

Master Inservice Plan Component Preparation Template - January 2010

COMPONENT BASICS

Component Title	PDA-Differentiating Science Instruction for All Students	
Component Number (Will Be Assigned by PD Staff)	[1100003]	
Total Maximum Points	Up to 30 points [May NOT Exceed 120 (or 60 for Endorsement)]	
Point Value- Learning Process & Assessment	15 [May be from 1 up to 60 and may be less, equal to, or more than value for Implementation]	
Point Value- Implementation Processes	15 [May be from 1 up to 60 and may be less, equal to, or more than value for Learning Process/Assessment]	
Contact Person (Position/Title)	Lourdes Day FDLRS technology Specialist	

PART I - PLANNING

A. Primary Purpose of this Professional Development (Check only one.)

- | | | |
|--|--|--|
| <input type="checkbox"/> Add-on Endorsement (A.) | <input type="checkbox"/> Other Professional Certificate/License Renewal (D.) | <input type="checkbox"/> Approved District Leadership Development Program [G.] |
| <input type="checkbox"/> Alternative Certification (B.) | <input type="checkbox"/> Professional Skill Building (E.) [Non Certified Staff Only] | |
| <input checked="" type="checkbox"/> Florida Educators Certificate Renewal (C.) | <input type="checkbox"/> Wm. Cecil Golden PD Program School Leaders [F.] | |

B. Intended Participants (Check all that apply but at least one.)

- | | | |
|--|--|---|
| <input checked="" type="checkbox"/> Instructional Staff | <input type="checkbox"/> District Level Leaders | <input type="checkbox"/> District Level Non-Instructional Staff |
| <input checked="" type="checkbox"/> School-Based Leaders | <input type="checkbox"/> District Level Professional/Technical Staff | <input type="checkbox"/> Parents and/or Community Members |
| <input checked="" type="checkbox"/> School Level Support Staff | <input type="checkbox"/> School Level Non-Instructional Personnel | <input type="checkbox"/> Other... Specify |

C. Primary Related State Focus Area (Check only one.)

- | | |
|---|--|
| <input checked="" type="checkbox"/> Subject Content /Sunshine State Standards (1) | <input type="checkbox"/> Classroom Management (5) |
| <input type="checkbox"/> Instructional Methodology (2) | <input type="checkbox"/> School Safety/Safe Learning Environment (6) |
| <input type="checkbox"/> Technology (3) | <input type="checkbox"/> Management/Leadership/Planning (7) |
| <input type="checkbox"/> Assessment & Data Analysis (4) | <input type="checkbox"/> General Support (8) |

D. Related Subject Content Area (Check only one from one category only, in Part D as may be applicable. If you do, skip Parts E, F, G, & H... and go directly to Part I.)

Basic Programs

- Art (000)
- Career Education, Unclassified (002)
- Computer Science/Technology Education (003)
- Foreign Language (004)
- Health/Nutrition (005)
- Humanities (006)
- Integrated Curriculum (007)
- Language Arts (008)
- Mathematics (009)
- Music (010)
- Physical Education (011)
- Pre-kindergarten (012)
- Reading (013)
- Safety/Drive Education (014)
- Science (015)
- Social Studies (016)
- Writing (017)

OR - Exceptional Education Programs

- ESE Instructional Strategies (100)
- ESE Classroom Management (101)
- ESE Assessment (102)
- ESE Procedural/Legal Requirements (103)
- ESE Aides, Volunteers, Mentors (104)
- ESE Curriculum (105)
- Career- Agriscience/Natural Resources (200)
- Career- Business Technology (201)
- Career- Diversified Education (202)
- Career- Family & Consumer Sciences (203)
- Career- Health Science (204)
- Career- Industrial Education (205)
- Career- Marketing Education (206)
- Career- Middle School Exploratory (207)
- Career- Public Service Occupations (208)
- Career- Technology Education (209)
- Career- Instructional Support Services (210)
- Career- Technical, Unclassified (211)

OR - Adult Edu. Prog.

