What is a "good" ELO?
~ Mariane Gfroerer, NH Department of Education

Experiences from other schools and states have shown that rigorous ELOs – those that result in the highest levels of academic and personal learning for students – have 4 general components. These are:

- Research
- Reflection
- Product
- Presentation

Establishing these four components in the ELO plan from the beginning helps the student to focus, gives them four natural 'goals' to aim for, and helps you to benchmark progress. These components also lend themselves nicely to varying assessment measures, both formative, as growth and learning are occurring, and summative, as the culminating assessment of the learning experience. Do not feel constrained to force these four components into an ELO where they are not appropriate (such as requiring a student with high performance anxiety to exhibit in front of strangers), but in general do try to include them in the ELO plan.

Research: Research is such a good place for a student to start with any exploration. Learning where and how to find more information about their subject can turn a lukewarm interest into an engaged enthusiasm. Research adds to the knowledge base of the subject matter, in a similar way that your class lecture would. Base the evidence of this aspect of the ELO on the subject, the student, and your professional judgment. Ask, "Is this a good opportunity for the student to gain in research-writing skills or will that emphasis impede their engagement? Will an outline or PowerPoint be more appropriate to this situation or would the student benefit from putting together a formal research paper? How important is it that they reflect on what new ideas and avenues their research revealed?"

Reflection: When you ask students to reflect often and regularly on their ELO, you teach them how to examine their experience and interpret it in ways that lead to new understanding. An experience full of jumbled memories of emotions and reactions falls into order as genuine learning. Students are able to compare their own values and goals with the issues that formed the basis of their experience that day. In addition, your direction and guidance for the reflection helps them to continually connect their ELO activities to the ELO course level competencies. All of this develops the higher order thinking skills. The following suggestions are adapted from Colorado State University:

- Make purposeful reflection an expected part of the ELO experience
- Write down your expectations for student reflection, including frequency, sharing, evaluation criteria, and general content parameters, so that students can refer back to it throughout the experience
- Consider not just the written reflection, but group and individual reflection activities
- Challenge each student to self-assess their knowledge, values and skills as they move through the learning
- Establish a framework for reflection that guides students from objective observations and subjective responses to interpretation, awareness, analysis, and action.

- Always seek closure on emotional issues that arise in student reflection, but leave some cognitive and topical issues open for the student to continue mulling over.

By varying the reflection activities, you can accommodate multiple learning styles and help students understand that reflection is part of the learning process, not an isolated activity. Reflection activities may include any or a combination of the following:

- Journals
- Reflective papers
- Class discussions
- Small-group discussions
- Presentations
- Responses to readings (research, readings you provide, media content, - anything relevant to the issues surrounding their ELO experience)
- Electronic discussions (e.g., chat, e-mail, online forum)

Product: Learner-centered activities often include student-created products that demonstrate the results of their learning. The creation of products that reflect the knowledge and information constructed by students is one of the focal points of learner-centered instruction. Students are encouraged to show the outcome of their insights by generating an appropriate original product.

In some ELOs, the product will grow logically from the topic or discipline that the student is exploring, such as building working robotic models, or constructing an antiseptic wound care kit. In some cases, you will need to help the student think creatively about what "original product" would adequately demonstrate the learning and mastery of competencies involved. Help students move beyond simple pencil-and-paper artifacts such as written reports to products that involve multiple higher-order thinking and problem-solving skills.

Some ideas for products (adapted from Teaching for Today, from McGraw-Hill and from NH DOE CBAS 2006)		
Song/song lyrics	Outlines / Diagrams	Visual graphic
Drawing	Original experiment	Interview
Play script	Newspaper article	Advertisements
Spreadsheet	Historic document	Letter to the editor
Web development	Web based demonstration	Comparison chart
Free-form map	Flowchart	Analogy in any form
Pictures / photos	Graphic novel	Persuasive letter
Venn diagram	Foldable booklet	Flip chart
Painting	Mural	Lesson plan
Multimedia presentation	Digital video	Pilot TV Show
Itinerary	Travel guide	Floor /building plan
Tapestry	Bulletin board	Weather forecast
Quilt	Performance	Group discussion
Game	Illustrated Time Line	Menus/ Recipes
Facilitation of a meeting	3-D model	Debate

Demonstration	Diorama	Dramatic presentation

Assessing student products: Rubrics, or other established guides to assessment, are helpful tools for teachers and for students. As well as taking the guess work out of expectations for students, they help you – the teacher – plan for grading. In creating the product rubric, teachers should think about a few common elements:

- What is the purpose of having a student create a product (to give visual demonstration of the skill competencies) ?
- Has the student met that purpose?
- To what degree?
- To what quality?
- Can they connect the product to a conscious reflection of learning?

Presentation: The ELO presentation is one of the most commonly misunderstood of the ELO components. Many people view the presentation as a way for a student to declare that they completed a learning experience, this was how they did it, and this is what happened when they did it. They may include aspects of what they learned while they did it. The presentation becomes a sort of 'verbal report', sharing the same information as is gleaned from the written report. In fact, the ELO presentation is an authentic assessment tool. It is a venue for student demonstration of mastery of those course-level competencies connected with the ELO. Therefore, it's not so much a public narrative about "what I did and what I learned" as "Here is how I show you my learning – right now in front of you". This "demonstration" is multi-layered, showing the student growth in personal, social, academic and skill areas, as well as planfully demonstrating the ability to synthesize those areas which good presentation always requires. In order to be a fully facetted presentation, it may include the research, reflection, and product as well. In some places, the presentation takes the form of an exhibition, which is presented in front of an assessment team and others, includes the research, reflection, and product, may include the longitudinal portfolio of the extended learning opportunity, and is completely student-centered.

Assessing student presentations: In your ELO training, you will have received a sample rubric from Animo FTA Charter High School, Los Angeles, CA that may be used with student presentation. We reproduce it here because we believe it is a good example. You may adopt it or adapt it for your ELO assessment. Please note that this rubric does not include assessment of the content learning or foundation knowledge of the subject. Assessors will use more than one rubric to assess different aspects of the ELO, and some aspects may have been assessed before the presentation.

	Advanced	Proficient	Developing	Beginning
Project Depth, Learning Goals & Competencies	• The emphasis is on how & why, analysis & viewpoints are obvious. knowledge-based questions have been addressed as well. Evaluation &	• The questions are deeper and how & why analysis has been done. • Learning Goals are addressed in detail, student can explain	• The questions are deeper: "how" and "why" allow for analysis through maybe not complete • Several Learning Goals are addressed	• Focus is on knowledge-based questions (what, when, where); no analysis • Little or no evidence of

	synthesis are included. • Several Learning Goals are addressed exhaustively (all sub-goals, included) • Competencies are identified and addressed in depth and connected to Learning Goals. Seamless integration into project	the goals (1 – 2 of sub-goals) • Competencies are addressed in some detail with relatively seamless integration into the project	in some detail (1 or 2 sub-goals) • Competencies are identified and addressed	Learning Goals • Competencies are identified, but not sufficiently addressed
Authentic Context	• The combination of traditional bookwork and real world produces an original point of view • The product is based on meaningful and sustained interactions with experts and/or a professional environment • The products of this work contribute positively to student's community	• The product balances traditional bookwork and real world • There is substantial evidence of adult relationships • The product features objectives that go beyond "school work", affecting the student and others	• The product is focused either on traditional bookwork or real world, but doesn't balance the two • There is evidence of relationships with adults outside the school but additional perspectives are needed • There is little or no evidence of relationships with experts outside the school	• The product shows little evidence of focus on either traditional bookwork or real world • There's little or no evidence of relationships with experts outside the school • The product is solely "fulfilling" the school assignment
Personalization	• The student's interests and choices are identifiable throughout all aspects of the work • Student's life situation, experience, and point of view are reflected <u>throughout</u> the work • The student has in some way changed as a result of having undertaken this work	• The student's interests and choices are identifiable in most aspects of the work • Student's life situation, experience and point of view are reflected in the work • Student demonstrates self-awareness and ownership of the learning	• There is a minimal connection to the student's interests and choices • There are some connections to the student's life, experiences or point of view • Student is beginning to show self-awareness and ownership of the work	• It is unclear if the student's interests ad choices connect to the work • There is little or no connection to the student's life or experiences • Student views work as fulfillment of an "assignment"

Adapted from Animo FTA Charter High School, Los Angeles, CA