FSLA/VIBE Research Design Proposal

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May 2018

The purpose of this proposal is to delineate the research design and protocol for the FSLA/VIBE – Future Service Leaders of American/Virtual Interactive Based Education program. The design will focus on a pilot study in order to test the VIBE Curriculum intervention. After the successful completion of the pilot a full blown RCT Study will be designed. But for now, a more limited and focused pilot study is warranted in order to formatively determine the salient elements of the VIBE Curriculum that need adjustment.

This pilot study will be conducted in one state and will be a convenience sample with a school district that the FSLA/VIBE staff have a positive working relationship. The reason for this selection is to guarantee the full access to the classroom environments so that the FSLA/VIBE staff can manipulate the curriculum on an as need basis. However, the pilot study will follow all other RCT design features with the exception of the fact that the sample is a convenience sample.

Children from a comprehensive school district in which all age ranges are represented will be used in this pilot study. This will be from Preschool to High School. If the children are in separate buildings, this would be preferable; rather than all the children being in one building. Fifty percent of the children will receive the VIBE curriculum while the other 50% will receive their regular curriculum as deemed by the school district. In other words, one building receives the intervention while the other does not. The two buildings should be randomly selected from all the various buildings. This may be possible with preschool and elementary ages children but not the case with junior high and high school aged children. In this case, if there are two or more classrooms for each age group they would be randomly assigned to either the VIBE Curriculum intervention or the comparison group.

The sample will be matched as closely as possible to make them equivalent. Statistical tests will be performed using the various data collection tools to be employed by the school district for tracking children. This will be done at the pre-test to test for equivalency. The research data base will be established utilizing these two groups for comparison purposes.
By utilizing the research design above, we will be able to ascertain how much the VIBE curriculum improved the children’s performance.

Statistical Analysis Plan: t-tests will be conducted on the pre-test and we should find no statistically significant differences between the two groups. Scores on all tests are basically equal between the VIBE group and the Comparison group. T-tests will be done on the post-test and this is where we are anticipating significant statistically change with the VIBE group performing much better than the Comparison group. And finally, t-tests will be done from pre- to post-test change for both the VIBE group and the Comparison group. We would anticipate significant statistical change for VIBE but not for the Comparison group.

The above graph depicts what hopefully will be expected from the VIBE Intervention Curriculum. The pre-test scores will not be statistically different, while the post-test scores will be statistically different.