- ABE (300)
- Adult, Unclassified (301)
- Adult ESOL (302)
- Adult General ESE (303)
- Citizenship (304)
- Adult High School (305)
- GED (306)
- Vocational Prep (307)
- Workplace Readiness (308)

E. Student and Instructional Support Processes as Appropriate (**Check only one** as may be applicable. **If you do, skip Parts D, F, G, & H...And go directly to Part I.**)

- | | |
|--|--|
| <input type="checkbox"/> Academic Intervention (400) | <input type="checkbox"/> Parental Involvement, Parent Support (413) |
| <input type="checkbox"/> Assessment/Student Appraisal (401) | <input type="checkbox"/> Physical and Mental Health Issues (414) |
| <input type="checkbox"/> Attendance (402) | <input type="checkbox"/> Problem Solving Teams (415) |
| <input type="checkbox"/> Behavioral Interventions (Crisis, Abuse, Social Skills) (403) | <input type="checkbox"/> Professional Standards & Ethics (416) |
| <input type="checkbox"/> Classroom Management & Organizational Learning Environments (404) | <input type="checkbox"/> Program Administration, Evaluation & Accountability (417) |
| <input type="checkbox"/> Dropout Retrieval (405) | <input type="checkbox"/> Scholarships, Financial Aid, Education Transitions (418) |
| <input type="checkbox"/> Human Relations/Communication Skills (406) | <input type="checkbox"/> Section 504/Americans with Disabilities Act (419) |
| <input type="checkbox"/> Instructional Media Services (407) | <input type="checkbox"/> Service Coordination, Collaboration, Integration (420) |
| <input type="checkbox"/> Instructional Strategies (408) | <input type="checkbox"/> Student Motivation (421) |
| <input type="checkbox"/> Instructional Support Services, Unclassified (409) | <input type="checkbox"/> Student Records (422) |
| <input type="checkbox"/> Laws, Rules, Policies, Procedures (410) | <input type="checkbox"/> Supplemental Academic Instruction (423) |
| <input type="checkbox"/> Learning Styles, Student Differences (411) | <input type="checkbox"/> Working with Volunteers, Aides and Mentors (424) |
| <input type="checkbox"/> Multicultural Education (412) | |

F. General Support as Appropriate (**Check only one** as may be applicable. **If you do, skip Parts D, E, G, & H... And go directly to Part I.**)

- | | |
|---|--|
| <input type="checkbox"/> Board of Education (500) | <input type="checkbox"/> Management Information Services (508) |
| <input type="checkbox"/> Central Services- Planning, Program Evaluation, Continuous Improvement (501) | <input type="checkbox"/> Office/Clerical Services (509) |
| <input type="checkbox"/> District-level Management (502) | <input type="checkbox"/> Plant Operations and Maintenance (510) |
| <input type="checkbox"/> Diversity/Ethics (503) | <input type="checkbox"/> Safety/Security (511) |
| <input type="checkbox"/> Fiscal Services (504) | <input type="checkbox"/> School Improvement (512) |
| <input type="checkbox"/> Food Services (505) | <input type="checkbox"/> School-level Management (513) |
| <input type="checkbox"/> General Support Services, Unclassified (506) | <input type="checkbox"/> Service on Advisory or Instructional Materials Councils (514) |
| <input type="checkbox"/> Leadership Skills, Communication, Critical Thinking (507) | <input type="checkbox"/> Transportation Services (515) |

G. Community Services as Appropriate (**Check only one** as may be applicable. **If you do, Skip Parts D, E, F & H... And go directly to Part I.**)

- | | | |
|---|--|---|
| <input type="checkbox"/> Community Services, Unclassified (600) | <input type="checkbox"/> Lay Advisory Councils (601) | <input type="checkbox"/> Parent Education (602) |
|---|--|---|

H. English Language Learners as Appropriate (**Check only one** as may be applicable. **If you do, Skip Parts D, E, F & G and go to Part I.**)

- | | |
|---|--|
| <input type="checkbox"/> Instructional Strategies ELL(700) | <input type="checkbox"/> Content Area ELL PD [Cat II,II,IV](704) |
| <input type="checkbox"/> Testing & Evaluation ELL(701) | <input type="checkbox"/> Other [E.g., Cross Cultural Comm.](705) |
| <input type="checkbox"/> Understanding/Implementation ELP Academic Standards(702) | |
| <input type="checkbox"/> Alignment of Curriculum to ELP Standards(703) | |

