

APPENDIX B

EFF Developmental Skills Matrices

COMMUNICATION SKILLS: Read Critically

LEVEL 2	LEVEL 3	LEVEL 4
READ CRITICALLY		
<ul style="list-style-type: none"> • Focus is on literal meaning, concrete facts. • Looks for answers to concrete questions, new facts, agreement with own learned rules of right and wrong. • Emphasizes whether or not content gives facts, directions, rules. • Challenge is to be able to see general and abstract meaning. 	<ul style="list-style-type: none"> • Focus is on author’s general meaning, main points, what the expert says. • Looks for what the author/expert is saying and whether or not it validates or is in opposition to one’s community of ideas or beliefs; looks to learn what one <i>should</i> know. • Emphasizes authority and expertise of author, wholly identifying with or rejecting author based on compatibility or not with one’s affiliations. • Challenge is to be able to critique author or text based on own standards, pick and choose individual, personal points of agreement and disagreement with author/text independent of what the experts and authorities say. 	<ul style="list-style-type: none"> • Focus is on gaining greater and more complex understanding, integrating new information into own system of knowledge and expertise. • Looks for multiple layers of meaning, expansion of and challenge to own knowledge and understanding. • Emphasizes understanding author’s perspective in relation to one’s own, examining what makes sense, what doesn’t and why; need for understanding multiple perspectives in order to more fully understand the whole. • Challenge is to be able to set aside one’s values and standards with which one’s self is identified and invested in, and to embrace values, standards, and perspectives that are diametrically opposed to those one has identified oneself with.
CONVEY IDEAS IN WRITING		
SPEAK SO OTHERS CAN UNDERSTAND		
LISTEN ACTIVELY		
VIEW CRITICALLY		

COMMUNICATION SKILLS: Convey Ideas in Writing

LEVEL 2	LEVEL 3	LEVEL 4
READ CRITICALLY		
CONVEY IDEAS IN WRITING		
<ul style="list-style-type: none"> • Focus is on communicating concrete ideas with concrete facts, rules, one’s concrete goals. • Tries to communicate the right vs. wrong, concrete step-by-step process or description of the issue. • Emphasizes the facts; concrete reasons why one’s idea is better than another, or is right when another is wrong; getting own concrete needs and goals met. • Challenge is to be able to convey general ideas and abstract meaning; to internalize one’s audience, i.e., imagine how another will hear and feel about what one writes. 	<ul style="list-style-type: none"> • Focus is on communicating to a perceived or imagined audience one’s feelings, abstract ideas, self, or transmitting the views of experts or authorities, all for the purpose of connecting with others, belonging. • Tries to communicate abstract ideas of importance as representative of one’s self in order to be understood, accepted, and liked. • Emphasizes agreement, acceptance, connecting with others through philosophical, psychological, or emotional ideas, loyalties, and identifications as defined by external authorities. • Challenge is to be able to separate one’s ideas and feelings from one’s need to be accepted and to belong. 	<ul style="list-style-type: none"> • Focus is on expressing the complexity and independence of one’s ideas to a specific audience for the purpose of being able to express oneself publicly and get feedback. • Tries to express complexity in such a way as to do justice to one’s own sense of an issue, to raise questions, start a dialogue or debate, make oneself understood in relation to a wide array of opinions. • Emphasizes multifaceted nature of ideas and opinions, need for differing perspectives for the whole picture; independence, ownership of and responsibility for own ideas, opinions, and perspectives. • Challenge is to be able to not be identified with or invested in one’s own written ideas and opinions, values, morals.
SPEAK SO OTHERS CAN UNDERSTAND		
LISTEN ACTIVELY		
VIEW CRITICALLY		

