

**Forest Heights STEM Academy  
Comprehensive Needs Assessment & Plan Overview  
2018-2019**

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**Focus Area 1: Leadership**

**Goal: Improve staff practices that improve student academic achievement**

Forest Height STEM Academy will continue to implement a collaborative team approach to enhance our building leadership for all stakeholders. We have assessed multiple indicators of effective practice to develop, implement and monitor team structure. As an instructional leadership team, we have identified areas that need improvement. Each area of need is aligned to an appropriate indicator of effectiveness.

**Possible Indicators of Effectiveness:**

- ID08: The Leadership Team serves as a conduit of communication to the faculty and staff.
- ID09: The Leadership Team shares in decisions of real substance pertaining to curriculum, instruction, and professional development.
- ID12: Instructional Teams meet regularly (once a week or more for 45 minutes each meeting) to conduct business.

**Professional Development**

We will regularly monitor and address the professional development needs of our faculty, staff and students. We will continue the implementation of this through weekly PLCs, monthly team and faculty meetings.

**Possible Barriers**

Please describe any costs required to implement your plans for LEADERSHIP:  
Academic Resources for staff: \$2000

**Focus Area 2: Effective Instructional Practices**

**Goal: Improve instructional and technological practices that will impact school growth**

Instructional teams will continue to implement the use of district and building curriculum and assessments in order to effectively progress monitor student achievement with the guidance of the instructional leadership team, including the math and literacy facilitators. As an instructional leadership team, we have identified indicators of effectiveness in the categories of (a) Curriculum, Assessment and Instructional Planning and (b) Classroom Instruction to improve our practices. During our instructional team planning time by grade level, content discipline/department or in our professional learning communities (PLCs), our instructional staff will continue to refine and implement selected evidenced based strategies that have previously proven effective in

our core content areas. Additionally, a science lab will be developed for school-wide use in order to further our STEM initiatives and improve our science scores. We have reviewed and analyzed our students' data to direct and support decisions regarding instruction, student growth and achievement relative to our combined population and each subgroup. Based on our data trends, our student growth and achievement goals for

- **Science**

- Based on our data trends, our student growth and achievement goals for science are:
  - increasing the overall growth percentage of students who score Ready or Exceeding on the 2018-19 ACT Aspire Summative science assessment as compared to the previous year
- To determine those areas in math that are most challenging to our students we analyzed:
  - ACT Aspire Summative results for science (2017 and 2018)

Science Grade	2017 % In Need of Support	2018 % In Need of Support	2017 to 2018 Diff	2017 % Close	2018 % Close	2017 to 2018 Diff	2017 % Ready	2018 % Ready	2017 to 2018 Diff	2017 % Exceeding	2018 % Exceeding	2017 to 2018 Diff
03	36.6%	25.0%	-11.6%	18.3%	21.0%	2.7%	21.1%	24.0%	2.9%	23.9%	31.0%	7.1%
04	26.5%	25.0%	-1.5%	14.7%	27.0%	12.3%	29.4%	27.0%	-2.4%	29.4%	21.0%	-8.4%
05	17.1%	19.0%	1.9%	35.7%	26.0%	-9.7%	22.9%	29.0%	6.1%	24.3%	26.0%	1.7%
06	13.2%	19.0%	5.8%	19.8%	20.0%	0.2%	26.4%	34.0%	7.6%	40.7%	27.0%	-13.7%
07	8.8%	17.0%	8.2%	12.1%	14.0%	1.9%	33.0%	23.0%	-10.0%	46.2%	46.0%	-0.2%
08	17.0%	12.0%	-5.0%	15.9%	22.0%	6.1%	28.4%	22.0%	-6.4%	38.6%	43.0%	4.4%

**Possible Indicators of Effectiveness:**

- IIIA02: All teachers develop weekly lesson plans based on aligned units of instruction.
- IIIA07: All teachers differentiate assignments (individualize instruction) in response to individual student performance on pre-tests and other methods of assessment.
- IID10: Instructional Teams use student learning data to identify students in need of instructional support or enhancement.
- IID06: Yearly learning goals are set for the school by the Leadership Team, utilizing student learning data.

**Professional Development**

- Ongoing professional development will be provided by the building math and literacy instructional facilitators focusing on planning, assessment, and research-based strategies in the areas of STEM and core content.
- Ongoing professional development will be provided by the STEM coordinator focusing on inquiry based learning and science education in the areas of STEM and core content
- Provide support to grade level teams or content teams to support their understanding of aligned instructional units.

- In order to provide staff with high quality, on-going job embedded and differentiated professional development (IF11), we will use Title I funds to support a Math and Literacy facilitator.
- Required R.I.S.E. (Reading Initiative for Student Excellence) will be provided to 6th grade English teachers
- NCTM Annual Conference

### **Possible Barriers**

Please describe any costs required to implement your plans for EFFECTIVE INSTRUCTION:  
 Funds for voluntary R.I.S.E. training: (2-day initial training @ 6 hrs./day x \$25/hr. x 10 staff members = \$3,000 **note:** evening training would be broken into 3 hr. segments)  
 Personnel Costs: \$160,000.00 – math and literacy instructional facilitators  
 CGI/ECM training fee: \$5,500.00 – cycle year teachers  
 NCTM annual conference: \$3,000.00  
 Science Lab: \$2,000.00  
 Training and Materials for Inquiry Based Learning: \$1,500.00  
 Technology: \$5,000.00

### **Focus Area 3: Student Growth and Achievement**

#### **Goal: Improve instructional practices that will impact individual student achievement**

All of our stakeholders (students, teachers, staff, parents, and community partners) know our mission, share our vision and support our growth and academic goals for our students. Having a team structure makes it possible for our leadership team, instructional teams and professional learning communities to review student data and use that information to improve core instruction as well as identify appropriate interventions to meet the needs of students who need additional support to remain on track for meeting their growth and/or academic goals.

We have reviewed and analyzed our students’ data to direct and support decisions regarding instruction, student growth and achievement relative to our combined population and each subgroup. Based on our data trends, our student growth and achievement goals for

- **Literacy**
  - Based on our data trends, our student growth and achievement goals for literacy are:
    - increasing the overall growth percentage of students who score Ready or Exceeding on the 2018-19 ACT Aspire Summative ELA assessment as compared to the previous year
  - To determine those areas in literacy that are most challenging to our students we analyzed:
    - ACT Aspire Summative results reading and English (2017 and 2018)

English Grade	2017 % In Need of Support	2018 % In Need of Support	2017 to 2018 Diff	2017 % Close	2018 % Close	2017 to 2018 Diff	2017 % Ready	2018 % Ready	2017 to 2018 Diff	2017 % Exceeding	2018 % Exceeding	2017 to 2018 Diff
3	2.80%	3.00%	0.20%	8.50%	11.00%	2.50%	39.40%	25.00%	-14.40%	49.30%	61.00%	11.70%
4	4.40%	3.00%	-1.40%	14.70%	15.00%	0.30%	27.90%	36.00%	8.10%	52.90%	47.00%	-5.90%
5	0.00%	0.00%	0.00%	15.70%	10.00%	-5.70%	35.70%	38.00%	2.30%	48.60%	52.00%	3.40%
6	3.30%	1.00%	-2.30%	7.70%	12.00%	4.30%	18.70%	20.00%	1.30%	70.30%	67.00%	-3.30%
7	3.30%	0.00%	-3.30%	6.60%	4.00%	-2.60%	15.40%	20.00%	4.60%	74.70%	76.00%	1.30%
8	1.10%	2.00%	0.90%	9.10%	6.00%	-3.10%	28.40%	20.00%	-8.40%	61.40%	72.00%	10.60%
Reading Grade	2017 % In Need of Support	2018 % In Need of Support	2017 to 2018 Diff	2017 % Close	2018 % Close	2017 to 2018 Diff	2017 % Ready	2018 % Ready	2017 to 2018 Diff	2017 % Exceeding	2018 % Exceeding	2017 to 2018 Diff
3	35.20%	22.00%	-13.20%	21.10%	25.00%	3.90%	21.10%	26.00%	4.90%	22.50%	26.00%	3.50%
4	19.10%	17.00%	-2.10%	29.40%	33.00%	3.60%	32.40%	27.00%	-5.40%	19.10%	23.00%	3.90%
5	0.00%	0.00%	0.00%	15.70%	10.00%	-5.70%	35.70%	38.00%	2.30%	48.60%	52.00%	3.40%
6	26.40%	15.00%	-11.40%	12.10%	26.00%	13.90%	22.00%	27.00%	5.00%	39.60%	37.00%	-2.60%
7	13.20%	17.00%	3.80%	19.80%	21.00%	1.20%	49.50%	40.00%	-9.50%	17.60%	22.00%	4.40%
8	10.20%	8.00%	-2.20%	17.00%	20.00%	3.00%	36.40%	40.00%	3.60%	36.40%	31.00%	-5.40%

- **Math**

- Based on our data trends, our student growth and achievement goals for math are:
  - increasing the overall growth percentage of students who score Ready or Exceeding on the 2018-19 ACT Aspire Summative math assessment as compared to the previous year
- To determine those areas in math that are most challenging to our students we analyzed:
  - HMH Math Inventory scores
  - ACT Aspire Summative results for math (2017 and 2018)

Math Grade	2017 % In Need of Support	2018 % In Need of Support	2017 to 2018 Diff	2017 % Close	2018 % Close	2017 to 2018 Diff	2017 % Ready	2018 % Ready	2017 to 2018 Diff	2017 % Exceeding	2018 % Exceeding	2017 to 2018 Diff
03	4.2%	7.0%	2.8%	26.8%	18.0%	-8.8%	45.1%	43.0%	-2.1%	23.9%	32.0%	8.1%
04	4.4%	8.0%	3.6%	25.0%	28.0%	3.0%	47.1%	52.0%	4.9%	23.5%	12.0%	-11.5%
05	7.1%	6.0%	-1.1%	41.4%	35.0%	-6.4%	32.9%	46.0%	13.1%	18.6%	13.0%	-5.6%
06	3.3%	4.0%	0.7%	19.8%	35.0%	15.2%	29.7%	40.0%	10.3%	47.3%	21.0%	-26.3%
07	10.0%	11.0%	1.0%	16.7%	25.0%	8.3%	28.9%	25.0%	-3.9%	44.4%	39.0%	-5.4%
08	11.4%	4.0%	-7.4%	18.2%	30.0%	11.8%	31.8%	18.0%	-13.8%	38.6%	47.0%	8.4%