I. Related Florida Educator Accomplished Practices IF Applicable (Check all that apply.)

- | | |
|---|---|
| <input type="checkbox"/> Assessment | <input type="checkbox"/> Human Development & Learning |
| <input type="checkbox"/> Communication | <input checked="" type="checkbox"/> Knowledge of Subject Matter |
| <input type="checkbox"/> Continuous Improvement | <input type="checkbox"/> Learning Environments |
| <input type="checkbox"/> Critical Thinking | <input type="checkbox"/> Planning |
| <input type="checkbox"/> Diversity | <input type="checkbox"/> Role of the Teacher |
| <input type="checkbox"/> Ethics | <input type="checkbox"/> Technology |

J. Related Levels of Learning or Related Evidence-Based Practices IF Applicable (Check all that apply.)

Acquisition of Knowledge Processes	Extending Thinking Skills
<input type="checkbox"/> Essential Questions	<input type="checkbox"/> Identifying Cause/Effect
<input checked="" type="checkbox"/> Linking to Prior Knowledge	<input checked="" type="checkbox"/> Comparing/Contrasting
<input checked="" type="checkbox"/> Scaffolding/Previewing	<input checked="" type="checkbox"/> Classifying
<input type="checkbox"/> Collaborative Pairs	<input checked="" type="checkbox"/> Constructing Support
<input checked="" type="checkbox"/> Distributed Practice	<input type="checkbox"/> Analyzing Perspectives
<input type="checkbox"/> Distributed Summarizing	<input type="checkbox"/> Justifying Position
<input type="checkbox"/> Use of Graphic Organizers	<input type="checkbox"/> Reasoning by Induction
Authentic, Meaningful Use and Mastery	<input type="checkbox"/> Reasoning by Deduction
<input checked="" type="checkbox"/> Decision Making	<input type="checkbox"/> Analyzing for Errors
<input checked="" type="checkbox"/> Problem Solving	<input checked="" type="checkbox"/> Evaluating
<input type="checkbox"/> Investigation	<input checked="" type="checkbox"/> Abstracting
<input type="checkbox"/> Invention	<input checked="" type="checkbox"/> Providing Example to Idea
<input type="checkbox"/> Experimental Inquiry	<input checked="" type="checkbox"/> Providing Idea to Example
<input type="checkbox"/> Rigor & Relevance Frameworks	<input type="checkbox"/> Writing Prompts

K. Related Florida Sunshine State Standard(s) (State as may be applicable.)

Crosses all Science content strands and benchmarks

L. Related Polk County School Board Strategic Plan Element(s) (Check all that apply but at least one from Academics OR Instruction OR Management.)

ACADEMICS

Goal 1: Improve student achievement and increase the graduation rate.

- Increase student proficiency levels to meet or exceed the state standards.
- Increase overall graduation rate and graduation rate for at risk students.
- Increase the achievement of all subgroups.
- Conduct on-going progress monitoring of student achievement.
- Increase student engagement by providing more opportunities for: career and technical education, career academies, and extra-curricular offerings at the secondary level.

Goal 2: Strengthen instruction and curriculum to meet the educational needs of each student.

- Drive academic achievement through a continuous improvement model used in elementary, middle and high schools.
- Align curriculum that reflects the knowledge and skills students are expected to master on Next Generation Standards at each level, K through 12.
- Drive the teaching/learning process based on the goals, objectives, strategies, and evaluations in the School Improvement Plans.

Goal 3: Enhance parent and community involvement and communication.

- Promote diversity initiatives and encourage strong inclusive practices.
- Increase multicultural cooperation within the schools and community.
- Ensure better communication through updated school web sites.

L. Related Polk County School Board Strategic Plan Element(s) (Continued)

INSTRUCTION

Goal 1: Recruit and retain highly qualified personnel who reflect the changing demographics of our diverse communities.

- Develop a supportive district-wide culture committed to attracting, hiring and retaining highly qualified, appropriately certified instructional and administrative personnel that reflects the changing demographics of our diverse community.
- Provide professional instructional leadership while maintaining a vision, direction and focus for student learning.
- Provide a coordinated system of relevant, timely staff development for all employee groups consistent with the Florida Professional Development Evaluation Protocol.
- Ensure an effective teacher induction seminar.
- Establish for instructional and non-instructional employees a fair competitive compensation structure.
- Incorporate diversity benchmarks into the performance evaluation process for teachers and administrators.
- Use student academic progress as the chief indicator in evaluating school-based administrators.

