Educational System Guidelines Learner Tier

Explanation Sheets

The following guidelines are intended to aid in the continual improvement of educational systems. The underlying framework for these guidelines asserts that there are at least three tiers that impact student learning and development: 1) <u>Learners</u>, 2) <u>Courses-Instructors</u>, and 3) the <u>Educational Organization</u> in part or as a whole. In order to improve the quality of education, we must work with each of these three tiers and a series of guidelines have therefore been developed for them. These guidelines may be used for such endeavors as developing objectives for educational development interventions, conducting system-wide assessments, providing feedback to specific entities within the institution, et cetera.

The more detailed explanations below are intended to provide further insights into each of the guidelines and their associated levels. A narrative description is provided along with examples that one might expect to find for each of the levels. Each guideline is separated out to have its own sheet of paper (front and back). Each sheet provides a narrative description as well as examples for each level. Overall, in addition to providing clarity, these explanations should also help to improve reliability when using the guidelines.

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Feedback Table - Objectives

1) Learner is able to integrate learning objectives into their professional, civic, and/or personal life (Core Guideline)

Setting clear learning objectives is generally considered to be essential for educational processes. Learners should therefore have **clear goals in mind** when they are studying and working to learn more deeply. As a result, this guideline highlights the importance of having learning objectives that relate to their personal, professional, and/or civic life. Moving from Level 1 to Level 3, there is a growing emphasis on the learner being able to articulate learning objectives in ways that are more meaningful and relevant to them personally as well as being able to see the relationship between these personal learning objectives and the classes that they are taking.

Levels of Development Level 3 Level 2 Level 1 At this level, learners will collaboratively work At this level, the learner will be able to articulate At this level, **learners should be able to describe** with others to further adapt their own learning their own learning goals with much greater detail **general goals** for their own educational journey. **objectives**. These adaptations should more closely and complexity. Learners at this level will be able They should also be able to state where to find to state how their education directly relates to align with their long-term professional, personal, course objectives but they may not be able to and/or civic aspirations. This level is therefore goals that they have for their personal, name what these objectives are. At this level, then, focused on the learner taking more ownership and professional, and/or civic life. They should also be learners will have a vague notion why their able to relate these goals to specific courses that **responsibility** for their lifelong learning education is important and will be able to trajectories. Such ownership should therefore be they are taking and the learning objectives in these articulate these understandings in very broad and reflected in the learner's ongoing revisions to their general ways. Examples of this might include "to classes. Overall, Level 2 learners have a much get a degree," "to get a good paying job," "to learn learning goals in light of their long-term plans. As a clearer sense of their own learning goals in part of these processes, the learner should more," etc. relation to their education. additionally turn to community resources (such as instructors, mentors, family members, experts in **Examples**: Examples: the field, etc.) to help shape these lifelong learning • Student articulates their learning goals in Learner is able to state what their personal objectives in ways that still align with the learning goals are and can clearly relate broad and general ways. accreditation, institutional, program, and/or course these goals to their personal, professional, • Student course work shows evidence of a outcomes of the educational institution that they and/or civic life. vague understanding of the importance of are currently a part of. For example, learners Learner is able to state what the their classes for their own educational should be able to articulate course/module course/module objectives are for the goals. objectives of the classes they are currently taking course(s) they are taking. • Student is observed questioning the in ways that are personally meaningful and relevance of specific classes for their Learner is able to state the relevance of relevant to them. Overall, the emphasis here is on course/module objectives for their learning journey. learners having internalized and made sense of personal, professional, and/or civic life.

Levels of Development		
Level 3	Level 2	Level 1
learning objectives in their own ways, ways that directly align with their lifelong plans and goals.	 Student assessment data demonstrates that they are aware of course/module objectives and/or understand the 	Student is able to state where learning objectives for a specific course may be found.
• Learner can state how they have collaboratively worked with others to develop learning objectives for themselves and ensure that these align with: 1) their own lifelong personal, professional, and/or civic goals, and 2) accreditation, institutional, and/or program-specific outcomes of the school they are attending. • Learner and their instructor(s) are observed to collaboratively work to adapt given course/module objectives to align with learners' personal, professional, and/or civic goals. • In consultation with others, the learner should also be able to state why they are engaging in given course activities and how these relate to the course/module objectives. • Learner assessment data demonstrates that the learner worked with others to understand course/module objectives and how these relate to their personal, professional, and/or civic life.	relevance of these objectives for their personal, professional, and/or civic life.	

Feedback Table - Assessments

1) The learner utilizes assessment information to support their own development towards their learning goals. (Core Guideline)

Using assessments is central to education and learning processes. For learners, following this guideline, these assessments should play a central role in at least two ways. First, the learner should use assessments to help ensure that their proficiencies are being more accurately measured. Each type of assessment (e.g., exams, research papers, portfolios, etc.) is inherently limited in the kinds of information that it can give and using **multiple types of assessments therefore helps to provide a more robust picture of learners' actual capabilities**. Secondly, **assessment data should be used by the learner to continually modify their study strategies** to better meet their own unique needs. Overall, the trend for this guideline is from more individualistic to more collaborative analyses.

Level 3
Level 3 continues with the work of Levels 1 and 2,
only now the learner is observed to be working
with others on many of these tasks. In addition to
the previous levels, the learner continually works
to expand upon the range of assessments that
they are using to provide insights into their
learning progress. The learner is also observed
working together with others to decide how they
can continue to improve in relation to relevant
knowledge, skills, and/or attitudes based upon
assessment data. Being more collaborative, Level 3
for this guideline is characteristically different from
the previous levels as the learner works directly
with others to identify and analyze assessments as
well as to modify their own study strategies in light
of this assessment data.

Examples:

 Learner is observed working with others to reflect on their performance on assessments and to then decide how they might modify their study strategies. At this level, similar kinds of processes are present as with Level 1: gathering and analyzing data by utilizing multiple types of assessment. However, at this level, the learner will additionally be observed working to further improve the quality and effectiveness of their study strategies based upon the assessment data that they have gathered. The emphasis here is on continually modifying these strategies in real-time in response to their performance on assessments. In other words, the learner actively works to adjust these in an effort to further maximize their learning.

Levels of Development Level 2

Examples:

- Learner is observed using assessment data to modify their study strategies.
- Learner is able to state how they are using assessment data to modify their study strategies.
- Learner can identify specific assessments that they have used to help them improve how they study and learn.

At this most basic level, the learner will work individually to gather and analyze assessment data. The learner should be able identify the multiple types of assessment that they are gathering, whether these assessments are formal (e.g., how they performed on exams, papers, etc.) or informal (e.g., self-observations, passing conversations with classmates, emails/correspondence with the instructor, etc.). Learner might also use information from previous experiences to inform their ongoing reflections (e.g., "Have I had a class like this before? If so, how did I do? What contributed to my success/failure in that class?" Etc.).

Level 1

Examples:

- Learner is observed using assessments (formal and/or informal) to assess their competencies in relation to specific knowledge, skills, and/or attitudes.
- Learner can state assessments (formal and/or informal) that they use to assess

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Levels of Development		
Level 3	Level 2	Level 1
 The learner is able to state how they have worked with others to develop a study plan that is based on how they have done on assessments. Learner can name specific and multiple assessments that they have used to modify their study strategies in consultation with instructors, peers, student achievement staff, etc. Instructors, staff, peers, etc. are able to state how they have worked with the learner to develop a study plan that is based on how this learner has done on specific assessments. 	 Learner is able to articulate why they are using their current study strategies and can provide examples of assessments that support the effectiveness of these strategies. Learner can state how they have changed their study strategies in response to how they did on specific assessment(s). 	 their competencies in relation to specific knowledge, skills, and/or attitudes. Learner is able to talk about their performance on assessments in ways that can be used to improve their progress in the future (e.g., "I didn't study very hard for this exam, but I am planning on working harder before the next one"). Learner is able to critically reflect on their assessment performance (e.g., being able to identify which parts were more/less difficult for them, able to state which parts they should have received more help on, etc.).

2) The learner uses feedback from assessments to continually improve their competencies in their courses as well as to build their own self-regulated learning capabilities. (Core Guideline)

Numerous studies continue to show that learners benefit from detailed feedback that aids them in better knowing where and how they can continue to improve in their learning. This feedback should therefore be used by the learner to help clarify where they are doing well in addition to where they will likely need to focus on more going forward in order to continue to improve in their knowledge, skills, and/or attitudes. As a part of this process, the learner should seek out opportunities that more directly help them to continue to improve in their areas of strength as well as addressing their noted areas for improvement. At the highest level, the learner will be observed taking initiative to then use this feedback to develop more effective learning strategies in collaboration with others. Overall, the trend for this guideline is from the learner simply using feedback to identify their strengths/ weaknesses to their working with others to help them identify strategies that will improve their performance going forward.

