**EFFECIVE PROPOSALS INCLUDE SCIENTIFICALLY-BASED OR PEER-REVIEWED RESEARCH**

Research that contributes to the under- standing of the need, the creation of a plan, the development of a remedy, or the method to adequately measure results should be included or at least referenced in the grant application.

**Scientifically-Based or Peer-Reviewed Research** are essential tools used by proposal writers to garner prime consideration for their grant request. The proposal writing process begins with a literature review of the relevant scholarly articles, trade journals, books and other sources (e.g. dissertations, trustworthy websites, or conference proceedings information) published on the topic, issue, or need pertinent to the grant seeker.

**Use Research to Define the Need or Problem.** Effective grant writing reveals the significance or very nature of a problem and presents a persuasive plan that will be undertaken to achieve clear, sustainable results. A literature review will help define the problem and reveal component issues associated with the problem.

**Use Research to Develop Measurable Goals and Objectives.** The development of measurable goals and objectives can be enhanced by scientifically–based or peer-reviewed research. The operative word is measurable: “***To (increase/decrease) (what) by (% / number) among (whom) by (when) as measured by (how do you know / assessment tool).”*** Keep in mind that a goal is a general statement about the solution to the problem (what you want to hap- pen) and the objectives are the specific statements (the steps) that describe the changes necessary for achieving the goal.

Look for sources of data and relevant assessment tools in the literature review and incorporate the same or equivalent data in your grant application when appropriate. Assessment tools include surveys, tests, or data and can be selected from a variety of online sources, purchased through commercial assessment tool providers, or self-created, although this step may require a lengthy process to establish the reliability and validity of the tool.

**What does Scientifically-Based Research Mean?** Research that involves the application of rigorous, systematic, and objective procedures to obtain reliable and valid knowledge relevant to education activities and programs; and

1. Employs systematic, empirical methods that draw on observation or experiment;
2. Involves rigorous data analysis to test the stated hypothesis and justify the conclusion;
3. Relies on measurements or observational methods that provide reliable and valid data across multiple measurements, observations, and studies by the same or different investigators;
4. Uses experimental or quasi-experimental designs in which individuals, or activities are assigned to different conditions and with appropriate controls to assess the effects of the condition of interest, with a preference for random- assignment experiments, or other designs contained within-condition or across-condition controls;
5. Ensures that experimental studies are presented in sufficient detail and clarity to allow for replication or, at a minimum, offer the opportunity to build systematically on their findings; and
6. Has been accepted by a peer- reviewed journal or approved by a panel of independent experts through a comparably rigorous, objective, and scientific review.

**What does Peer-Reviewed Research Mean:** Articles and papers in peer- reviewed journals were closely inspected before they were accepted for publication--generally by a panel of reviewers who are experts on the topic (that is, the author’s professional peer hence the term peer review). Reviewers look for proper use of research methods, significance of the article’s contribution to the existing literature, and respectful integration of previous authors’ work on the topic in any discussion (in particular, citation of sources used!). Source: American Public University System Online Library.

With respect to peer-reviewed research, faculty should make certain that the author’s credentials, perspective (is the author objective or is contrary information available), and argument (is it persuasive or supported by evidence) appropriately aligns and supports the standards of the identified needs, goals and objectives of their proposed program or project.

<http://www.clayton.edu/Grant-Contract-Programs/Links>