays), PA Core, curriculum sequence standards based assessment, and grading. Indicators of effectiveness Include: • Lesson Plans • Enhanced staff knowledge base, evidenced in Principal meetings • PVAAS scores from PDE Performance Profile will show a year or more growth

Person Responsible	SH	S	EP	Provider	Type	App.
Principal	3.0	3	30	CSE staff, Edinboro University, and IU5 trainings.	IU	No

Knowledge	PA Core and SAS as applied to school curriculum
Supportive Research	PDE

Designed to Accomplish

For classroom teachers, school counselors and education specialists:	Enhances the educator's content knowledge in the area of the educator's certification or assignment.
	Increases the educator's teaching skills based on research on effective practice, with attention given to interventions for struggling students.
	Provides educators with a variety of classroom-based assessment skills and the skills needed to analyze and use data in instructional decision-making.
	Empowers educators to work effectively with parents and community partners.
For school and district administrators, and other educators seeking leadership roles:	Provides the knowledge and skills to think and plan strategically, ensuring that assessments, curriculum, instruction, staff professional education, teaching materials and interventions for struggling students are aligned to each other as well as to Pennsylvania's academic standards.
	Provides leaders with the ability to access and use appropriate data to inform decision-making.
	Empowers leaders to create a culture of teaching and learning, with an emphasis on learning.
	Instructs the leader in managing resources for effective results.
Training Format	LEA Whole Group Presentation Series of Workshops School Whole Group Presentation Department Focused Presentation

Participant Roles	Classroom teachers Principals / Asst. Principals New Staff	**Grade Levels**	Middle (grades 6-8) High (grades 9-12)

Follow-up Activities	Team development and sharing of content-area lesson implementation outcomes, with involvement of administrator and/or peers Analysis of student work, with administrator and/or peers Creating lessons to meet varied student learning styles Joint planning period activities	**Evaluation Methods**	Classroom observation focusing on factors such as planning and preparation, knowledge of content, pedagogy and standards, classroom environment, instructional delivery and professionalism. Student PSSA data Standardized student assessment data other than the PSSA Classroom student assessment data Review of participant lesson plans

LEA Goals Addressed:	**Ensure that there is a system within the school that fully ensures consistent implementation of effective instructional practices that meet the needs of all students across all classrooms and aligns with the Pennsylvania Framework for Teaching**	**Strategy #1: Assessment Design: Depth of Knowledge**

Start	End	Title	Description
6/1/2016	7/31/2017	DOK: Professional Education	CSE will provide training to all instructional staff regarding Webb's Depth of Knowledge design.

Person Responsible	**SH**	**S**	**EP**	**Provider**	**Type**	**App.**

CEO	2.0	3	43	IU 5 and CSE	IU	Yes

Knowledge   Staff will become versed in the four identifiable assessment qualifiers within the DOK design.

Supportive Research   IU5 and best practice

Designed to Accomplish

For classroom teachers, school counselors and education specialists:

Enhances the educator's content knowledge in the area of the educator's certification or assignment.

Increases the educator's teaching skills based on research on effective practice, with attention given to interventions for struggling students.

Provides educators with a variety of classroom-based assessment skills and the skills needed to analyze and use data in instructional decision-making.

Empowers educators to work effectively with parents and community partners.

For school and district administrators, and other educators seeking leadership roles:

Provides the knowledge and skills to think and plan strategically, ensuring that assessments, curriculum, instruction, staff professional education, teaching materials and interventions for struggling students are aligned to each other as well as to Pennsylvania's academic standards.

Provides leaders with the ability to access and use appropriate data to inform decision-making.

Empowers leaders to create a culture of teaching and learning, with an emphasis on learning.

Instructs the leader in managing resources for effective results.