Levels of Development

Level 2

Level 3 Further building upon Level 2, at this level the learner will work with others to identify and utilize strategies that will help them to improve their learning and development based upon the feedback that they have been provided. This level is more collaborative as well as self-directed as the learner reflects on their performance in relation to the feedback that has been provided as well as in determining steps that they might take to improve. While this level uses the same processes as the two previous levels (i.e., using feedback to identify areas of strength/improvement and then engaging with activities as a result), there are two significant difference. First, a Level 3 learner will be observed working with others to engage in these Level 1 & 2 processes. Second, the learner will work to identify and/or develop their own learning strategies/activities as a result of the feedback that they have been provided. At Level 2, these activities/ strategies may be part of a class, but at Level 3 the learner will collaboratively work

to find/create their own additional/supplemental

Building upon the previous level, at Level 2 the learner will be observed engaging in activities that directly help them to act on the feedback they have been provided and thereby improve their competencies in relation to relevant knowledge, skills, and/or attitudes. These learning activities may be ones that are a part of their courses or they may be external ones that the learner seeks out on their own initiative. Regardless of where these activities are engaged, the key purpose of them should be to help the learner to improve in the areas of strength/improvement that the feedback has identified. If the learner is unable to state how these activities are directly related to feedback that they have received, then they have not achieved this level according to this guideline.

Examples:

 Learner is observed completing an activity that has them apply feedback that they received previously. At Level 1, there will be evidence of the learner intentionally using feedback from instructors, peers, mentors, assessments, etc. to help them identify their own areas of strength in additional to areas that need improvement. They will also be open to and looking for strategies that might help them to improve, though they may not use these strategies in an intentional or ongoing way. The learner, at this level, will therefore likely have more of a positive view of feedback that is provided, recognizing that these bring ideas and opportunities for continual learning and development.

Level 1

Examples:

 Learner is able to state when and how they have received timely, detailed, and constructive feedback from others as well as the areas of strength/improvement that this feedback identified.

Levels of Development		
Level 3	Level 2	Level 1
activities. This level therefore represents a higher level of self-regulated learning, where the learner takes more ownership (in collaboration with others) of their learning journey based upon the feedback that they continually receive. Examples: • Learner is able to state how they have used feedback that has been provided by one of their instructors to modify their study strategies in consultation with others to continue to improve in their classes. • Learner is observed working with others to reflect on feedback that they have received and then identify and/or develop activities that will help them to continue to improve in one or more of their classes. • Instructor, staff, peer, etc. is able to state how they have worked with the learner to reflect on feedback that they have received and then identify and/or develop activities that will help them to continue to improve in one or more of their classes. • Learner is observed completing an activity where they have collaboratively reviewed feedback that has been provided by one of their instructors and then developed a concrete plan for how they will use this feedback to continue to improve in their classes.	 Assessments data (formal and/or informal) shows evidence of the learner being required to complete an assignment where they had to apply instructor feedback. Learner can state how they have applied feedback that they have been provided on previous assignments to subsequent assignments. Learner is observed seeking out activities that directly help them to improve on areas of strength/improvement that specific feedback has identified. 	 Learner is observed reviewing feedback on papers, exams, etc. and can highlight the areas that they are doing well on as well as what they need to revisit and improve upon. An instructor/staff is able to share conversations (face-to-face or via technology) that they have had with the learner where they discussed feedback and the areas of strength/improvement that were identified. Learner is able to state how they have used feedback from others to improve in one or more of their courses, being able to highlight the areas of strength/improvement that were identified by the feedback that was provided.

strategies.

3) Assessments are utilized by the learner to improve their learning in ways that are in accordance with best practices.

For learners who are committed to improving their competencies, assessments are an integral part of their learning processes. However, it is equally important that the learner understand what their performance on quizzes, exams, etc. mean and how they might more effectively use them to improve their study strategies. Following this guideline, then, the learner will be observed adhering to best practices when interpreting and applying the results of formal and informal assessments to improve their learning. At higher levels, the learner will do this in collaboration with others and they will be an integral part of helping to ensure that these assessments are both valid (e.g., the information gleaned from them accurately represents the learner's capabilities) and reliable (e.g., there is consistency for the assessments across students and graders). Overall, the learner will therefore work to use assessments in accordance with best practices.

Levels of Development Level 3 Level 2 Level 1 Building upon the previous levels, at Level 3 the Level 2 extends the work of the previous levels by At this level, learners should be able to identify learner will be observed proactively working with ensuring that the learner's interpretations and uses and/or be observed using specific recommendations and/or best practices to help others in ways that helps them to better utilize of assessment results and feedback are valid and best practices to guide their understanding and reliable. In other words, learners at this level will guide their understanding and use of assessments. be observed working to verify that the changes These resources (e.g., mentors, web sites, use of assessment results. Such collaboration should focus on helping them to analyze their they are making to their study strategies (based handouts from instructors/staff, etc.) should help the learner to better understand what their performance on assessments as well as adapting upon assessment results) really are improving their study strategies in reliable and valid ways **their achievement** (i.e., establishing validity). There assessment results mean. These resources should help the learner to think about how they might use that lead to improved achievement. The learner should also be evidence at this level of the learner will therefore be observed working closely with working to help confirm that such positive assessment results to improve their study their instructors, organizational staff, outside changes are being made in consistent ways (i.e., strategies. As a result, learners at this level should mentors, classmates, etc. to engage in these kinds reliably). At this level, then, there will be clear be able to articulate how they are interpreting of activities. evidence of the learner working to establish and applying assessment results as well as how processes that continually result in improvements these interpretations and applications align with the recommendations and/or best practices that Examples: to their learning strategies based upon best practices for interpreting assessment results and they are drawing from. The learner is observed working with their instructors, classmates, staff, etc. to help feedback. them reflect on their assessment results in Examples: light of specific best practices. Examples: Learner is observed using specific recommendations that provide insights • The learner can state who they have The learner can describe how they have worked to verify that the improvements into how to interpret and/or apply worked with to collaboratively decide how they have made to their study strategies assessment results to improve their study to use assessment results to help improve

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(in response to their performance on

Levels of Development		
Level 3	Level 2	Level 1
 their achievement in a course, following evidence-based recommendations. An instructor, staff member, peer, etc. can describe how they worked with the learner to reflect on and use the results of the learner's assessments to help them continue to improve in reliable and/or valid ways. The learner can articulate how they have worked with others to modify their study strategies based upon specific assessment results and following best practices. 	 quizzes, papers, etc.) are leading to positive improvements in their achievement. There is evidence that the learner is consistently making effective improvements to their learning strategies as a direct result of assessment results. The learner is observed regularly reflecting on their assessment results and then continually making positive improvements to their study strategies. Learner can show evidence of working to establish the validity and/or reliability of their efforts to improve their learning strategies in response to their performance on quizzes, papers, etc. 	 The learner is able to state which best practices they are using to help them to interpret and/or apply the information that they are learning from their assessment results. The student's coursework shows evidence that they are using specific recommendations to guide how they are interpreting and/or applying the information that they are learning from their assessment results and feedback. An instructor/staff confirms that the learner attended a workshop on how to use specific recommendations to provide insights into how students can interpret and/or apply assessment results to improve study strategies.

4) Learner utilizes self- and/or peer-assessments and reflections to improve their own and/or their peers' learning and development.

Social-cultural learning theories and its associated research has shown that students learn a great deal when working with their peers. Peer tutoring, for example, has been found to be one of the more effective means to foster learning (Hattie, 2009, p. 186-87). As it relates to assessments, evaluating their own and one another's work can be a powerful strategy that learners can use to improve their competencies. Doing this requires them to better understand the criteria that they are using to self- and/or peer-assess as well as to be able to apply these criteria to actual examples of work. Another primary purpose of these kinds of assessments are to help learners not only to continue to progress in relation to their learning goals but also to take more responsibility for their own and one another's learning and development. As a result, having learners adopt this strategy is considered to be a best practice for the learner's development of collaborative self-regulated learning skills.

