**Location**

Ballroom E

**Strand #1**

Academic Achievement & School Leadership

**Relevance**

**The Topic of S.T.E.M. education is a new framework entering into the academics of all educational providers. S.T.E.M. education began on the college and university levels. The goals were for Colleges and Universities to prepare students for the current and ever changing workforce. However, what became apparent was the lack of diversity in the S.T.E.M. fields and a need for students to be better prepared prior to College. As a result many organizations have begun to focus on increasing the number of minorities in the S.T.E.M. fields. In an effort to broaden the participation of minorities in the S.T.E.M. fields there is a focus on the following on a National level: focusing on underrepresented groups, exposing girls and young women to S.T.E.M. fields, setting the standard with exceptional role models, and promoting technology inclusion. These efforts have brought about changes to the expectations of all educational providers and especially at-risk students.**

**The biggest obstacle to providing a S.T.E.M. education to at-risk students is knowledge. To provide a S.T.E.M. education to at-risk students it requires administrators, support staff and teachers to look at the teaching of science and math differently. It requires that all stakeholders are willing to be open to change; from how lesson plans are written to how lessons are delivered to students. It is also helpful if technology is defined correctly to help students understand how to use and create new technologies. The goal of this presentation is to open the minds of stake holders of the possibilities S.T.E.M. brings to the students they serve and how S.T.E.M. can impact student engagement and focus.**

**Brief Program Description**

**This dynamic presentation from award winning; Kaija Spencer will provide the foundation from which education is based .** The definition of S.T.E.M. will be discussed. And provide a complete outline of how a traditional school changed from the traditional 6 subject schedule to a school that embraces the full integration of all subjects throughout the entire school day. Participants will understand how to start the process of changing the instructional plan of a school by first building a team, have realistic SMART (Specific, measurable, attainable, relevant, and time-bound) goals, and a strategic and systematic plan for implementation.

**Summary**

**In order for at risk students to enter into the S.T.E.M. fields those that oversee and make the decisions must first see how S.T.E.M. can impact there students and community as a whole. This presentation will cover the aspects of S.T.E.M. education that Principals, Assistant Principals, and Teachers impact the most – instruction and curriculum. Throughout this presentation multiple take- aways will be provided from the building of a S.T.E.M. team, instructional team, and developing and creating the checks and balances needed to ensure effective S.T.E.M. implementation. The next topic of focus will be what the role and goals of each of these teams are and how they work together. Throughout this presentation the focus will be on how to close the GAP for at-risk students in S.T.E.M. education. Attendees will leave this sessions with strategies and an understanding of the tasks that are required to successfully bring S.T.E.M. education to a non- S.T.E.M. school.**

**Evidence**

This prosal and presentation is supported by the following:

https://www.apa.org/monitor/2012/02/at-risk-students.aspx

http://files.eric.ed.gov/fulltext/EJ1002146.pdf

http://www.educationworld.com/a\_admin/admin/admin578.shtml

https://www.whitehouse.gov/sites/default/files/microsites/ostp/pcast-stemed-report.pdf

**Format**

Individual Presentation

**Biographical Sketch**

**Kaija Spencer is the S.T.E.M. coordinator at Ronald E. McNair Discovery Learning Academy. Mrs. Spencer’s task as the S.T.E.M. coordinator consist of being responsible for improving the quality of education in the classroom by developing curriculums, training teachers, assessing and implementing an educational program , and selecting the most appropriate materials to assist with the implementation of STEM at Ronald E. McNair Discovery Learning Academy.**