## **Mathematics and Science Partnership Grants: Background Information**

## Application due: 12/10/2010 at 5:00 p.m.

#### **Background Information**

Title II, Part B of No Child Left Behind (NCLB) authorized the Mathematics and Science Partnerships (MSP) program as an avenue to improve student academic achievement in mathematics and science by improving teacher content knowledge and skills in these curricular areas. Partnerships between high-need school districts and the science, technology, engineering, and/or mathematics (STEM) faculty in institutions of higher education are at the core of these improvement efforts

The - P.L. 107-110, Sec. 2201 (a) (1-5)

The purpose of this part is to improve the academic achievement of students in the areas of mathematics and science by encouraging State educational agencies (SEAs), institutions of higher education (IHEs), local educational agencies (LEAs), elementary schools, and secondary schools to participate in programs that --

- \* Improve and upgrade the status and stature of mathematics and science teaching by encouraging institutions of higher education to assume greater responsibility for improving mathematics and science teacher education through the establishment of a comprehensive, integrated system of recruiting, training, and advising mathematics and science teachers:
- \* Focus on the education of mathematics and science teachers as a career-long process that continuously stimulates teachers' intellectual growth and upgrades teachers' knowledge and skills;
- \* Bring mathematics and science teachers in elementary schools and secondary schools together with scientists, mathematicians, and engineers to increase the subject matter knowledge of mathematics and science teachers and improve teaching skills through the use of sophisticated laboratory equipment and work space, computing facilities, libraries, and other resources that institutions of higher education are better able to provide than the elementary and secondary schools;
- Develop more rigorous mathematics and science curricula that are aligned with challenging state and local
  academic content standards and with the standards expected for postsecondary study in engineering, mathematics,
  and science; and
- \* Improve and expand the training of mathematics and science teachers, including training said teachers in the effective integration of technology into curricula and instruction.

The intent of this legislation is the formation of partnerships among institutions of higher education and school districts, elementary schools, and secondary schools to provide professional development activities that increase the subject matter knowledge and teaching skills of mathematics and science teachers.

## **Definitions**

#### Definitions

Note: For a complete list of all definitions related to this legislation, please refer to the No Child Left Behind Act of 2001, Title IX - General Provisions, Part A - Definitions.

**Core Academic Subjects -** The term "core academic subjects" means English, reading, language arts, mathematics, science, foreign languages, civics and government, economics, arts, history, and geography.

**Institute of Higher Education -** 1998 Amendments to the Higher Education Act of 1965 P.L. 105-244 Title I - General Provisions PART A DEFINITIONS SEC. 101. GENERAL DEFINITION OF INSTITUTION OF HIGHER EDUCATION.

- (a) INSTITUTION OF HIGHER EDUCATION For purposes of this Act, other than Title IV, the term 'institution of higher education' means an educational institution in any State that -
- (1) admits as regular students only persons having a certificate of graduation from a school providing secondary education, or the recognized equivalent of such a certificate;
- (2) is legally authorized within such State to provide a program of education beyond secondary education;
- (3) provides an educational program for which the institution awards a bachelor's degree or provides not less than a 2-year program that is acceptable for full credit toward such a degree;
- (4) is a public or other nonprofit institution; and
- (5) is accredited by a nationally recognized accrediting agency or association, or if not so accredited, is an institution that has been granted pre-accreditation status by such an agency or association that has been recognized by the Secretary for the granting of accreditation status, and the Secretary has determined that there is satisfactory assurance that the institution will meet the accreditation standards of such an agency or association within a reasonable time.

**Highly Qualified Paraprofessional** - A paraprofessional with an associate's degree, the equivalent of two years of college, or demonstrated competency in a field or academic subject as evidenced by passing a formal test for paraprofessionals.

**Low-Performing School -** The term "low-performing school" means an elementary school or secondary school that is identified as needing improvement for failing to make adequate yearly progress in enabling all students to meet academic achievement standards as defined in the state's own plan for two consecutive years.

**Major Role** - "Major role" is defined as having key responsibilities such as those of an administrator/fiscal agent, co-director, evaluator, consultant, or it may also be defined in terms of the amount of money received in compensation from the grant (i.e., an individual may not receive more than 10% of the total grant request if that individual is participating in more than one grant).