Levels of Development Level 3 Level 2 Level 1 A learner at Level 3 for this guideline will still Learners at this level will use criteria from course Level 2 is similar to the previous level in that the engage in Level 1 and 2 kinds of activities. At this learner will still utilize criteria to complete selfassignments, or other sources, as the basis for level, however, the learner will participate in these and peer-assessments to improve and deepen guiding how they will study, prepare, and activities in more proactive and collaborative ways. their learning and development. At this level, ultimately assess their own and their peer's work. For instance, there will be evidence of the **learner** however, the learner will then collaboratively use These criteria might be detailed criteria (e.g., working with their instructors and/or peers to the results of these assessments to improve their course rubrics, info sheets, guidelines, etc.) or they generate self/peer-assessment criteria. Doing so study strategies and engage in additional may be general expectations that the learner is requires a deeper level of understanding of course activities that will help them strengthen their familiar with. Here, the learner will be observed concepts, skills, and/or attitudes as well as selfproactively using these criteria to better gauge competencies. An example might include working motivation to set higher standards for their own with a staff member to revise the draft of a paper how well they are grasping concepts, skills, and/or that has been self-assessed or improving their expected attitudes. They will also work with their learning. In addition, the learner will be observed taking more self-initiative to collaboratively discussion board posts based on replies they have peers to help one another to continually improve reflect on and respond to the results of these received from their peers. This level is therefore in relation to their learning goals. kinds of assessments. At Level 2, such analyses and distinguished by activities that **explicitly empower** applications could have been a required part of the the learner to act on the suggestions that have Examples: courses that they are they are taking. At Level 3, been gathered from self/peer-assessments. There Learner will be observed using rubrics or however, the learner will be observed engaging in should also be evidence that these **changes and/or** guidelines that have been provided by one these kinds of activities on their own initiative, additional activities were chosen in consultation or more of their classes to assess their own whether their courses require them or not. with instructors, staff, and/or peers. and/or their classmates' competencies. • Learner can state how they have engaged **Examples**: in self- and/or peer-assessments in relation • Learners are observed completing activities to course concepts/skills.

that guide them in applying the results of

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Levels of Development		
Level 3	Level 2	Level 1
 Learners are observed working in study groups outside of class to create their own self/peer-assessment criteria. The learner is observed using self/peer-assessments as part of their self-regulated learning processes (e.g., goal setting, developing learning strategies, evaluating progress, revising strategies, etc.). Peers, instructors, and/or staff are able to describe how the learner has taken the initiative to create, implement, and then use the results of self/peer-assessments to improve their learning strategies. The learner can provide evidence (e.g., study notes, etc.) of self/peer-assessments that they have helped to create and utilize. 	 self/peer-assessments, such as revising a draft of a paper. Instructor is able to articulate how they helped to guide the learner in a step-by-step manner to use self/peer-assessment data to revise assignments, modify their study strategies, etc. Learner has attended organizational events where they worked to alter their learning strategies, conduct and/or reflect on self-and/or peer-assessments, etc. Peers/classmates are able to state how they worked with the learner to complete peer-assessments and subsequently improve their study strategies. 	 Learner participates in course activities where they are guided in evaluating their own and/or one another's work using a set of guidelines that the instructor has provided. The learner's discussion board posts and/or other course materials show evidence of the learner critically reflecting on their own and/or their peer's work in relation to a set of standards that they have learned about in class. Instructors/staff can state how they have seen or worked with the learner to utilize self- and/or peer-assessments.

Feedback Table - Activities, Organization, & Resources

1) The learner intentionally seeks to engage in learner-learner interactions to support learning and development. (Core Guideline)

Evidence-based studies and assessment tools have confirmed the substantial impact that learner-learner interactions have on student achievement. In their **simpler forms**, these kinds of learning interactions are **generally shorter** and engage in course knowledge, skills, and/or attitudes (KSAs) in **more superficial** ways. As learner-learner **interactions become more substantial**, the learner will be observed to **critically reflect on their own and their peers' perspectives in greater detail**, perhaps questioning not only what each other thinks about course related materials but also how they came to hold these views. **At higher levels**, these types of interactions are usually more long-term and are more focused on **collaboratively engaging with more complex decision-making**, **innovation**, **etc. processes**. As a result, learner-learner interactions are deeper and more intentional at higher levels and require more complex collaboration and group work skills as well as higher order thinking. Overall, this guideline is intended to encourage these kinds of in-depth engagement on the part of the learner with their peers.

Levels of Development Level 3 Level 2 Level 1 In addition to engaging with others in mutually At this level, there will be evidence of the learner At this level, the learner will seek out **interactions** supportive and critically reflective ways, learners at engaging with their classmates in deeper and more that are shorter and more superficial. If restricted this level will be observed to be a part of long-term intentional ways. Following Bloom's Taxonomy, the only to these kinds of interactions, learners would learner will work with their peers to apply, not come to know one another in more detailed groups that are working on more complex projects. These kinds of projects, which may or may not be a analyze, and/or evaluate course concepts and ways, especially in terms of their academic **skills**. As an integral part of these processes, the part of course or program requirements, involve competencies or learning strategies. In addition, learners collaboratively engaging in long-term learner will be observed **critically reflecting on** these kinds of interactions typically engage with decision-making, problem solving, real world their own and their classmates' views of course content/skills in simpler ways. For instance, projects, etc. Following Bloom's Taxonomy, these students might meet to memorize definitions, quiz content. Here, the goal is not just to understand projects will have the higher tiers of creativity, what each other believes but also how each person one another on key terms, or share notes with each another. Using Bloom's Taxonomy, these came to these positions. In addition, learners at synthesis, etc. As a part of these groups, the learner should be observed transitioning through this level will also be more supportive of one kinds of learner-learner interactions would be at normal group development processes (e.g., another's educational journey by intentionally the remembering or understanding levels. As forming, norming, storming, performing, helping each other to engage with course these types of peer engagement are beneficial to knowledge, skills, and/or attitudes (KSAs) in learning and development, there should be adjourning). Overall, these in-depth group projects evidence of the learner seeking these out. should have the primary purpose of helping the deeper ways. learner to continue to progress towards their learning goals. **Examples**: The learner is observed engaging with course content in more critically reflective

Levels of Development		
Level 3	Level 2	Level 1
 Student is able to articulate and present evidence of how the long-term groups that they have been working with have required them to collaborate on activities such as service-learning projects, design projects for ill-defined problems, long-term peer assessment partnerships, etc. As part of a long-term group project, the learner and their peers are observed transitioning through typical group development processes (e.g., forming, norming, storming, performing, adjourning). A faculty or staff member is able to describe a long-term project that they have been working with the learner on that has required the team (including the learner) to critically collaborate on decision-making, problem solving, etc. Course assessments show clear evidence of the learner completing activities that have required them to demonstrate their abilities to critically collaborate with others on long-term problem-solving, research, service-learning, etc. projects. 	 and long-term ways with their peers, either as part of course assignments or on their own initiative. Learners are observed questioning their own and one another's assumptions, exploring how/why they understand course content in the ways that they do, providing constructive feedback and support to one another, etc. There is evidence of the learner working in long-term groups where they are required to engage with course content and one another in increasingly complex ways (e.g., applying, evaluating, analyzing, etc.). The learner can describe semester-long study groups that they are a part of where they work together to question one another's assumptions, exploring how/why they understand course content in the ways that they do, providing constructive feedback to each other, etc. 	 Learner is observed working in short-term groups on simpler activities, problems, etc. related to key course concepts and skills. Course assessments have evidence of the learner completing assignments where they were required to collaborate on short-term projects. The learner participates in peer tutoring activities for short periods of time and they focus mostly on simply reviewing common terms and definitions from their classes. The learner is able to describe group-work activities that they have engaged in that were of shorter duration focused mostly on reviewing key concepts or practicing skills that they are expected to memorize.

2) The learner strives to engage in higher order thinking in order to support their learning and development. (Core Guideline)

When learners simply work to memorize concepts and skills from class, their long-term retention is limited. When, however, they engage with knowledge, skills, and/or attitudes (KSAs) in critically reflective ways, their understanding and capabilities deepen. As a result, following this guideline, learners should be observed using higher order thinking skills to strengthen their competencies. At lower levels, this will involve applying, analyzing, and/or evaluating the concepts/skills that they are learning. At higher levels, the complexity of their critical engagement will increase as will the initiative that they take to find/develop these kinds of activities. Overall, learners should be observed utilizing these critical thinking skills to help pursue their learning goals.