COMMUNICATION SKILLS: Speak so others can understand

LEVEL 2	LEVEL 3	LEVEL 4
READ CRITICALLY		
CONVEY IDEAS IN WRITING		
SPEAK SO OTHERS CAN UNDERSTAND		
<ul style="list-style-type: none"> • Focus is on “telling it like it is” i.e., just the facts, with the sense that there is only one way to tell and understand a story or issue. • Tries to communicate just the facts and concrete details so that others will come to the same understanding as oneself. • Emphasizes that there is one right way to look at or understand a story or issue and one’s job is to communicate that way clearly. • Challenge is to be able to recognize own perspective as one among many and to be able to speak to a wide audience knowing everyone will react differently to what one is saying. 	<ul style="list-style-type: none"> • Focus is on communicating clearly through speaking to a known or perceived audience so that the audience will understand and accept one’s point of view and be persuaded by it, agree with it and accept oneself as well. • Tries to connect with audience, whether one or many, to form a bond of mutuality and understanding. • Emphasizes connection with others and coming to a shared, mutual understanding and acceptance of an issue and of each other. • Challenge is to be able to formulate and express one’s own ideas and opinions for their own sake, independent of others’ acceptance. 	<ul style="list-style-type: none"> • Focus is on speaking one’s own ideas clearly and concisely so that they can be understood by a wide variety of people with differing perspectives and opinions. • Tries to speak so that complexity of own ideas comes across in such a way as to invite questions, discussion, dialogue, and disagreement. • Emphasizes audience (one or many) understanding one’s points and perspective, not necessarily agreeing with or accepting them, but engaging with them in some way. • Challenge is to be able to present ideas without an investment in what happens to them or how they are received.
LISTEN ACTIVELY		
VIEW CRITICALLY		

COMMUNICATION SKILLS: Listen Actively

LEVEL 2	LEVEL 3	LEVEL 4
READ CRITICALLY		
CONVEY IDEAS IN WRITING		
SPEAK SO OTHERS CAN UNDERSTAND		
LISTEN ACTIVELY		
<ul style="list-style-type: none"> • Focus is on literal meaning, concrete facts and rules. • Listens for whether or not discussion or conversation meets own concrete needs and goals. • Emphasizes following the rules, doing it the right way, meeting own concrete goals. • Challenge is to be able to generalize. 	<ul style="list-style-type: none"> • Focus is on general meaning, main points, emotional tone of what is said. • Listens for opinions of experts and authorities, confirmation and acceptance of self and self’s belief system. • Emphasizes learning what experts say, accepting and following experts’ guidance and wisdom, agreeing or disagreeing with experts based on compatibility with one’s identified group of belonging, following the party line. • Challenge is to be able to take critical perspective on oneself and on the way in which one hears what one hears. 	<ul style="list-style-type: none"> • Focus is on multiple perspectives and opinions, including theoretical, psychological, political, emotional; and the interaction and integration between and among them. • Listens for new ideas, challenges to old ideas, differing perspectives, conflicts, contradictions, multiple layers of meaning. • Emphasizes multiplicity of meanings and perspectives as necessary for whole picture; and individual personal responsibility for own feelings, thoughts, reactions. • Challenge is to see, in the moment, how the choices one makes for what one listens to and for automatically excludes other possibilities for hearing what else is happening.
VIEW CRITICALLY		

COMMUNICATION SKILLS: View Critically

LEVEL 2	LEVEL 3	LEVEL 4
READ CRITICALLY		
CONVEY IDEAS IN WRITING		
SPEAK SO OTHERS CAN UNDERSTAND		
LISTEN ACTIVELY		
VIEW CRITICALLY		
<ul style="list-style-type: none"> • Focus is on the concrete, literal meaning of the material. • Looks for display or representation of concrete facts, rules, steps to follow. • Emphasizes correctness of facts and information; and whether or not it is useful in getting one's own concrete goals met. • Challenge is to be able to see general meaning or trends and patterns in visual information, and to be able to apply the information to broader, more abstract issues or circumstances. 	<ul style="list-style-type: none"> • Focus is on trying to understand what the presenter of the material intended to communicate. • Looks for abstract, generalizable information, and confirmation that one's interpretation is what the author/presenter intended. • Emphasizes generalizability and usefulness in helping one understand a particular issue and to shed light on similar issues or situations; trusts the authority to know/have accurate information. • Challenge is to be able to view material and critique its source, accuracy, and usefulness according to one's own self-constructed standards. 	<ul style="list-style-type: none"> • Focus is on interpreting the visual information according to own set of standards as well as trying to understand what the information is trying to convey • Looks for accuracy and clarity of display of information, biases of presenter and presentation, usefulness of information relevant to subject matter. • Emphasizes reliability of source, comparing information to other sources and displays. • Challenge is to be able to see the inherent worth of any presentation of data, regardless of (perhaps because of) bias.

DECISION-MAKING SKILLS: Use Mathematical Concepts and Techniques

LEVEL 2	LEVEL 3	LEVEL 4
USE MATH CONCEPTS & TECHNIQUES		
<ul style="list-style-type: none"> • Focus is on knowing the concrete mathematical steps to follow to get the right answer or to solve the problem. • Uses specific, concrete computations to apply to everyday necessities, i.e., price comparison, discounts, mileage, etc. • Emphasizes concrete uses to make daily chores and tasks easier. • Challenge is to be able to look for and use more general concepts and analyses for more abstract purposes. 	<ul style="list-style-type: none"> • Focus is on understanding abstract mathematical concepts and being able to apply them to a variety of situations and to use them correctly. • Uses mathematical concepts and formulations as “external authority” to help make decisions. • Emphasizes using concepts and computations correctly, as one has been taught. • Challenge is to be able to take abstract concepts and put them to use to evaluate, interpret, and predict according to one’s own needs and interests. 	<ul style="list-style-type: none"> • Focus is on having a storehouse of mathematical concepts and computations to be able to use them at will to help understand and solve a variety of issues that arise. • Uses mathematical concepts to flesh out own ideas, questions, problems, make predictions about own ideas, business. • Emphasizes knowing what one needs to know mathematically for one’s own interests and investments, as well as the limits of own mathematical knowledge and where to find information and help to fill in the gaps. • Challenge is to be able to recognize that, and in what way, mathematical concepts fail to address a particular situation or problem of interest; and to be able to expand or invent the mathematics to be a useful tool for that particular issue.
SOLVE PROBLEMS		
RESEARCH		
PLAN		

DECISION-MAKING SKILLS: Solve Problems

LEVEL 2	LEVEL 3	LEVEL 4
USE TECHNOLOGY		
USE MATH CONCEPTS & TECHNIQUES		
SOLVE PROBLEMS		
<ul style="list-style-type: none"> • Focus is on concrete definition of problem and finding the right answer to fix it. • Watches for self and others to find and follow the right concrete steps to the right answer, and to make sure it meets one’s own concrete goals and needs. • Emphasizes one right answer and one correct way to get to it. • Challenge is to see the problem more abstractly and with more abstract solutions. 	<ul style="list-style-type: none"> • Focus is on agreeing what the problem is and consulting experts for solution. • Watches for agreement among experts as to what the problem is and its solution, cooperation and mutuality between and among individuals in implementing the solution. • Emphasizes following experts’ advice, trying not to offend anyone or hurt anyone’s feelings, and coming to the right decision based on experts’ advice. • Challenge is to tolerate and internally integrate conflicting views on the problem and conflicting solutions to it. 	<ul style="list-style-type: none"> • Focus is on identifying multiple aspects of problem and identifying multiple solutions, highlighting pros and cons of each solution, and projecting out possible outcomes of each. • Watches for inclusion of differing and conflicting perspectives on both problem and solutions in working through issues. • Emphasizes the process of problem solving as important as the solution itself, and the process must include looking at all sides of the issue in order to come to the best solution. • Challenge is to welcome and embrace standards for problem solving processes that are diametrically opposed to one’s own standards, for example a standard that does not value inclusion of all perspectives.
RESEARCH		
PLAN		

DECISION-MAKING SKILLS: Research

LEVEL 2	LEVEL 3	LEVEL 4
USE TECHNOLOGY		
USE MATH CONCEPTS & TECHNIQUES		
SOLVE PROBLEMS		
RESEARCH		
<ul style="list-style-type: none"> • Focus is on a concrete understanding and statement of the question and finding a concrete set of rules and steps to get the necessary concrete facts and information. • Works on following a prescribed set of steps to gather the facts needed to answer the question. • Emphasizes learning new facts about something, learning a new set of rules and procedures to follow to increase the amount of knowledge one has. • Challenge is to be able to see the question in a more abstract way, that it isn't just about facts, but about gaining a new philosophical understanding of an issue. 	<ul style="list-style-type: none"> • Focus is on trying to understand what the experts say about a particular issue. • Works to identify authorities and sources of information to gather; and to evaluate information based on philosophy and opinions of one's important affiliations. • Emphasizes finding the most authoritative and philosophically compatible (to one's affiliations) source to come to the best understanding of the issue. • Challenge is to internally generate one's own standards and values for evaluation, and to make recommendations and follow through on information based on internally generated interests and standards, regardless of agreement or disagreement with other important affiliations or authorities. 	<ul style="list-style-type: none"> • Focus is on satisfying one's own multifaceted curiosity about a particular issue. • Works to state the issue and question clearly in order to be able to consider all aspects of the issue and to be able to gather pertinent information from all sides. • Emphasizes gathering as much diverse information as possible in order to come to the widest possible understanding of the issue, and then to make one's own evaluation of the information and follow up according to one's own internal standards and values and interests. • Challenge is to be able to identify with and make an investment in points of view very different from or in opposition to the perspectives one has deeply held.
PLAN		

DECISION-MAKING SKILLS: Plan

LEVEL 2	LEVEL 3	LEVEL 4
USE MATH CONCEPTS & TECHNIQUES		
SOLVE PROBLEMS		
RESEARCH		
PLAN		
<ul style="list-style-type: none"> • Focus is on naming concrete goals and setting the right concrete steps to get there. Goals are based on concrete needs and desires. • Works to follow correct steps and rules and make sure to do each one in the right way (there being only one right way). • Emphasizes following through on those concrete procedures and doing so in the proscribed manner. Deviation is experienced as doing it wrong. • Challenge is to recognize, accept, and be flexible enough to follow very different paths to reach a goal; to see the goal and the steps toward it in abstract terms with a variety of meanings and ways to get there. 	<ul style="list-style-type: none"> • Focus is on realizing an abstract goal and figuring out best ways to achieve it. Goals are based on a sense of loyalty or obligation to another person or group or cause. • Works to follow guidance from experts or other authority re best way to plan for and reach goal. Looks externally for support, encouragement and validation of progress. • Emphasizes setting up a plan and steps to get there based on what the experts or authorities recommend. Successful achievement of goal is based on positive evaluation from others or other external measure. • Challenge is to independently create and use one's own goal, procedures, and standards for evaluation separate from and possibly in contradiction to, external experts/authorities. 	<ul style="list-style-type: none"> • Focus is on identifying one's own independently conceived and desired goal(s) and considering all of the possible ways to accomplish it/them. • Works toward considering the multiple ways of achieving one's goal and deciding on which makes most sense to do given all of the complexities of the goal and of one's own talents and resources. • Emphasizes following one's own standards and values for reaching the goal, recognizing when and where one needs others' expertise and seeking that out. • Challenge is to recognize the relative and constructive nature of one's goals and plans, and to be able to pursue, with equal investment, goals that once felt antithetical to who one is.

INTERPERSONAL SKILLS: Cooperate With Others

LEVEL 2	LEVEL 3	LEVEL 4
COOPERATE WITH OTHERS		
<ul style="list-style-type: none"> • Focus is on everybody doing the same thing, following the same rules. • Watches for own concrete needs and goals getting met as a result of cooperating. • Emphasizes self and others doing things the right way, following instructions and rules, with own concrete goals in mind. • Challenge is to value others' feelings and opinions in and of themselves. 	<ul style="list-style-type: none"> • Focus is on making sure everyone agrees with each other, creating loyalty to each other and to the group's goals. • Watches for inclusion and acceptance of self and others. • Emphasizes mutuality, agreement, not hurting others' feelings, working together in identification with and in service of a larger group goal. • Challenge is to value and welcome disagreement and conflict as part of working together. 	<ul style="list-style-type: none"> • Focus is on respecting differences of opinion, perspective, values; and working together to integrate each one. • Watches for honest and free expression of own and others' opinions; capacity of group or others to welcome and work with conflict. • Emphasizes making room for everyone's perspective and voice, valuing and learning from each others' different views. • Challenge is to relinquish investment in own standards for cooperation and to see that by holding the standards that one does, the opposite standards are called into being by the fact of their exclusion; and that cooperating means embracing diametrically opposed value systems and standards.
ADVOCATE AND INFLUENCE		
RESOLVE CONFLICT AND NEGOTIATE		

INTERPERSONAL SKILLS: Advocate and Influence

LEVEL 2	LEVEL 3	LEVEL 4
COOPERATE WITH OTHERS		
ADVOCATE AND INFLUENCE		
<ul style="list-style-type: none"> • Focus is on the concrete details of the issue, what is right or wrong, fairness according to a concrete definition of fairness: “I get mine, you get yours.” • Watches for others following the rules and being fair. • Emphasizes doing the right thing, being fair according to a prescribed concrete set of rules and steps. • Challenge is to recognize and understand a wider range of fairness in addition to the emotional content of the issue rather than just the concrete issues and rules. 	<ul style="list-style-type: none"> • Focus is on being attentive to the needs and feelings of others within a particular issue; feeling responsible for others’ feelings and well-being. • Watches for being fair in a broader, more psychological/emotional way: are my/your emotional needs being met? • Emphasizes mutuality and loyalty to each other in the focus and presentation of issue and solutions. • Challenge is to separate one’s feelings of responsibility for others’ feelings from the issue; to be able to take a perspective on one’s own participation and motivation in the process so that a wider range of issues and aspects of issues might be considered. 	<ul style="list-style-type: none"> • Focus is on identifying the disparate aspects within the issue, prioritizing them, and deciding on the best strategy for a particular audience. • Watches for consistency and/or discrepancies in argument and whether or not intended group is being well-served by it. • Emphasizes presenting case clearly so it is easily understood by target audience, and strengthening case by listening and responding to range of feedback from positive to negative. • Challenge is to be able to step back from and let go of one’s own sense of investment in any particular outcome or perspective; to be able to see the process itself as the most important part of the issue.
RESOLVE CONFLICT AND NEGOTIATE		

INTERPERSONAL SKILLS: Resolve Conflict and Negotiate

LEVEL 2	LEVEL 3	LEVEL 4
COOPERATE WITH OTHERS		
ADVOCATE AND INFLUENCE		
RESOLVE CONFLICT AND NEGOTIATE		
<ul style="list-style-type: none"> • Focus is on concrete identification and definition of the conflict, usually on who is right and who is wrong. • Watches for who is following the rules and who is not, whether or not one’s own concrete needs and goals are being met. • Emphasizes meeting one’s own concrete needs in a kind of tit for tat fairness. • Challenge is to be able to understand and recognize a more abstract definition and reality of conflict, that there are many ways to resolve it, that go beyond rules to taking others’ feelings and needs into account as something important in and of themselves. 	<ul style="list-style-type: none"> • Focus is on acknowledging the existence of and identifying the nature of the conflict and others’ feelings about it. • Watches for commonalities and places of agreement that can be built on to decrease sense of differences and hurt feelings. • Emphasizes loyalty and inclusion of everyone and coming to a mutual understanding and resolution that everyone feels good about. • Challenge is to be able to tolerate and accept conflict within a relationship without feeling that it threatens the relationship; to see conflict as a necessary and helpful aspect of relationships and not necessarily something to avoid and get rid of. 	<ul style="list-style-type: none"> • Focus is on articulating nature and vicissitudes of the conflict and the surrounding issues. • Watches for clear expression and acknowledgment of whole spectrum of issues and disagreement within the conflict. • Emphasizes potentially useful nature of conflict and the ways that conflict can clarify an issue and lead to better communication and relationship. Also emphasizes a resolution that takes into account the diversity of opinions and perspectives and feelings of everyone involved, and that will also move the interests of the group forward. • Challenge is to see the process itself as the main thing and let go of one’s investment in one’s own particular standards for how the process should move.

LIFELONG LEARNING SKILLS: Take responsibility for learning

LEVEL 2	LEVEL 3	LEVEL 4
REFLECT AND EVALUATE		
TAKE RESPONSIBILITY FOR LEARNING		
<ul style="list-style-type: none"> • Focus is on identifying concrete characteristics of own learning style and holding as definitive set of characteristics of self along with height, weight, religion, gender, etc. • Watches for concrete evidence of own learning style and how it “works” or doesn’t work to get one’s concrete needs and goals met. • Emphasizes using identified learning style to solve problems, justify why one can’t do something; learning new strategies if other one’s don’t work to get one’s needs and goals met. • Challenge is to be able to generalize, to apply idea of learning styles and strategies to wider and more abstract issues. 	<ul style="list-style-type: none"> • Focus is on identifying own learning style according to the experts, in order to validate self and make differences between self and others ok. • Watches for abstract and confirming evidence that one does fit into a particular style, and uses that confirmation as the authority to help one work through learning issues. • Emphasizes identification with a particular style or strategy: “this is mine, this is me;” when strategies don’t work, emphasizes lack of fit between task and learning style as responsible, and then seeks help from authority on what to do next. • Challenge is to be able to have and use own internal authority to generate new strategies for learning, to take responsibility for own learning style and strategies rather than depend on external authorities to identify, define, and support one’s learning. 	<ul style="list-style-type: none"> • Focus is on understanding one’s own predominant learning style, it’s strengths and limitations; and working to borrow strategies from other styles to enhance and strengthen one’s own. • Watches for gaps in one’s own style or strategy where one can benefit from looking to a new strategy or style. • Emphasizes taking charge of own learning by making sure one has the skills, knowledge, strategies, and resources available to educate oneself and get the necessary help where and when it is required. • Challenge is to be able to have and use and value strategies that are diametrically opposed to each other without feeling a sense of internal contradiction or dissonance.
USE TECHNOLOGY		

LIFELONG LEARNING SKILLS: Reflect and Evaluate

LEVEL 2	LEVEL 3	LEVEL 4
REFLECT AND EVALUATE		
<ul style="list-style-type: none"> • Focus is on a concrete and literal recounting of what one does, has done and will do and whether or not it is right or wrong. • Watches for whether or not one’s concrete goals and needs are being met. • Emphasizes getting better at meeting one’s concrete goals--learning better rules, getting better skills. • Challenge is to be able to reflect on oneself in a more abstract, psychological way in terms of one’s character, and to be able to see and evaluate oneself through another’s eyes. 	<ul style="list-style-type: none"> • Focus is on reviewing oneself: who one is, what one does in the context of who and what one <i>should</i> be and do according to important external source of authority and expertise. • Watches for whether or not one is meeting the standards and expectations of important others, and how one is being evaluated and accepted by them. • Emphasizes being a better person as defined by important others (church, family, spouse, theoretical framework) and meeting their expectation. • Challenge is to be able to construct one’s own set of values, standards, and definitions for who and what one is independent of what another thinks and/or expects. 	<ul style="list-style-type: none"> • Focus is on reviewing and critiquing own actions, decisions, direction, and competence based on one’s own set of standards, values, plans, vision, and one’s sense of self within a larger context. • Watches for whether or not one is meeting own standards and living up to one’s own full potential as one wants and defines them. • Emphasizes being more competent, expanding one’s own choices and options, all within one’s particular and varied contexts of life and work. • Challenge is to be able to relinquish one’s identity with and investment in one’s own standards, values, and sense of self as competent and in control, and to experience oneself as more process driven: as both created by and creator of the context.
LEARN IN NEW WAYS		

LIFELONG LEARNING SKILLS: Use Technology

LEVEL 2	LEVEL 3	LEVEL 4
REFLECT AND EVALUATE		
TAKE RESPONSIBILITY FOR LEARNING		
USE TECHNOLOGY		
<ul style="list-style-type: none"> • Focus is on understanding and using technology for concrete purposes. • Watches for clear directions, instructions and rules for how to use technology. • Emphasizes following directions, step-by-step instructions on how to do what, all in a very concrete, goal oriented way. • Challenge is to be able to think about and use technology for more abstract uses and to begin to generalize techniques and skills to larger and more abstract uses. 	<ul style="list-style-type: none"> • Focus is on finding experts and teachers to guide one’s understanding and use of technology. • Watches for what the experts say is the best way to choose and use technology. • Emphasizes following the directions, learning what the experts say and being able to apply that to a variety of tasks and purposes. • Challenge is to rely on one’s own sense of knowledge, trust oneself as an experimenter, and uses one’s own knowledge to access, use, and trouble-shoot one’s use of technology. 	<ul style="list-style-type: none"> • Focus is on coming to a bigger understanding of what technology is available and it’s many uses and purposes. • Watches for wide variety of opinions, guides, and suggestions for how to access, use and expand one’s knowledge of the available technology. • Emphasizes self-learning, teaching oneself what one needs to know to be able to access and use technology to suit one’s own unique interests and purposes. • Challenge is to expand one’s use of technology by not becoming wedded to any particular system or understanding.