MANAGEMENT

Goal 1: Ensure students realize their highest potential through the use of all available resources.

- Prioritize resource allocation to enhance student achievement.
- Provide equitable facilities, staffing, and services to all schools.

Goal 2: Establish learning environments that ensure academic and personal success of each student.

- Cultivate a highly professional environment that is safe, orderly, and family friendly.
- Provide safe and secure schools through the implementation of Positive Behavior Support and other strategies.
- Establish school zones that make optimal use of facilities that preserve diversity in the student body.
- Establish and enforce a consistent Attendance Policy throughout the district.

M. Related Florida Leadership Standard(s) If Applicable (Check all that apply.)

- | | |
|---|---|
| <input type="checkbox"/> Vision | <input type="checkbox"/> Diversity |
| <input type="checkbox"/> Instructional Leadership | <input type="checkbox"/> Technology |
| <input type="checkbox"/> Managing the Learning Environment | <input type="checkbox"/> Learning Accountability and Assessment |
| <input type="checkbox"/> Community and Stakeholder Partnerships | <input type="checkbox"/> Human Resource Development |
| <input type="checkbox"/> Decision Making Strategies | <input type="checkbox"/> Ethical Leadership |

N. Linkage to National Staff Development Council Standards: (Check all that apply but at least one.)

Context Standards

- Learning Community Focus & Organization
- Leadership Participation and Support
- Adequate Resources (Time, Money, Staff)

Content Standards

- Equity Emphasis (Safe, Supportive, Expectant)
- Quality Teaching (Rigor, Relevance, Relationship)
- Parental Involvement Focused

Process Standards

- Data Driven Processes
- Evaluation Focused – (Achievement & Application)
- Research-Based Content
- Design – Aligned Goals, Strategies, Outcomes
- Adult Learning Theory & Change Theory Applied
- Collaboration Valued and Implemented

O. Rationale for Component Inclusion in District MIP (Check all that apply but at least one.)

- District Disaggregated Student Achievement Data by Content Area and Skills
- Other Data Provided by Principals/Teachers Related to Student Achievement
- "Target" Performance Gain Data Analysis
- School-wide Analysis of Student Achievement Data
- Other Student Performance Data Analysis

Specify:

- Faculty Level Performance Appraisal Data Analysis
- District Strategic Plan Initiative
- Personal Professional Growth Interests Indicated by Staff
- Grade Level, Team or Departmental "Alignment" Analysis
- Certification Needs
- State or Federal Mandated Professional Development/Training

P. General Goal/Purpose/Outcome

Participants will learn and apply the guidelines of differentiation to science instruction for the purposes of increasing student achievement. Participants will develop skills for differentiating science instruction by using continuous assessment to plan and deliver effective whole-group, small-group and individualized instruction in order to be responsive to each student’s needs.

Q. Specific Objectives (Must have 1 Minimum and Up to 12 Maximum for Each Category)

Acquisition:

1. Define terms and guidelines related to differentiating instruction.
2. Define common terms used in effective science instruction.
3. Discuss the rationale for differentiating science instruction and self-evaluate their current instructional practices related to the guidelines of differentiating instruction.
4. Utilize current research related to effective science instruction.
5. Explain the connection between continuous assessment and meaningful differentiation and identify types and sources of assessment information related to effective science instruction.
6. Identify potential barriers to science achievement and common misconceptions about science.
7. Explain and provide examples of how preconceptions a student brings to the differentiated science classroom can affect learning.
8. Explain the inquiry instructional approach in science.
9. Identify components of whole-group instruction and determine when whole group instruction is appropriate.
10. Discuss ways to integrate technology to differentiate science instruction.
11. Purposefully group students based on sound rationale informed by pre-assessment and continuous assessment.

Application:

Participants will be able to differentiate Science instruction by using continuous assessment to deliver whole and small group instruction as well as meet individual needs.