Levels of Development

Level 2

Learners at this level will intentionally work to help design and implement activities that engage with higher order thinking skills. These activities may occur as part of curricular or co-curricular projects or the learner might seek out or create these on their own initiative. Learners, for example, might adapt discipline-specific methods (e.g., scientific methods, engineering design processes, philosophical analyses, etc.) for a specific application that was developed by the learner, they might identify and address ill-defined problems in the community, or they might choose and assess specific critically reflective study strategies to use in one or more of their courses. As a result of

engaging with these activities, the learner is not

activities they are helping to develop but they are

only using higher order thinking skills in the

also using these skills as part of the activity

development process itself.

Level 3

Examples:

 Learner helps to develop a rubric to assess a course paper and then make revisions For this level, the learner would be expected to engage with higher order thinking skills that are more synthesizing, integrative, and multidimensional in nature. Here, the learner will be observed seeking out ways to engage the concepts/skills they are learning about in these kinds of ways. These activities may be a part of a course they are taking, co-curricular activities that they participate in, or they may be self-initiated. The learner will also be found to continually and critically question the limitations, inherent biases, underlying assumptions, etc. of the course materials that they are required to engage with. Participating in these kinds of higher order thinking skills has the intention of deepening the learner's understandings and insights into the concepts and skills that they are learning.

Examples:

 As part of a class, the learner completes a semester-long project where they have to propose novel solutions to real-world problems. At this level, there is evidence of the learner using basic critical thinking skills to deepen their learning. For instance, the learner might use criteria/guidelines from one of their classes to reflect on and/or evaluate a real-world situation, they might be observed comparing and contrasting course concepts, or they might be found using inductive/deductive reasoning skills. Overall, the learner should be observed applying, evaluating, analyzing, etc. the knowledge, skills, and/or attitudes (KSAs) that they are learning about in an effort to further develop in these KSAs.

Level 1

Examples:

- The learner is able to state how they have applied specific skills they are learning to a real-world situation.
- Study groups are observed comparing and contrasting course concepts in an effort to better understand them.

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Levels of Development		
Level 3	Level 2	Level 1
 based upon self/peer assessments using this rubric. The learner can describe study groups where they have worked to identify and address an ill-defined problem in their local community using concepts/skills from one or more of their courses. Learner states how they have continually assessed higher order thinking study strategies and can identify specific changes that they have made to these that have resulted in higher achievements in one or more of their courses. The learner is observed collaborating with faculty and/or staff to develop a research project that is directly related to concepts/skills from one or more of their courses. 	 The learner is observed participating in a small group activity that requires them to use concepts/skills to create, innovate, design, etc. The learner can identify what they believe to be some of the limitations, inherent biases, underlying assumptions, etc. of the course materials that they are using. Instructor/staff can describe how they have worked with the learner to complete quality improvement projects that required the learner to use knowledge/skills in more integrative ways. 	 A course that the learner is taking requires the learner to analyze a case study using concepts from the class. Staff and/or instructors are able to state how they have worked with the learner to analyze, evaluate, apply, etc. specific concepts/skills.

3) Learner intentionally uses relevant and interactive technologies to improve their learning and development.

Obviously, technologies are becoming a pervasive presence in schools across our globe. One of the primary questions in educational research is whether and how students are effectively utilizing these to increase their achievement. This guideline is therefore focused on attempting to assess such usage both in and out of their classes. At lower levels, the learner will be found using technologies in more simplistic ways (e.g., using a word processing software to write papers) that do not require more advanced technical skills. At higher levels, the learner will be observed using more sophisticated and possibly even discipline-specific software packages and skill sets (e.g., SPSS, augmented/virtual reality, coding in HTML/CSS, etc.) to help them complete assignments and/or improve their competencies. Overall, one of the primary aims of this technology usage is for the learner to gain the competencies that they will need in order to more effectively utilize relevant technologies in their personal, civic, and/or professional lives in addition to helping to improve their learning and development.

Levels of Development Level 3 Level 2 Level 1 At this highest level, the learner will be found Moving beyond Level 1, learners at this level will be At this level, the learners will be observed using engaging with more sophisticated technologies, observed proactively engaging with more technology to support their educational journey in ones that have activities that would be very sophisticated technologies to improve their ways that are more of a convenient "means-to-andifficult to complete without the use of knowledge/skills. Such usage will involve end" rather than being integral to their own **technology** as the technology itself redefines the technology that is integral to the learning process **learning processes**. In addition, their technology nature of the activity. These **technologies should** by requiring more direct engagement with these use will **only require basic technical competencies**. be observed facilitating the learner's direct concepts/skills via the technology. This level might Here, the learner will therefore be observed engagement with course concepts/skills and they also require the learner to have and/or develop actively using technology to support their learning, may require more advanced technical skills in more sophisticated technological skills in order to but in shorter and more simplistic ways. order to be effectively utilized. In addition, there be able to effectively use these kinds of should be some evidence of the learner technologies. Overall, there will therefore be Examples: collaborating with others in choosing and evidence of the learner using such technologies (as The learner is observed using their device implementing these technologies. part of their courses and/or on their own) to (e.g., computer, tablet, etc.) to take notes. achieve their learning goals. • Learner participates in online discussion Examples: boards. • Working with others, the learner is **Examples**: The learner can state how they have used observed collaborating via online The learner is observed creating a digital online resources (e.g., videos, blogs, technologies with a community from image collage in order to help them better articles, etc.) to help them better another part of the world to complete a understand course concepts. understand course concepts. real-world project together.

Levels of Development		
Level 3	Level 2	Level 1
 The learner works with their classmates to use an intelligent tutoring system or virtual simulation software to help them to better understand concepts and/or practice relevant skills. As part of one of their courses, the learner works with their group to create an elearning module that other groups will complete. The learner works with their study group to develop a website so that they can communicate and collaborate together more effectively. 	 Learners are observed submitting digital storytelling projects in place of written papers for an assignment. The learner can describe online interactive sites and/or apps that they are using to help them to better understand concepts and/or practice skills. The instructor can show interactive elearning modules that the learner has been required to complete. 	Learner is observed using software to manage and format citations for a course paper.

4) The learner seeks to adapt relevant KSAs* to address real-world issues in authentic contexts.

Following this guideline, the learner will recognize the importance of being able to apply the knowledge, skills, and/or attitudes (KSAs) that they are learning in real-world situations. Doing so will not only help them with transference of these KSAs to authentic situations but it will also aid in helping these KSAs to be more relevant and meaning to them, which is an important part of fostering deeper learning. As the learner moves from Level 1 to Level 3, they will be observed moving from simply engaging KSAs within authentic settings/scenarios towards more actively identifying and directly addressing specific real-world problems in close collaboration with others. Overall, the learner should to be able to utilize KSAs in ways that are directly related to the authentic settings of their personal, professional, and/or civic lives.

Level 3 Level 2 Level 1

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Levels of Development

Level 3, as with many other guidelines, is more collaborative in nature in that the learner will be found working with others to identify real-world problems or issues and then engage with these within authentic contexts/scenarios. This therefore differs from Level 2 where the learner was provided with a real-world issue by their instructor, a staff member, or an organization. However, this level also builds upon Level 2 by still requiring significant adaptations to be made to relevant **KSAs**. Overall, the focus for this level is therefore on learners having more collaborative responsibility and leadership with peers, staff, instructors, and/or community partners in identifying real-world issues and then working to find effective ways to address these issues by adapting relevant KSAs in relation to their authentic contexts.

Examples:

 There is evidence of the learner working with a community partner to conduct an asset/needs assessment and create a plan Extending beyond Level 1, at this level the learner will work to address a given problem or they will engage with a real-world issue that they might be expected to find in an authentic context. As part of this work, the learner will be observed adapting key KSAs in significant ways. This requires a higher **level of competency** on the part of the learner compared with Level 1, where they merely had to apply what they have learned in direct and unmodified ways. This level is therefore distinguished from the previous level by: 1) the learner addressing a real-world issue that has been provided by instructors/staff and/or **community partner(s)**, and 2) these activities requiring them to modify relevant KSAs in significant ways in order to address these problems/issues.

Examples:

 The learner is observed adapting course skills (such as healthcare skills, conflict mediation, strategic planning, web development, etc.) to help an organization. Here, the learner will be found working to take the concepts/skills that they are working to develop their competencies in and apply these in realworld situations. At this level, such KSA applications will be will be direct and unmodified. This means that the learner will only seek to apply the KSAs in the exactly the same way as they have **been introduced to them**, without any kind of adaptations or modifications (KSA adaptations and modifications are a Level 2 competency according to this guideline). In addition, such applications will have the primary purpose of helping the learner to better acquire the concepts/skills rather than attempting to address a specific real-world problem/issue (again, this is a Level 2 competency). By participating in these kinds of activities, the learner will therefore have the added benefit of engaging with KSAs in similar contexts/scenarios as they will need to apply them in their professional, civic, and/or personal lives.