### **Possible Indicators of Effectiveness:**

- CC01: All teachers reinforce elements of mastered knowledge that can be retained in memory through recitation, review, questioning and inclusion in subsequent assignments.
- MTV01: All teachers promote a growth mindset by attributing learning success to effort and self-regulation and insist upon (and reward) persistence to mastery.

### **Professional Development**

- Specific content support
- Classroom management support
- Focus on the strategies used in your school that have been effective in delivering instruction in the various content areas.
- Continuing growth mindset PD will be available throughout the school year
- Continuing periodic blended learning PD will be available throughout the school year

### **Possible Barriers**

Please describe any costs required to implement your plans for STUDENT GROWTH AND ACADEMIC ACHIEVEMENT:

Lexia: 15,000.00

### **Focus Area 4: School Culture and Student Discipline**

**Goal: to improve staff practices that support student achievement, and social/ emotional growth.**

Our school's culture reflects various beliefs, perceptions, relationships, attitudes, and rules that shape and influence many aspects of how our school functions. Given the diversity of Forest Heights STEM Academy, it is important that every member of our school community experiences both physical and emotional safety along with the orderliness of classrooms and public spaces. We will continue to make sure that our rituals and routines are in place to provide the structure and support needed for student achievement. School wide incentives will be created to acknowledge students who are following school procedures and expectations. The school will also target chronic absenteeism and truancy.

### **Possible Indicators of Effectiveness:**

- IIIA27: All teachers verbally praise students.
- IIIA33: All teachers interact socially with students (noticing and attending to an ill student, asking about the weekend, inquiring about the family).

- IE10: The principal celebrates individual, team, and school successes, especially related to student learning outcomes.
- IE11: The principal provides incentives for teacher and student accomplishment.
- IE13: The principal offers frequent opportunities for staff and parents to voice constructive critique of the school’s progress and suggestions for improvement.
- CL12: All school personnel work effectively and equitably with racially, culturally, linguistically, and economically diverse students.
- MTV01: All teachers promote a growth mindset by attributing learning success to effort and self-regulation and insist upon (and reward) persistence to mastery.
- SE01: The school promotes social/ emotional competency in school rituals and routines, such as morning announcements, awards assemblies, hallway and classroom wall displays, and student competitions.
- SE04: All teachers are attentive to students’ emotional states, guide students in managing their emotions, and arrange for supports and interventions when necessary.

**Professional Development:**

- Classroom management support
- PBIS

**Other Needed Support tied to specific Barriers:** None

**Evaluation:** We will monitor our implementation and evaluate PBIS through our School Based Intervention Team

Please describe any costs required to implement your plans for SCHOOL CULTURE AND STUDENT DISCIPLINE:

Yearly incentives: \$1,500.00

**Focus Area 5: Parent and Family Engagement**

**Goal: Improve opportunities for parents to engage in the academic and social welfare of their children.**

Forest Heights STEM Academy views parents as partners within our school community. We believe that student learning and school culture benefit tremendously when parents are fully aware and in support of our mission, vision and beliefs associated with teaching and learning. Our parents have had an integral role in the development of our School Improvement Plan. Our Parent Involvement Plan will serve as the basis of this priority. In reviewing our parent survey data, we have jointly decided to address the following to improve our parent school partnership.

**Possible Indicators of Effectiveness:**

- FE01: Parent (Family) representatives advise the School Leadership Team on matters related to family-school relations.
- FE05: The “ongoing conversation” between school personnel and parents (families) is candid, supportive, and flows in both directions.
- FE06: The school regularly communicates with parents (families) about its expectations of them and the importance of the curriculum of the home (what parents can do at home to support their children's learning).
- FE07: The school's website has a parent (family) section that includes information on home support for learning, announcements, parent activities/resources, and procedures on how families may post items.
- FE11: The school provides parents (families) with practical guidance to encourage their children’s regular reading habits at home.

**Other Needed Support tied to specific Barriers:** None

**Evaluation:** We will monitor our implementation regularly (SMART) and will evaluate our Parent and Family Engagement Plan Annually.

**Professional Development**

- Parenting Partners
- National Network of Partnership Schools

**Possible Barriers**

Please describe any costs required to implement your plans for PARENT AND FAMILY ENGAGEMENT:

Parenting Partners: Cost minimal – supported by Title I District  
 National Network of Partnership Schools: \$400.00 (membership fee)  
 Parent-Student Summer Engagement Packet: \$1,000.00  
 Parental communication Displays: \$2,000.00  
 STEM night: \$4,000.00