**Out-of-Field Teacher -** This term defines a teacher who is teaching an academic subject or a grade level for which the teacher is not highly qualified.

**Paraprofessional -** A "paraprofessional" is an individual with instructional duties. Individuals who work solely in non-instructional roles such as food service, cafeteria, playground supervision, personal care services, and non-instructional computer assistance are not considered to be paraprofessional.

Professional Development - (NCLB, Title IX, Section 9101) -

includes activities that -

- \* improve and increase teachers' knowledge of the academic subjects the teachers teach, and enable teachers to become highly qualified;
- \* are an integral part of broad school-wide and district-wide educational improvement plans;
- \* give teachers, principals, and administrators the knowledge and skills to provide students with the opportunity to meet challenging State academic content standards and student academic achievement standards;
- \* improve classroom management skills;
- \* are high quality, sustained, intensive, and classroom-focused in order to have a positive and lasting impact on classroom instruction and the teacher's performance in the classroom; and
- \* are not one day or short-term workshops or conferences;
- \* support the recruiting, hiring, and training of highly qualified teachers, including teachers who became highly qualified through State and local alternative routes to certification; and
- \* advance teacher understanding of effective instructional strategies that are based on scientifically based research (except that this sub-clause shall not apply to activities carried out under Part D of Title II); and
- \* strategies for improving student academic achievement or substantially increasing the knowledge and teaching skills of teachers; and
- \* are aligned with and directly related to State academic content standards, student academic achievement standards and assessments; and
- \* the curricula and programs tied to the standards described in sub-clause(I) except that this sub-clause shall not apply to activities described in clauses (ii) and (iii) of section 2123(3)(B)(effective instructional practices);
- \* are developed with extensive participation of teachers, principals, parents, and administrators of schools to be served under this Act:
- \* are designed to give teachers of limited English proficient children, and other teachers and instructional staff, the knowledge and skills to provide instruction and appropriate language and academic support services to those children, including the appropriate use of curricula and assessments.
- \* to the extent appropriate, provide training for teachers and principals in the use of technology so that technology and technology applications are effectively used in the classroom to improve teaching and learning in the curricula and core academic subjects in which the teachers teach;
- \* as a whole, are regularly evaluated for their impact on increased teacher effectiveness and improved student academic achievement, with the findings of the evaluations used to improve the quality of professional development;
- st provide instruction in methods of teaching children with special needs;

- st include instruction in the use of data and assessments to inform and instruct classroom practice; and
- \* include instruction in ways that teachers, principals, pupil services personnel, and school administrators may work more effectively with parents; and may include activities that -
  - \* involve the forming of partnerships with institutions of higher education to establish school-based teacher training programs that provide prospective teachers and beginning teachers with an opportunity to work under the guidance of experienced teachers and college faculty;
  - \* create programs to enable paraprofessionals (assisting teachers employed by a local educational agency receiving assistance under Part A of Title I) to obtain the education necessary for those paraprofessionals to become certified and licensed teachers; and
  - \* provide follow-up training to teachers who have participated in activities described in subparagraph (A) or another clause of this subparagraph that are designed to ensure that the knowledge and skills learned by the teachers are implemented in the classroom.

## **Definitions**

#### Definitions

Scientifically Based Research - The term "scientifically based research"

- 1) Means research that involves the application of rigorous, systematic, and objective procedures to obtain reliable and valid knowledge relevant to education activities and programs; and
- 2) Includes research that -
  - \* Employs systematic, empirical methods that draw on observation or experiment;
  - \* Involves rigorous data analysis that are adequate to test the stated hypotheses and justify the general conclusions drawn:
  - \* Relies on measurements or observational methods that provide reliable and valid data across evaluators and observers, across multiple measurements and observations, and across studies by the same or different investigators;
  - \* Is evaluated using experimental or quasi-experimental designs in which individuals, entities, programs, or activities are assigned to different conditions, with appropriate controls to evaluate the effects of the condition of interest and with a preference for random-assignment experiments or other designs to the extent that those designs contain within-condition or across-condition controls:
  - \* Ensures that experimental studies are presented in sufficient detail and clarity to allow for replication or, at a minimum, to offer the opportunity to build systematically on their findings; and
  - $_{*}$  Has been accepted by a peer-reviewed journal or approved by a panel of independent experts through a comparably rigorous, objective, and scientific review.

## **Standards Based Curriculum**

- \* Expectations for learning are high for all students and developmentally appropriate;
- \* Standards guide all classroom decisions;
- \* The focus is always on student learning;
- \* Effective instructional practices result in higher levels of achievement for all students; and
- \* Assessment outcomes are used to inform the teacher about the effectiveness of curricular and instructional decisions.

## **Scope of the Mathematics and Science Partnership Grants**

The Appendix A High Need School Districts can be found in the following document.

High Need School Districts

## Scope of the Mathematics and Science Partnership Grants

## 2.1 Availability and Duration of Funding

- \* \$852,984.00 will be available for grant distribution on a competitive basis.
- \* The anticipated award per project is expected to range upward from \$50,000.
- \* Funds will be awarded to selected proposals to begin project activities in January 2011 and to complete by the end of September 2012.
- \* While funding is for only one year, the partnership proposal should be written with possible multi-year funding in mind (1 to 3 years).

## 2.2 Participants/Time Commitment/Professional Development

## 2.2.1 Participants.

Each project proposal is expected to serve a minimum of 25 participants. K-12 teachers, administrators, and paraprofessionals may participate in the project. The high need school district (see Appendix A) is expected to provide a significant number of the total participants. Please keep in mind that the reviewers of submitted projects are likely to consider the cost (grant funds) per participant. Proposals should clearly state the expected number of participants.

## 2.2.2 Time Commitment.

Summer activities are expected to be scheduled for 10-15 days and academic-year workshops for 4-10 days, for a total of 14-25 days of professional development. One professional development day is expected to last six (6) hours. The project activities may be in the form of a course taught in a classroom setting and/or job-embedded format, with optional graduate credit awarded. University project staff should provide additional support at participating school sites during the academic year.

## 2.2.3 Professional Development.

The term 'professional development' includes activities that improve and increase teachers' knowledge of the academic subjects the teachers teach, and enables teachers to become highly qualified; are an integral part of broad school-wide and district-wide educational improvement plans; give teachers, principals, and administrators the knowledge and skills to provide students with the opportunity to meet challenging State academic content standards and student academic achievement standards [NCLB, Title IX, Section 9101 (34]. Professional development activities may include classes, conferences, workshops, action research, coaching/peer mentoring, focus/study groups, scoring work, mentoring, networking, collaborations, etc.

## 2.2.4 Summer Workshop or Institute.

The "summer workshop or institute" is to be -

- \* Conducted for a period of time not less than two weeks;
- st Includes, as a component, a program that provides direct interaction between educator participants and IHE faculty; and
- \* Provides for **follow up** classroom training during the academic year that is conducted for a period of **not less than three days** except that -
  - \* If the follow-up training is for teachers in rural school districts, the training may be conducted through distance learning.
- \* Includes intensive, school-based, job-embedded follow-up.

## 2.3 Number of Projects to be Funded

Projected number of projects to be funded - 4 or more

## 2.4 Origins of Proposals

Proposals may emanate from **either of the required eligible partners** as described on the Eligibility tab. Innovative proposals targeted at focused grade levels and based on the identified needs of specific schools within a qualified school district (especially low-performing schools) are encouraged.

## **Scope of the Mathematics and Science Partnership Grants**

## **General Guidelines**

#### 2.5.1 Administration

The administrator/fiscal agent for the project will need to be identified in the application. The administrator/fiscal agent may be any one of the required eligible partners. The named administrator/fiscal agent will be responsible for administering all aspects relating to the project, including, but not limited to, coordinating all financial details, completing all forms, and assuring that all requirements and guidelines are followed.

The administrator/fiscal agent for the project shall keep an "audit trail" beginning with the preparation of the application, and shall include records to support the application (See Section 76.730 and 76.731 of EDGAR [Education Department General Administrative Regulations] - EDGAR is available from the U.S. Department of Education). These records must show -

- 1. the amount of funds under the grant;
- 2. how the recipient uses the funds,
- 3. the total cost of the project,
- 4. the share of the cost provided from other sources (if applicable); and
- 5. other records to facilitate an effective audit.

The administrator/fiscal agent will retain records of the program for five years, will allow access to those records for purposes of review and audit, and ensure that all funds are used by the dates defined in the application.

## 2.5.2 Availability of College or Continuing Education Credit for Participants/Permitted Tuition Rate.

Proposed projects are expected to provide an opportunity for participating educators (teachers, administrators, and paraprofessionals) to obtain college or university credit. However, credit must be an opportunity and not a requirement. Educators must be able to attend project activities at no cost and for no credit if they so choose. Participants who wish to receive credit are responsible for tuition and fees as described below.

If instructor costs are paid with grant funds, the institution of higher education (IHE) granting the credit may only charge an administrative recording fee to the participants registering for credit.

#### 2.5.3 Credit and Disclaimer.

Statements of credit and disclaimer are required by the U.S. Department of Education (USED) and the Wyoming Department of Education (WDE). Therefore, credit and disclaimer for both USED and WDE must be included in all notices, recruiting brochures, workshops materials, and any other publications produced with support of WDE grants. The two statements below will satisfy this requirement -

This project is funded by a federal grant under No Child Left Behind (NCLB) [P.L. 107-110, Title II, Part B] administered by the Wyoming Department of Education. [If applicable, also name any other federal/non-federal programs granting funds to the project with amounts of money/percentage of project being funded from these sources.]

Opinions and findings expressed herein do not necessarily reflect the position or policy of the U.S. Department of Education or the Wyoming Department of Education, and no official endorsement by either of these agencies should be inferred.

## 2.5.4 Site Visits(s)

During the time period covered by this grant, a site visit from the Wyoming Department of Education (WDE) Title II-B Grant Manager or another representative of the WDE may be expected. It is the responsibility of the administrator/fiscal agent to ensure that the WDE is kept current as to when the activities that are outlined in the grant application are taking place.

## **Eligibility**

The Appendix A High Need School Districts can be found in the following document.

High Need School Districts

## **Eligible Partnership**

The WDE Mathematics and Science Partnership Grants will be awarded competitively to eligible partnerships.

## An eligible partnership must include:

- 1) an engineering, mathematics, or science department of an institution of higher education (Refer to IHE definition in the Definitions tab and Assurances); and
- 2) a high-need school district (see Appendix A: High Need School Districts).

## The application may originate from any of the required partners.

In addition to the above required partnerships, additional partners may include:

- 1) another engineering, mathematics, or science department of an institution of higher education;
- additional local education agencies, public charter schools, public or \*private elementary or secondary schools, or a consortia of such schools;
- 3) the school or college of arts and sciences at an institution of higher education
- 4) a business; or
- 5) a nonprofit or for-profit organization of demonstrated effectiveness in improving the quality of mathematics and science teachers.[NCLB, Title II, Part A, Subpart 3, Section 2131 (1)]

An eligible school district may be a partner in two grant applications. WDE will resolve cases of ambiguity regarding eligibility and participation.

\* The project manager must document the invitation extended to area private schools to participate in the planning of the project professional development activities.

## **Activities**

## **Activities**

Funds for the partnership are to used by the universities, districts, and/or local schools to:

- 1) Plan and provide professional development that:
  - \* Is designed to meet the specific needs of the partner district(s), and then other partner districts, if included in the partnership, who have similar needs,
  - \* Includes intensive, school-based, job-embedded follow-up and
  - \* Spans a period beginning January 2011 through September 2012.
- 2) Create opportunities for enhanced and ongoing professional development of mathematics and science teachers that improves the subject matter knowledge of those teachers and assists them with becoming highly qualified;
- 3) Promote strong teaching skills for mathematics and science teachers and teacher educators, including integrating reliable scientifically based, research-based, and technology-based teaching methods into curriculum; and
- 4) Establish and operate mathematics and science summer workshops or institutes, including follow-up training, for elementary and secondary school mathematics and science teachers that:
  - \* Directly relates to the curriculum and academic areas in which the teacher provides instruction, and focuses only secondarily on the pedagogy;
  - \* Enhances the ability of the teacher to understand and use challenging state academic content standards for mathematics and science

While content-rich, the proposed projects should model standards-based curricula as well as instructional and assessment practices, in keeping with state standards. The content-rich curriculum should broaden and deepen the subject-matter knowledge of the participants. The leadership skills necessary to provide guidance to teachers in the content area should include knowledge of learning styles/multiple intelligences of both adults and children and knowledge of attitudes that might inhibit change. Projects should equip participants with the skills and abilities to serve all students and to raise the performance of all students. Consideration will be given to projects that are designed to enhance the capacity for long-term sustainable growth and reform in these areas. The projects should help to chart new directions for professional development in the core content area of mathematics and/or science in schools. The project design should also foster school-building teams or school-district teams of teachers, paraprofessionals, and principals who will work together for support-team purposes throughout the year.

The partnership proposal should be written with possible multi-year funding in mind (1 to 3 years), as current research supports the belief that ongoing professional development experiences have a substantial, positive influence on both teachers' classroom practice and student achievement. A number of studies suggest that the duration of professional development is related to the depth of positive teacher change. Research on teacher learning indicates that successful professional development shares several core features:

- 1) Ongoing collaboration of teachers (measured in years) for purposes of planning;
- 2) The explicit goal of improving students' achievement of clear learning goals;
- 3) Professional development that is anchored by attention to students' thinking, the curriculum, and pedagogy; and
- 4) Access to alternative ideas and methods, with opportunities to observe these in action and to reflect on the reasons for their effectiveness.

Project proposals submitted to WDE should include, in the project design, how these core features will be addressed.

# **Geographic Distribution**

## **Geographic Distribution**

WDE will award grants that are:

- 1. equitably distributed by geographic area within the state; or
- 2. to eligible partnerships in all geographic areas within the state.

## **Mathematics and Science Partnership Grants: Review of Proposals**

All proposals will be evaluated by a review panel composed of at least three peers and/or stakeholders having expertise in mathematics and/or science. Proposals will be selected for funding based upon the following criteria:

- 1. final score assigned by the proposal review team (based on the scoring rubric);
- 2. project significance and objectives;
- 3. cost effectiveness ratio determined by the relationship between the number of teachers served, the actual amount of teacher-faculty instructional contact time, and the total cost of the program;
- 4. all partnerships are equitably distributed by geographical area; and
- 5. funds available.

## The Wyoming Department of Education:

- 1. May not fund any or all proposals.
- 2. May reject proposals that do not meet specific specifications and criteria.
- 3. May select review panel as deemed appropriate.
- 4. May partially fund projects or adjust award amounts.
- 5. Will reject proposals received late.
- 6. Will inform eligible partners of this RFP.
- 7. Will use a competitive grants scoring system for the selection process.
- 8. Will provide technical assistance to preparers of proposals if requested.
- 9. Will continue to offer technical assistance to successful applicants throughout the term of the grant.
- 10. Will announce grant awards within a reasonable time via the eGrants Management System.

Requests for clarification of the requirements or for other assistance in preparing and submitting proposals should be directed to Anne Ochs at 307-682-4550 or e-mail aochsgrants@yahoo.com

Awards will be announced on or about January 30, 2011.

# **Mathematics and Science Partnership Grant Basic Rubric**

**Project Name:** 

Reader Name:	Review Date:					
Wyoming Department of Education Competitive Grant Basic Point Requirements: 0 - 102 points						
1 Point	2 Points	3 Points	Points Awarded	Weight	Total Points Awarded	
1. Abstract						
Abstract not completely based on RFP requirements.	Abstract is based on the RFP requirements, but is incomplete and/or lengthy.	Abstract complete and concise and is based on the RFP requirements.		x 1		
2. Statement of Need						
Portions of the Statement of Need may not support the goals and objectives of the proposal.	Statement of Need is based on valid data appropriate to the area of service, but is not clear and concise.	Statement of Need is clear, concise and based on valid data appropriate to the area of service.		<b>x</b> 3		
3. Population						
Proposal indicates the population to be served but this population does not meet any of the requirements specified in the RFP.	Proposal indicates population to be served, but this population does not exactly match the population described in the RFP.	Proposal indicates population to be served and serves the population indicated in RFP.		x 2		
4. Community Involvement Coo	rdination					
Limited coordination with other education, government, and community agencies/businesses/schools is included.	Coordination with other education, government, and community agencies/businesses/schools is included but sketchy.	Coordination with other education, government, and community agencies/businesses/schools is described in detail.		x2		
5. Project Goals						
=	Project goals are described and are appropriate to the project, but are not clearly defined as required in the RFP.	Project goals are described in a clear, organized manner and are appropriate to the project as required in the RFP.		x 5		
6. Measurable Objectives						
Objectives described are not measurable. They may or may not relate to the project goals and RFP requirements.	Some objectives are measurable, not all. All or most relate to the project goals and fulfill requirements in the RFP.	All objectives are measurable and described in a clear, organized manner. Each relates to the project goals and fulfills requirements in the RFP.		x 5		
7. Activities						
The activities described do not relate to the planned objectives.	Some, not all, of the activities described are instrumental in reaching the planned objectives as they relate to the project goals requried in the RFP.	The activities described are instrumental in reaching the planned objectives as they relate to the project goals required in the RFP.		x 5		
8. Timelines						
Timeline appears unrealistic.	There is a realistic timeline for reaching most, not all, goals and objectives.	There is a realistic timeline for reaching all goals and objectives within the grant period.		x 2		
9. Evaluation						
Evaluation is planned for some or all objectives, but does not seem effective.	Effective evaluation is planned for some objectives, not all.	Effective evaluation is planned for each objective.		x 2		
10. Disseminating Results						
There are plans to share results of the project, but the methods appear ineffective.	There are clear plans to share results of the project, but the method described does not include all educators that could be affected.	There is a clear, effective method described for sharing the results of the project with educators in participant schools as well as the region and state.		x2		
11. Job Descriptions						
Only curricula vitae were included.	Job descriptions and/or curricula vitae were not complete or do not relate to the project goals and objectives.	There are job descriptions and curricula vitae for budgeted staff. The descriptions support project goals and objectives.		<b>x</b> 1		