PART II - LEARNING

A. Change Focus of This Professional Development (Check all that apply but at least one.)

- Knowledge Acquisition/Application Skill Acquisition/Application Mental Model Impact

B. Primary Learning Method (Check only one.)

- | | | |
|--|---|---|
| <input type="checkbox"/> Study Group/Learning Community (D.) | <input type="checkbox"/> Action Research (E.) | <input type="checkbox"/> Independent Study (F.) |
| <input type="checkbox"/> District-wide Workshop (A.) | <input checked="" type="checkbox"/> Electronic Interactive (B.) | <input type="checkbox"/> Other |
| <input type="checkbox"/> School-wide Workshop (AA.) | <input type="checkbox"/> Electronic Non Interactive (C.) | Specify: |

C. Learning Activities Applied (Check all that apply but at least one.)

- | | | |
|---|--|---|
| <input type="checkbox"/> Lecturette | <input checked="" type="checkbox"/> Guided Practice | <input type="checkbox"/> Journaling |
| <input type="checkbox"/> Small Group Activities (Cooperative Learning) | <input checked="" type="checkbox"/> Independent Practice | <input type="checkbox"/> Inventory/Survey |
| <input checked="" type="checkbox"/> Skill Practice With Feedback | <input checked="" type="checkbox"/> Embedded On-Going Coaching | <input type="checkbox"/> Video/Audio Analysis |
| <input type="checkbox"/> Individual/Team Presentation | <input type="checkbox"/> Individual/Team Problem Solving | <input type="checkbox"/> Role Play/Simulation |
| <input checked="" type="checkbox"/> Other – Specify... <u>Written Task within modules</u> | | |

D. Participant Assessment of Learning Method(s) (Check all that apply but at least one.)

- | | | |
|--|---|--|
| <input type="checkbox"/> Objective Pre/Post Test or Narrative Test | <input type="checkbox"/> Product Development | <input type="checkbox"/> Reflective Journal |
| <input type="checkbox"/> Portfolio Development | <input type="checkbox"/> Interview/Dialogue | <input type="checkbox"/> Questionnaire/Survey |
| <input type="checkbox"/> Observation/Application | <input checked="" type="checkbox"/> Project Completion/Presentation | <input type="checkbox"/> Other... Specify <u>Online activities</u> |

Part III - IMPLEMENTATION

A. Primary Implementation Method (Check Only One.)

- Structured Coaching/Mentoring** (M.) – (May include direct observation, conferencing, oral reflection and/or lesson demonstration)
- Action Research** related to professional development (N.) - (Should include evidence of implementation)
- Collaborative Planning** related to professional development (O.) [E.g., Professional Learning Community Outcomes]
- Study Group** participation (Q.)
- Electronic Interactive** (R.)
- Electronic Non-Interactive** (S.)

B. Position Title of Person Responsible for Documentation of Implementation Processes related to this Component (Check Only One.)

- Facilitator of the Professional Development Activity
- Senior Director or Director
- School Principal
- Assistant Principal
- Other School-Based Support Staff (E.g., IST, AIF, Content Resource Teacher, ESE Facilitator)
- Other District Level Staff Member As Designated by the Component Writer

Specify:

Part IV - EVALUATION

A. Activity Evaluation Method (By Participants) (Check Only One.)

- HRD Professional Development Activities Evaluation Form (HRD Form 005)
- Facilitative Leadership Feedback Process (Pluses/Deltas)
- Facilitator Designed Feedback Gathering Instrument
- Program-based Feedback Gathering Instrument
- Other- Specify DOE Satisfaction Survey

B. Primary Method for Evaluation of Impact of this Professional Learning Experience (Check Only One.)

- District Developed/Standardized Student Test Results (A.)
- School Constructed Student Test Results (B.)
- Portfolios of Student Work (C.)
- Checklists of Student Performance (D.)
- Charts and Graphs of Student Progress (E.)
- Other Performance Assessment (F.)
- Summaries of Observed Student Behavior
- Documented Transfer of Knowledge/Skill/Mental Model Into Participants' Job Role
- OR... Specify satisfactory completion of online assignment

C. Position Title of Person Responsible for Documentation of Evaluation Processes related to this Component (Check only one.)

- Facilitator of the Professional Development Activity
- Senior Director or Director
- School Principal
- Assistant Principal
- Other School-Based Support Staff (E.g., IST, AIF, Content Resource Teacher, ESE Facilitator)
- Other District Level Staff Member As Designated by the Component Writer

Specify: