



## *Enhance Service Learning*

*Dr. William A. Gray*

*President, Mentoring Solutions*

*Email: [wgray@mentoring-solutions.com](mailto:wgray@mentoring-solutions.com)*

*Telephone: (250) 652-0324*

**Background:** For 16 semesters, I did R&D to enhance Service Learning. What I discovered enhanced how more than 300 Undergrads served as Mentors for more than 1,000 youth in grades 4-12 (gifted/talented; English-as-Second-Language; At-risk of dropping out; Native youth). These Undergrad-mentors earned course credit for implementing **Mentor-Assisted Enrichment Projects** [MAEPs], based on each Mentor's expertise. MAEPs were structured to include community-based activities and learning, and to produce Multiple Benefits for everyone involved.

I trained Mentors to employ best practices from **didactic instruction** and **discovery learning**, and to involve Professionals so that Proteges could find out which careers best fit their aptitudes, talents, and career aspirations. Many MAEPs focused on Science, Technology, Engineering, Mathematics [STEM] with an added "Arts" components to attract more Proteges to participate and become responsible citizens, who contribute to solving real life problems (an early version of what is now called STEAM). Mentors ensured that Proteges learned about important concepts/practices, learned why they are important, and learned how they are being applied by Professionals to solve real world problems.

### **Additional R&D discoveries:**

- ❖ How to ensure Proteges view MAEPs as "their" project even though based on Undergrad-mentor's expertise
- ❖ How to create a STEM Pipeline of Youth-Undergrads-Professionals
- ❖ Appropriate structure and incentives (e.g., how to structure the course assignment so it will be fulfilled and easily graded)
- ❖ Roles & responsibilities for everyone involved
- ❖ Needed training for Mentors & Coordinators
- ❖ How to produce intentional Multiple Benefits for everyone involved

**Proteges** (Youth in grades 4-12) benefit in multiple ways, such as:

- Learn to plan and carry out a project – and create and give a Multi-Media PowerPoint presentation of what was done and learned.
- Learn how to take turns leading and following (being team members) within the project group.
- Utilize higher-level thinking skills in each project (based on Bloom's Cognitive Taxonomy).
- Learn how to give a public presentation to an audience to learn speaking skills and confidence – and share what was done/learned.
- Complete something they start to gain a feeling of accomplishment (**parents** especially appreciate this).
- Became more college-and-career ready.

**Undergraduate-mentors** benefit in multiple ways by serving as mentors, such as:

- Learn to use 4 Mentoring Styles to equip and empower Proteges.
- Learn project management by planning, carrying out, completing and presenting a MAEP with a group of Proteges.
- Learn how to make MAEP activities so engaging that Proteges will complete and present "their" MAEP.
- Learn how to utilize STEM professionals (too busy to be mentors) to motivate interest in STEM occupations.
- Learn how to get Proteges ready to give a Multi-Media PowerPoint Presentation of their completed MAEP.
- Interact with Professionals who can help with gaining employment.
- No Undergrad-mentor dropped out of university while carrying out a MAEP (did not want to disappoint their Proteges).

Teachers and schools, faculty and universities/colleges, and industry partners also benefit when MAEPs are properly implemented.

**Enhance Service Learning:** I can provide R&D discoveries described above to enhance both Service and Learning.