Levels of Development		
Level 3	Level 2	Level 1
to address identified assets/needs via adapting relevant course KSAs. The learner is observed partnering with an organization to complete a Continuous Quality Improvement (CQI) project that aligns with their own learning objectives and results in recommendations being made to the organization. The learner can describe specific volunteer experiences where they completed an advocacy project that they were passionate about that included working with an organization to strategize and/or work towards making change. They should also be able to state how this project has helped them to further develop their competencies as a student. As part of one of their courses and/or a study group, the learner is observed working with their classmates to generate case studies that require their peers to use modified versions of course KSAs.	 The learner can describe work that they have completed for a community organization where they have adapted the concepts/skills they are learning in their classes to these community settings. The learner is observed working with peers to adapt problem solving strategies for real-world case studies. Staff can state how they have worked with the learner to complete a service-learning project in the community where the learner had to adapt relevant concepts/ skills as part of their analyses and planning. 	 The learner is observed engaging in role playing activities that mimic real-world situations. The learner is observed practicing a skill in a real-world setting (e.g., taking blood pressures at a community center, learning how to collect water samples from a local creek, etc.). The learner can describe immersion trips that they have participated in that have had the primary purpose of exposing them to specific contexts to learn about course concepts, but not addressing specific issues/problems in the community. The learner has taken classes that met in real world settings (e.g., hospitals, public schools, community centers, etc.).

5) The learner engages in activities in ways that consistently scaffolds their increasing competencies for key KSAs*. (Core Guideline)

While the other guidelines in this area are more focused on specific activities that the learner might engage, this one centers more on how the learner organizes and manages their engagement with these activities. The learner, according to this guideline, should minimally move through their learning and development in a step-by-step manner. This means that the concepts and skills that they are learning should build upon previous ones. The learner should also work to ensure that they are generally competent in core knowledge, skills, and/or attitudes (KSAs) before moving on to subsequent ones. At higher levels, the learner will partner with others in developing and selecting varied pathways that support their own growth in core course KSAs. These pathways should be tailored to better match their own unique backgrounds and capabilities. Such pathways should also support scaffolding wherein the learner's progress towards advanced KSAs is dependent upon the achievement of given levels of competency for the more basic KSAs that these advanced topics/skills are founded upon. Overall, this guideline is therefore focused on how the learner engages in their learning experiences.

Levels of Development

Level 2

Similar to Level 2, a learner at Level 3 for this guideline will still seek out multiple and varied pathways to engaging with core concepts and skills. At this level, however, the learner will collaboratively work with others to help them develop these varied and scaffolded pathways. Here, there is a much greater emphasis on working directly with others to help them develop their self-regulated learning skills as they collaboratively create these varied and scaffolded

Level 3

Examples:

learning paths.

 The learner works with their instructor and classmates to create a rubric that outlines the scaffolded progress (i.e., different levels of competency) that learners in the class will need to demonstrate across the course.

Level 2 builds upon the activities of Level 1 but does so in more varied ways. Here, the learner will be found scaffolding their learning by seeking out multiple and varied activities. At Level 1, the learner may simply participate in class or meet with a tutor and follow the single learning path that has been set by the instructor/tutor. At Level 2, however, there will be strong evidence of the learner taking the initiative to seek out multiple and diverse learning activities to scaffold their progress. There should also be strong evidence of the learner choosing multiple and varied learning activities that are better matched to their own unique background, learning preferences, interests, etc. At Level 1, the learner may simply utilize resources and support that are most convenient and readily available. At Level 2, however, the learner will be more discerning in choosing the ones that are a better match for themselves personally.

engagement with key concepts/skills is better than engaging with these concepts/skills in a very intense and shorter period of time. As a result, there should be clear evidence that the learner is continually engaging with key concepts/skills as they work to attain competencies in these areas. In pursuit of these competencies, the learner will be observed moving through core knowledge, skills, and/or attitudes (KSAs) in scaffolding ways. This

means that the learner will proactively work to

ensure that they adequately grasp foundational

KSAs in deeper ways **before moving onto to newer**

and more complex ones. Overall, then, a learner at

this level will show evidence of working to master

Level 1

Numerous educational research studies have and

continue to show that repeated and distributed

Examples:

key KSAs in scaffolded ways.

 The learner makes use of learning modules that help them to master foundational

Levels of Development		
Level 3	Level 2	Level 1
 The learner is part of a study group that uses supplemental textbooks, articles, etc. to help them study for exams. The learner is observed working with a tutor to help them map out a scaffolded study plan that will enable them to be more successful in one of their courses. The learner is taking a class where they are required to work with other students as well as with the instructor(s) to identify the articles, videos, books, etc. that each learner will use to develop their course competencies. 	 The learner is observed seeking multiple ways of learning about core concepts/skills (e.g., lecture, demonstration, videos, etc.). The learner can describe multiple learning activities that they have used to help them to better understand/demonstrate key concepts/skills. The instructor is observed helping the learner to choose an assignment to complete that better matches the student's background and interests from among a wide range of possibilities. The learner can demonstrate how they are using supplemental app's or other software to help them learn course concepts or practice key skills. 	 concepts before moving onto more advanced ones. The learner is observed using self-check/ assessment activities to ensure that they understand core topics. The learner can show evidence of studying key concepts/skills repeatedly over an extended period of time. The learner is observed seeking out additional resources (e.g., tutoring, online videos, etc.) to help them better understand topics that will be foundational for subsequent ones.

6) Mission-Centered Focus: The learner helps to nurture a learning environment that is safe, inclusive, and caring.

Some cognitive science studies have shown that **we learn and retain more when we are less stressed**, so learning in these kinds of environments is particularly important for education. Learning, as may be seen by these Educational System Guidelines, is an iterative process of trial-and-error, continuous feedback, and ongoing efforts to continually improve. As a result, **the learner should seek to help their schools to be safe spaces** that allow **for risk-taking** without fear of failure, encourage free and **positively supported exploration of ideas and diverse perspectives**, and ones in which participants support and **challenge one another in affirming and constructive ways**. In order to help facilitate such learning environments, **there need to be clear expectations** that the learner not only adheres to but also takes an active part in developing. Overall, then, the trend across these levels is from the learner more simply following the behavioral expectations that have been set by the institution towards their collaborating with others to set these expectations. When assessing a learner for this guideline, we can therefore look at the extent to which the learner is involved in both setting these expectations as well as proactively working to nurture these kinds of learning environments.

Level 3 This level includes the previous levels' recommendations for having clear behavioral expectations that the learner is committed to. However, at this level, the learner will also be found working with others to develop and implement these expectations. A learner at this level is therefore someone who is more collaboratively involved in developing expectations that are more meaningful for themselves and others.

Examples:

- The learner participates in a small group that has worked to set their own ground rules for how they will interact and resolve conflicts together.
- The learner is an active participant in a course where the instructor has led students through a brainstorming process

Level 2 includes the previous level's recommendations where the learner adheres to clear behavioral expectations for the learning contexts that they are a part of. However, it then goes beyond Level 1 when the learner actively seeks out and participates in activities that intentionally facilitate safe, inclusive, and caring interactions. Overall, the goal here is for the learner to actively seek out opportunities where they can intentionally practice these expectations. It is one thing to have clear expectations that the learner minimally complies with (Level 1) but quite another for them to proactively participate in projects and activities where they are required to utilize these expectations (Level 2).

Levels of Development

Level 2

Examples:

 The learner is observed participating in a class debate where they are led by their instructor in positive and constructive At Level 1, the learner will be observed following given expectations for a safe, inclusive, and caring learning environment. Such adherence should not only occur when instructors and staff are present, but at all times. At this level, there will therefore be clear evidence of the learner interacting with others in ways that are congruent with the school's behavioral expectations as well as the learner positively and proactively working to ensure that that they are adhered to.

Level 1

Examples:

- The learner is observed affirming others' efforts (e.g., saying "Good Job!," thanking others for their help, etc.).
- The learner is observed correcting others when they act in ways contrary to given expectations (e.g., asking a classmate to put their phone away, redirecting a peer who is off-task, etc.).

Levels of Development		
Level 3	Level 2	Level 1
to generate behavioral expectations for the class. The learner is observed modeling expectations that have been developed collaboratively with others. The learner is observed correcting others when they act in ways contrary to expectations that have been established cooperatively.	 ways, engaging with viewpoints and opinions that are different from their own. The learner is involved in a curricular or cocurricular leadership position where they are expected to model specific behavioral expectations for the community (e.g., demonstrating academic excellence, supporting anti-hate initiatives, etc.). There is evidence of the learner selecting projects where they have to interact with people/communities that are different from themselves in ways that are safe, caring, and inclusive. As a team leader, the learner is observed coaching their peers in relation to behavioral expectations as they work on a small group activity. 	 The learner is observed affirming others when they share their diverse beliefs, viewpoints, answers, etc. The learner intervenes when one of their peers acts negatively towards another classmate.

Feedback Table - Teaching & Learning Theories

1) Learner is able to articulate: a) specific holistic learning theories that they might utilize; and b) when and how these theories might apply to their own learning. (Core Guideline)

What a learner believes about learning and development and can greatly influence the learning strategies that they utilize. For instance, a learner who believes that they learn best via rote memorization will likely approach their studying differently from someone who thinks that learning happens by building on their own prior knowledge via applying, analyzing, and/or evaluating with the concepts/skills they are learning about. As a result of this claim, this guideline is intended to help learners to reflect upon their understanding of learning processes. Overall, the trend is from simply being more explicit about these theories to drawing from multiple ones to help guide how they study.

Levels of Development Level 3 Level 2 Level 1 This more complex level further builds upon the Level 2 extends beyond Level 1 when the learner At this level, the learner will be able to explicitly previous level when the learner is able to reflects upon their own and others' experiences state what their own views of holistic learning articulate how a diversity of learning theories is and how they seem to be holistically learning and and development are and how they are using needed to support their own holistic learning and developing. These reflections can be **based upon** these models to inform and guide their study development. In other words, a student at this assessment data and/or conversations with others strategies. The learner does not necessarily need to level will recognize that different kinds of about this topic. The learner should then be able to be able to label these learning theories (e.g., knowledge, skills, and/or attitudes (KSAs) require compare this information with their own views of constructivism, information processing, etc.). different theories in order to maximize their holistic learning and development and note Rather, it is more important that they are able to similarities and differences. Finally, by additionally learning for each KSA. For instance, if they are clearly articulate: 1) the processes by which they studying for an exam that will have many terms drawing from evidence-based holistic learning believe that they holistically learn/develop, 2) and definitions, then they might look to cognitive theories, the learner should then be able to strategies that they can use to help themselves to psychology theories of memory to help them articulate how they are using this synthesized grow along these paths (i.e., strategies that align choose study strategies that will better help them with their understandings of learning processes), knowledge to modify and improve their study to memorize these terms. Alternatively, if they strategies. and 3) how they have chosen study habits that their exam is a demonstration of specific skills, support such learning and development (i.e., habits then they might look to skill development learning **Examples**: that align with their learning theories). Overall, **inconsistencies between these** theories and how theories to help them prepare. This level therefore The learner can state how they have used represents an intellectual advancement for their performance on exams, papers, etc. they are studying **should be pointed out** at this learners in relation to these theories/strategies to understand how they learn best in their level. when they come to realize that one holistic classes. **learning theory is not sufficient** to provide the kinds of nuanced and more complex insights and

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Levels of Development		
Level 3	Level 2	Level 1
guidance that are needed when working with diverse KSAs. The learner should therefore be able to clearly articulate why and how multiple holistic theories are needed to direct their learning strategies. Finally, and related to other guidelines, Level 3 here is intended to support more collaborative engagement with others as the learner works to develop and use these multiple theories to support their learning. Examples: The learner is able to identify 2 or more evidence-based learning theories that they have worked with others to help guide their study strategies. The learner can state how they have worked with others and used their performance on exams, papers, etc. in addition to 2 or more evidence-based learning theories to better understand how they learn best in their classes. The learner is part of a study group that is observed using multiple study strategies to prepare for an exam and can identify 2 or more learning theories to support the use of these strategies. Staff/instructor(s) can state how they have worked with the learner to improve their study strategies using 2 or more evidence-based learning theories.	 The learner can identify specific evidence-based learning theories to inform their understanding of learning processes. The learner is a part of a study group that is observed using a specific evidence-based study strategy (e.g., distributed practice, mnemonic devices, concept mapping, etc.) and can state how these strategies relate to their views of learning. The learner can articulate how their understanding of learning processes is based upon both evidence-based theories and their self-observations of how they seem to learn best. 	Learner is able to state the general processes by which they believe learning happens. The learner articulates how their study strategies help them to learn more effectively. The learner is observed using study strategies that directly align with their stated understanding of learning processes (e.g., they believe that learning happens best via real-world scenarios and they are observed using case studies to help them prepare for an exam). Study groups are observed discussing what strategies they should use to prepare for a test and how these relate to their understanding of learning.

based learning theories.
KSAs* - Knowledge, Skills, and/or Attitudes;

2) Learner utilizes active learning strategies to support their learning and development. (Core Guideline)

Increasingly over the past few decades, educational literature has given a central emphasis on the use of active teaching and learning strategies. For learners, this means using study strategies that empower them to engage with knowledge, skills, and attitudes (KSAs) in more active ways. In particular, the following active learning strategies are repeatedly highlighted in the literature as being high impact practices: elaboration and self-reflections; self-regulated learning and study strategies; direct instruction or modeling followed by learner practice; peer teaching/tutoring; concept mapping; class discussions, debate, etc.; problem solving, problem-based learning, etc.; real-world and clinical simulations; inquiry-based pedagogies; real-world projects, service-learning, etc.; workplace experiences, internships, etc.; role-playing; and game-based strategies. As this list suggests, there are numerous strategies that the learner can draw from to support their learning. The challenge to using these strategies are twofold: 1) choosing which learning strategy(ies) to use, and 2) how to adapt them for the learner's purposes. Overall, the trend for this guideline is from using these strategies in basic ways towards the learner developing multiple evidence-based strategies in collaboration with others. In addition, as the learner moves to higher levels, the strategies should more closely match with their background, interests, capabilities, etc. while simultaneously ensuring that these learning strategies foster genuine progress towards their learning goals.

Levels of Development Level 3 Level 2 Level 1 Level 3 for this guideline is similar to Level 3 for This level further extends upon the previous one Level 1 is achieved by the learner with the other guidelines in that it is more collaborative and when the learner is able to articulate/demonstrate acknowledgement of their use of active learning draws from multiple sources. The learner should be how they are using specific evidence-based active strategies. The learner should be able to able to demonstrate clear evidence of using learning strategies (see a beginning list of such articulate/demonstrate what strategy(ies) they strategies above). Ideally, they should be able to have chosen and how these are being used to help multiple active learning strategies. They should be able to articulate/ demonstrate which strategies identify specific evidence-based source(s) (e.g., them to progress towards their learning goals. they are utilizing and they should be able to point articles, workshops they have attended, their These strategies should be more than merely to specific evidence-based literature for each of instructors, etc.) that they are relying on as well as reading, highlighting, copying notes, etc. Rather, these (similar to Level 2). Beyond this, the learner how they are currently using these strategies. these learning approaches should have the learner should also be observed working with others to Finally, the learner should be able to **state/** engage with the concepts/skills in ways that require them to manipulate, create with, apply, select and adapt these strategies such that they demonstrate what adaptations they have made to **increase their competencies** in ways that are these active strategies based upon the classes that **critique**, etc. these KSAs. These strategies can be relevant for the classes that they are currently they are currently taking. These strategies, as with engaged on their own, with peers and study taking. Collaboratively, they should work to ensure the previous level, can be engaged either as a part groups, or as a part of one or more of their classes. that these individualized pathways are **congruent** of one of their classes and/or on their own Overall, these learning strategies should clearly with evidence-based recommendations as well as help the learner to actively engage with relevant initiative. the student's learning goals. KSAs.

Levels of Development		
Level 3	Level 2	Level 1
Examples:	Examples:	Examples:
 The learners actively participates in 2 or more evidence-based class activities. The learner can identify 2 or more evidence-based learning strategies that they are using as well as how they have collaborated with others to adapt these for their current classes. The learner is observed participating in a study group that uses 2 or more evidence-based learning strategies. The learner attends a workshop where they learn about and then use 2 or more evidence-based study strategies and how to adapt these in ways that will help them to be more successful in the classes that they are currently taking. 	 The learner actively participates in evidence-based class activities. The learner can state which active evidence-based study strategies they are using and can name which source(s) support to use of these strategies as well as how they are adapting these in light of the classes that they are currently taking. The learner is observed participating in a study group that uses evidence-based learning strategies. The learner attends a workshop where they learn about and then use evidence-based study strategies as well as how to adapt these for the classes that they are currently taking. 	 The learner is able to articulate which study strategies they are using and how these strategies require active engagement. The learner can state how they have reflected on their own progress in one or more of their classes and then developed a plan for improving their achievement through active study strategies. The learner is observed participating in class discussions/debates or other active teaching strategies. The learner is observed working with their study group to assess each other's work and offer suggestions of how to improve through active study strategies.

3) Learner is able to demonstrate the processes/methods by which they develop their learning strategies and there is alignment among their courses and their own learning goals, study strategies, and how they assess these goals and strategies. (Core Guideline)

ADDIE, backward design, universal design for learning, learner-centered, etc. are all examples of the many instructional design methods that students can use to help them develop their study strategies. While learners may not know the details of these specific methods, they should still be able to articulate the processes by which they are designing, implementing, and evaluating their learning approaches. This guideline is therefore intended to capture these self-regulated learning abilities. Overall, there are two trends: 1) from individually following some method to develop their study strategies towards collaborating with others and looking to evidence-based literature for help with this; and 2) there being close alignment between some of their learning theories/approaches and their classes towards this alignment existing for most of their courses' modules/units. In other words, this guideline becomes more collaborative and complex as one moves towards higher levels.

Levels of Development

Level 2

Level 3 Similar to other guidelines for this area, Level 3 builds directly upon Level 2 in more collaborative ways. The learner should still be able to articulate the evidence-based steps by which they are developing their learning strategies but **these steps** should now include collaboration with others. The learner should be able to clearly state which people they are working with and how these collaborations are directly impacting their **ongoing evidence-based changes** to their learning approaches. Alignment of their study strategies at this level is also extended to now include their classes' module/unit/weekly levels too. For example, if one of their classes is focusing on learning about how to conduct a literature review, then their study strategies that week might incorporate practicing these skills as well as better understanding why these reviews are essential for research methods. Following the framework developed for these guidelines, alignment between these course modules/units and the following elements should be verified: learning goals, study

Level 2 continues to extend the previous level. The study strategy development process articulated by the learner should now also include external evidence-based resources. There are at least two kinds of these resources: 1) external literature (e.g., educational research on learning, experts in the field, etc.) and 2) data from their own learning experiences. The learner should be able to clearly state which evidence-based resources they are utilizing and how these directly impact the learning strategies that they are using. Alignment is also further extended at this level with the module/units of their courses being directly aligned with their learning approaches. Following the framework developed for these guidelines, alignment between these course modules/units and the following elements should be verified: learning goals, study strategies, and how they are assessing the impact of these goals and strategies. At Level 1 for this guideline, the learner should be able to clearly articulate some process or set of steps that they are using to design, implement, and evaluate their study strategies. These steps might include reflecting on their own performance in past classes, looking to discipline-specific educational literature for insights into how they can learn better, following prescribed study strategies, etc. If a learner states that they are using one or more of the instructional design methods found in the literature (e.g., ADDIE, backward design, etc.), then they should also be able to state how they are applying these to their study strategies in detailed ways. In addition, there should be clear evidence that their learning goals, study strategies, and how they assess the effectiveness of their strategies are directly **aligned** with the courses that they are taking. For example, if one of their courses requires that they are able to demonstrate their abilities to conduct a research project, then the learner should adopt study goals and strategies that will better help

Level 1

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Levels of Development		
Level 3	Level 2	Level 1
strategies, and how they are assessing the impact of these goals and strategies, their own understanding of learning processes, and their own unique interests, capabilities, experiences, etc. Overall, the goal is to help ensure that their learning approaches are working in close connection with the classes that they are currently taking as these classes unfold week-by-week. Examples: • The learner participates in a study group for a specific class and can state how their study approaches directly relate to what they are learning about in the course for a specific week/unit/module. • The learner can describe the evidence-based processes by which they developed their study strategies and these steps include working with others at various stages. • The learner is observed working with a staff member to closely follow a prescribed evidence-based study strategy to guide their learning approaches. • The learner is able to state how a specific evidence-based study strategy/activity is directly related to what they are learning in a current week/unit for one or more of	 The learner is observed working to improve their learning goals, study strategies, etc. by drawing upon evidence-based resources to support these improvements. The learner is able to identify specific evidence-based resources that they are using to support the development of their study strategies. The learner participates in a workshop on how to use evidence-based learning strategies. The learner is able to describe how their learning goals, study strategies, etc. are directly related to the modules/units of the classes that they are currently taking. 	them to learn these methods as well as to continually assess their competencies in these research project skills. Examples: The learner is able to clearly articulate some process or set of steps that they are using to design, implement, and evaluate their study strategies. The learner is observed closely following a prescribed study strategy to guide their learning approaches. The learner is able to state how a specific study strategy/activity is directly related to one or more of the courses that they are currently taking.

their courses.

Feedback Table - Learner Background Considerations

1) The learner adapts study strategies to their own relevant prior knowledge, interests, skills, and capabilities; ADA considerations are addressed if needed. (Core Guideline)

This guideline is one of the most consistently emphasized across evidence-based literature, assessments, and theories. At its core, **education might be simply conceived of as a process of students moving from where they currently are in relation to course concepts/skills towards the higher levels of competency that are defined by their learning goals.** This therefore requires the learner to adapt learning strategies, course materials, etc. in accordance with their own unique background, knowledge, interests, capabilities, etc. in order to help better themselves to progress towards these objectives. This is **particularly important for learners with ADA considerations** as many courses and schools have not been developed for such diversity of differences. The overall trajectory of this guideline therefore spans from the learner modifying their learning approaches to meet their unique background towards collaborating with others in continually developing multiple goals, activities, materials, etc.

Level 3 At Level 3, the learner is **much more involved with others** than the previous two levels in that they will be observed collaborating to construct multiple ways of engaging with their learning trajectories; ways that are more in line with their backgrounds. Here, and working with others, the primary focus is on the learner becoming more self-directed in their own learning and development and better able to adapt their study strategies to meet their own prior knowledge, skills, interests, and capabilities. While some of this work might be done in their courses, the learner should also look to peers and other external resources to aid them in these collaboratively discerned learning approaches. Collaborative modifications can affect every part of their learning process including their learning goals, the activities that they engage in, and how they seek to self-assess their proficiencies for specific knowledge, skills, and/or attitudes (KSAs). The learner may also be a proactive part of

At Level 2, the learner will differ from Level 1 by seeking out multiple pathways to engaging with the course knowledge, skills, and/or attitudes (KSAs). These multiple pathways, similar to the previous level, should match their unique prior knowledge, current interests, capabilities, skills, etc. For ADA-related resources, whether they are ADA-identified or not, the learner should use and modify these in order to better fit with their unique learning needs and capabilities. This is important because studies on ADA resources/accommodations are revealing that non-ADA as well as ADA-identified students benefit from using well-designed ADA resources.

Levels of Development

Level 2

Examples:

 Self-identifying with a specific learning style, the learner can articulate how they have engaged with two or more learning At this level, the learner should be able articulate/demonstrate what past experiences they are drawing from and/or what specific external resources they are utilizing to modify their own approaches to learning. There should be clear evidence of the learner working to adjust these approaches in light of their own unique need, interests, capabilities, etc. These experiences and/or resources should therefore be directly related to the learner's own knowledge, interests, skills, and/or capabilities.

Level 1

Examples:

- The learner can state what they believe their learning style is and how they have adjusted their study strategies to better fit with this style.
- The learner is observed making use of their school's ADA support to help them be more successful in their classes.