Training Format   LEA Whole Group Presentation
Series of Workshops

School Whole Group Presentation

Participant Roles	Classroom teachers Principals / Asst. Principals	**Grade Levels**	Middle (grades 6-8) High (grades 9-12)
Follow-up Activities	Team development and sharing of content-area lesson implementation outcomes, with involvement of administrator and/or peers Analysis of student work, with administrator and/or peers Creating lessons to meet varied student learning styles Peer-to-peer lesson discussion Lesson modeling with mentoring	**Evaluation Methods**	Classroom observation focusing on factors such as planning and preparation, knowledge of content, pedagogy and standards, classroom environment, instructional delivery and professionalism. Student PSSA data Standardized student assessment data other than the PSSA Classroom student assessment data Participant survey Review of participant lesson plans

LEA Goals Addressed:	**Ensure that there is a system within the school that fully ensures consistent implementation of effective instructional practices that meet the needs of all students across all classrooms and aligns with the Pennsylvania Framework for Teaching**	**Strategy #1: Graphic Organizers and Note Taking** **Strategy #2: Data Analysis Procedures, Data-Informed Instruction, Data Teams & Data Warehousing Using Student Achievement Data to Support Instructional Decision Making.**

Start	End	Title	Description
8/15/2014	6/30/2017	Graphic Organizers/ Note Taking & Data Analysis - Professional Education	The CSE instructional staff will be educated in the areas of data driven instructional decision making. Topic areas for instruction include: effective use of curriculum, assessment strategies, PDE-SAS site, graphic organizers and note taking, re-aligning of curriculum delivery to PDE identified standards. Indicator of Implemenation: • Sign in sheets • in-service schedules • Principal supervision.

Person Responsible	SH	S	EP	Provider	Type	App.
Site Administrators	2.0	23	40	CSE and contracted staff	School Entity	Yes

Knowledge	Staff will gain knowledge to effectively implement Marzano's high impact instructional strategies, specifically graphic organizers and note taking. Victoria Bernhardt's multiple measures concepts are embedded within the teacher evaluation system, which will be included in this action step. Maintaining strategies for understanding a student's level of comprehension via assessment and instructional approaches will be an outcome.
Supportive Research	Robert Marzano's high impact instructional strategies and V. Bernhardt's multiple measures concept will be incorporated into effective research based practices across all classrooms. This action plan supports the instructional strategies within PDE SAS portal, supporting a Best Practice approach.

Designed to Accomplish

For classroom teachers, school counselors and education specialists:	Increases the educator's teaching skills based on research on effective practice, with attention given to interventions for struggling students. Provides educators with a variety of classroom-based assessment skills and the skills needed to analyze and use data in instructional decision-making.
For school and district administrators, and other educators seeking leadership roles:	Provides the knowledge and skills to think and plan strategically, ensuring that assessments, curriculum, instruction, staff professional education, teaching materials and interventions for struggling students are aligned to each other as well as to Pennsylvania's academic standards. Provides leaders with the ability to access and use appropriate data to inform decision-making. Empowers leaders to create a culture of teaching and learning, with an emphasis on learning. Instructs the leader in managing resources for effective results.
Training Format	LEA Whole Group Presentation Series of Workshops School Whole Group Presentation Department Focused Presentation

Participant Roles		**Grade Levels**	
	Classroom teachers		
	Principals / Asst. Principals		
	Supt / Ast Supts / CEO / Ex Dir		Middle (grades 6-8)
			High (grades 9-12)
	School counselors		
	Paraprofessional		
	Classified Personnel		
	New Staff		
	Other educational		

specialists

Related Service Personnel

Follow-up Activities

Team development and sharing of content-area lesson implementation outcomes, with involvement of administrator and/or peers

Analysis of student work, with administrator and/or peers

Creating lessons to meet varied student learning styles

Peer-to-peer lesson discussion

Lesson modeling with mentoring

Evaluation Methods

Classroom observation focusing on factors such as planning and preparation, knowledge of content, pedagogy and standards, classroom environment, instructional delivery and professionalism.

Student PSSA data

Standardized student assessment data other than the PSSA

Classroom student assessment data

Review of participant lesson plans

Assurance of Quality and Accountability

We, the undersigned, hereby certify that the school level plan for Perseus House CS of Excellence has been duly reviewed by a *Quality Review Team* convened by the Superintendent of Schools and formally approved by the district's Board of Education, per guidelines required by the Pennsylvania Department of Education.

We hereby affirm and assure the Secretary of Education that the school level plan:

- Addresses all the **required components** prescribed by the Pennsylvania Department of Education

- Meets **ESEA requirements for Title I schools**

- Reflects **sound educational practice**

- Has a **high probability of improving student achievement**

- Has sufficient **District leadership and support to ensure successful implementation**

With this *Assurance of Quality & Accountability*, we, therefore, request that the Secretary of Education and the Pennsylvania Department of Education grant formal approval to implement the school level plan submitted by Perseus House CS of Excellence for the 2014-2017 school-year.

Affirmed by Nick Viglione on 6/27/2016

Superintendent/Chief Executive Officer

Affirmed by Thomas Fortin on 6/27/2016

Board President

No signature has been provided

IU Executive Director

Evaluation of School Improvement Plan

Describe the success from the first year plan

This plan was initially approved and began in July 2014. The plan was rolled out to staff at the beginning of the year and has had many successes to date. CSE has continued to see an increase in retention annually. Dropout rate continues to decrease thus leading to increased academic achievement and ultimately an increase in credits earned and graduates. Our district continues to provide students with opportunities for dual enrollment courses. CSE has found success within the action plan steps. The re-alignment of existing and creation of blended based on- line curriculum has occurred in this first year. Classroom instruction has included strategies utilized by all instructional staff and students via graphic organizing and note taking. Central Enrollment process continues to support the health safety and welfare of all students newly enrolled at CSE and ensure appropriate instructional planning. Overall the evaluation from CSE relative to the success within this school improvement plan is thought to be satisfactory.

Describe the continuing areas of concerns from the first year plan

Due to the fact that we are currently in the first year and have not formally evaluated outcomes to date, which will occur upon completion of the 14-15 School Year, this area is somewhat unclear. However, a couple areas of concern continue to be clearly visible and on our radar. The curricular restructuring and redesigning appears to be meeting the premise at inception. Students are able to move at a pace that meets tier individual needs and academic levels. A major concern is the fact that our charter is designed to serve students at risk for academic failure and dropout. As a result each year new students enroll, average age of enrollment 16, with academic levels showing the deficiency of two or more years below grade level. This reality presents challenges to school performance profile scores with outcomes generated from PSSA and Keystone exams. CSE continues to provide instruction that is differentiated to meet the individual needs of our students, further evaluation of the goals identified within this plan are warranted upon the completion of this school year.

Describe the initiatives that have been revised

CSE has collaborated and received critical feedback from IU 5 staff throughout the development and application to date with this plan. With this first year of implementation there was not much revision needed. We anticipate after the end of year evaluation revisions will be made prior to the 15-16 School Year. One area that is already identified for revision is how to move our curriculum forward in both our traditional and blended based classrooms. To speak specifically regarding what those revisions are is premature, the data and outcomes will need reviewed so that the appropriate revisions are applied.

Describe the success from the past year.

During the 15-16 sy CSE successfully re-alligned curriculum, made that curriculum electronic and found on-line, continued to use graphic organizers and note taking strategies, and forged ahead with professional development. A major indicator of our overall success is found within the PDE SPP report. Despite the fact that CSE was chartered to serve students at risk of academic failure

causing many of our grade 6-12 students entering significantly below grade level, CSE showed significant growth in all areas relevant to PVAAS. This outcome validates that CSE is positively impacting through our educational design the students we serve. Additionally, our attendance percentages continue to trend in a positive direction.

Describe the continuing areas of concerns from the first two years.

CSE will continue to fine tune the curriculum and assessment process. These are two areas that while showing improvement and are on track within this plan, yet will continue to be specific areas CSE wishes to enhance.

Describe the initiatives that have been revised.

The Title 1 SW plan has been updated and uploaded within this report. One significant area of change is found within the strategy related to Webb's Depth of Knowledge (DOK). CSE is in the process of enhancing our assessment of student comprehension, retention and understandng for our curriculum sequence and will incorporate DOK in all phases of this effort. Professional education, implementation, monitoring and evaluation processes have been added herein to ensure effective and quality utilization.