12. Budget Structure						
There is little or no alignment of the expenditures with the project activities.	Some, but not all, expenditures are adequately described, allowable, and aligned with the project goals and objectives.	All expenditures are adequately described, allowable, and aligned with the project goals and objectives.		x 4		
			Grand Total:			
Reader Comments: (4,000 Character Maximum)						
Calculate Totals						

# **Mathematics and Science Partnership Grant Specific Rubric**

Project Name:						
Reader Name:	R	eview Date:				
Wyoming Department of Education Competitive Grant Title II, Part B, Specific Requirements: 0 - 165 points						
1 Point	2 Points	3 Points	Points Awarded	Weight	Total Points Awarded	
Required Partnership  Project does not clearly identify required partners.		Project clearly identifies required partners.		x 5		
2. Establishment of Data Driven Ne Limited or unclear description of needs and how these needs were used to determine project goals and measurable objectives.		Meets expectations of describing needs and how these needs were used to determine project goals and measurable objectives.		х[6		
<b>3. Target of Project</b> The target of the project is minimally defined.	The target of the project is defined, but lacks clarity.	The target of the project is clearly defined.		x 7		
<b>4. Project Goals and Measurable Ol</b> The proposal is unclear in two of the areas bulleted in the 3 point column.	=	The proposal meets all of the following priority criteria:		x 7		
	Coldmin	* Specific, clearly stated, achievable and measurable goals are written in student-centered terms.  * Specific, clearly stated, achievable and measurable goals are stated for the participants. These goals are aligned with the student academic goals.  * Clear objectives (competencies) for the participants.  * Clear statement of the expected number of participants and their position.				
5. LEA Collaboration						
Unclear description of required collaboration.		Description of required collaboration by both school district(s) and higher education meets the expectations of the RFP.		x 6		
6. Description of Activities						
The proposal is unclear in two of the areas bulleted in the 3 point column.	The proposal is unclear in one of the areas bulleted in the 3 point column.	The proposal meets all of the following activity description requirements:		x 6		
		* Explanation of activities refers to objectives by number.  * Subject content and pedagogical skills are described.				
		* Teaching strategies are described.  * Tentative summer schedule, with contact hours, is provided.  * Tentative follow-up schedule is provided.				
7. WDE Content Standards		· · · · · · · · · · · · · · · · · · ·				
Limited or unclear alignment of project with WDE state content standards and challenging student performance standards.		Meets expectation of aligning project with WDE state content standards and challenging student performance standards.		x 6		
8. Professional Development Stand	ards					
Some application of generally accepted professional development activities but not up to expectations.	I	Meets expectations of high quality professional development.		x 7		

## 9. Job Embeddedness

Some follow-up exists to embed the learning in the daily jobs of educators.	Meets expectations to embed the learning in the daily jobs of educators.	Grand	x 5	
Reader Comments: (4,000 Character Maximum)				
Calci	ulate Totals			