Levels of Development		
Level 3	Level 2	Level 1
 initiatives to incorporate and adapt ADA resources/support in an effort to help all students in the class or at the school to be more successful. Examples: The learner is observed meeting with an instructor or staff member to develop an individualized learning plan for one of their classes. The learner is part of a study group that uses self- and/or peer-assessments to evaluate their progress and then develop personalized study strategies. The learner is an active participant in a class that is observed collaboratively engaging in Universal Design for Learning (UDL) processes to develop an up-coming unit for the course. The learner is part of a course that contains an activity where small groups create their own service-learning project that is of direct interest and relevance to them. 	 activities to help them learn a key concept in one of their classes. The learner is observed turning on the close captioning for a video in an effort to help them better understand the concepts/skills that the video is presenting. The learner can identify two or more sources (e.g., books, websites, online videos, mentors, etc.) that have helped them to better learn core concepts/skills in one or more of their classes. The learner is then able to articulate how these sources match their unique needs, interests, capabilities, etc. The learner participates in multiple class activities for a key concept/skill that requires them to identify their own interests and prior knowledge/skills in relation this concept/skill. 	 The learner is able to state how they have reflected on their performance in previous classes and has modified their study strategies to better fit with their own needs and capabilities. The learner participates in a class activity that requires them to identify their own interests and prior knowledge/skills in relation the course and then adjust their learning strategies in light of this background.

2) Learner is able to appropriately modify their learning strategies in light of their own cultural locations (e.g., SES, ethnicity, gender, age, etc.).

Somewhat similar to the previous guideline, this one is more directly **centered on the cultural considerations of the learner** whereas the previous guideline was more related to their unique prior knowledge, interests, capabilities, etc. Recognizing that a student's culture deeply influences learning and development, this guideline focuses on identifying how the learner is adapting their learning strategies in light of their cultural considerations. A student's cultural location can include one or more of the following: **ethnicity, gender, age, socio-economic status (SES), educational level, sexual orientation, religious tradition, geographic location, political affiliations, etc.** These and other cultural factors influence many of the considerations named in the previous guideline. As a result, developing their study approaches to be **more aware of these cultural factors and intentionally engaged with them will result in greater gains** in achievement. Trends for the levels of this guideline range from the learner simply working to be more aware of how their cultural location might influence their learning to the student working directly with peers as well as community members to **modify their learning approaches to be more culturally responsive**.

Level 3 Level 2

Similar to many other guidelines, Level 3 will show evidence of the learner working directly with peers as well as outside instructors/ staff and community members to adapt learning strategies to better meet their own diverse cultural **locations**. The learner should therefore be able to demonstrate evidence of engaging with multiple learning pathways that have been developed in collaboration with others. Also, a learner at this level will seek to **broaden their diverse cultural** perspectives via their learning materials and activities. Overall, this level is very similar to the previous guideline but has a more **specific** emphasis on collaborative cultural engagement with course knowledge, skills, and/or attitudes (KSAs).

Examples:

 The learner is observed working with culturally diverse community members to Similar to the previous guideline, a learner at Level 2 differ from Level 1 by when they seek out and engage multiple and culturally relevant pathways to engaging with their learning and development. These multiple pathways, however, should match the cultural location of the learner as well as the wider communities that they are likely to work with in the future. These multiple pathways should lead the student to achieving their learning goals in ways that are congruent with their cultural heritage.

Examples:

- The learner chooses a class project that is relevant to their own ethnic heritage.
- The learner is observed finding multiple elearning modules online that help them to better understand course concepts/skills in relation to one or more of their own cultural locations.

At this beginning level, the learner should be **able** to identify some of the various cultural locations for themselves and the communities that they are a part of based on ethnicity, age, gender, socioeconomic status (SES), etc. The learner should also be able to identify resources that they are using to help them to better understand one or more of these cultural factors and how these might influence their own learning and **development**. The learner then uses this knowledge to **modify their learning approaches**. At this level, then, learners will be able to: 1) identify their own and their communities' cultural locations, 2) state which resources they are relying to inform their understandings of these cultural locations and how these might influence their own learning and development, and 3) articulate/ demonstrate how they are adapting their learning strategies based on these understandings. The primary aim at this level is the learner developing a beginning understanding of their cultural

Level 1

Levels of Development		
Level 3	Level 2	Level 1
 develop a project that is relevant for the community. The learner is observed working with one of their classes to identify culturally diverse resources that will become required reading for a course unit. The learner joins a study group that seeks to create study strategies that are culturally appropriate for everyone in the group. The learner works with a mentor to identify multiple resources that will help them to better know how the knowledge, skills, and/or attitudes of one of their classes needs to be adapted for their community's culture. 	 The learner can state how they have located supplemental culturally appropriate articles on a topic for one of their courses. The learner is able to identify multiple resources that have helped them to better know how the knowledge, skills, and/or attitudes of one of their classes needs to be adapted for their community's culture. 	Iocations and then making changes to their study strategies to be more aligned with these locations. Examples: • The learner is able to accurately identify one or more of their own cultural locations (e.g., SES, ethnicity, gender, age, etc.) and can state how they have adapted their learning strategies in light of this awareness. • The learner can identify one or more resources (e.g., articles, books, instructors, mentors, websites, etc.) that they have used to help them better understand their own cultural locations. • The learner is part of a class that contains resources that helps them to better understand their own cultural location and how to better learn course concepts/skills. • The learner is observed discussing with an instructor how course concepts/skills might vary based on their own cultural location.

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3) Mission-Centered Focus: In pursuit of learning goals, the learner engages in diverse cultural experiences with under-represented and marginalized communities and proactively works to reduce biases and increase justice for these populations. (Core Guideline)

Educational studies in the U.S. continue to document a significant gap in achievements between at least two sets of groups: 1) middle/upper and lower SES students, and 2) Euro-American and Non-Euro-American students. In response, nation-wide PK-16 initiatives have been launched in an attempt to close these gaps. This guideline is reflective of these initiatives and is intended to help ensure that each learner is helping to address the needs of marginalized, under-resourced, and lower performing students. Furthermore, following this guideline, classes should help to prepare students to proactively engage with marginalized and under-resourced communities in positively transforming ways. Doing so should not only help these communities, but it should also help to deepen learning for the student by making their education more meaningful, relevant, and real-world related. Overall, the trends from Level 1 to 3 are from the learner being more aware of diverse perspectives to actively engaging with diverse people and communities. It also entails the learner not only addressing their own personal biases but also helping others to do likewise.

Level 3 Level 2 Level 1

Level 3 continues with both of the considerations from Level 2. The learner will **intentionally seek** out interactions with people/communities in ways that deepen their ability to work with diverse cultures. Again, a central emphasis is given to marginalized and under-resourced populations and students learn how discipline-specific concepts/ skills directly relate and can be applied to working for change in solidarity with these communities. As they engage in this work, attention should be given to developing their own civic engagement and intercultural competency knowledge, skills, and attitudes (KSAs) at higher levels as they relate to under-resourced and marginalized communities. Numerous standards are available online that outline these KSAs and the learner should identify and integrate the most appropriate ones for their own purposes.

At this level, there are two primary considerations. The first extends upon Level 1 when the **learner** seeks to engage more directly with marginalized and under-resourced communities. Here, the interactions are more immersive and direct rather than simple exposure to their perspectives as it is with Level 1. For the second consideration, the work on identifying and transforming biases also expands at this level when the student now works with others in these areas. While it might at first appear that multicultural engagement from the previous guideline includes transformative **reflections on biases**, this is not always the case. Learners at this level therefore explicitly and directly address these kinds of personal **reflections with others**. This work involves the learner helping them towards a deeper awareness of their own biases and how these might be affecting their perceptions of and engagement with diverse people and communities particularly marginalized and under-represented

Level 1 for this guideline is primarily focused on the learner exposing themselves to diverse perspectives (locally, regionally, nationally, and/or globally) as part of their pursuit of learning goals. In line with the aims of this guideline, a **specific** emphasis is given to the lived experiences and perspectives of under-resourced and marginalized **communities**. The second part of this level involves the learner actively becoming more aware of their **own biases** and how these might be affecting their actions personally, civically, and professionally. The student should be able to: a) articulate/ demonstrate awareness some of their potential biases; b) state/demonstrate how these biases might be affecting their learning path, professional work, and/or civic engagement; and c) reflect on concrete steps that they can take to prevent these biases from adversely affecting themselves and others.

Levels of Development		
Level 3	Level 2	Level 1
 Level 3 Examples: The learner is an active participant in a course that contains social justice projects where students are required to work with a local advocacy group. The learner is part of a student organization that works with lower income community members to complete neighborhood improvement projects. The learner is able to articulate civic engagement and/or intercultural competency standards that they are working to develop in. The student volunteers with a community organization that works with policy makers to bring about changes that influence marginalized populations. 	 Level 2 ones. There should therefore be clear evidence of these kinds of engagement on the part of the learner as they continue to pursue their learning goals. Examples: The learner is observed participating in a study group that regularly discusses how course content relates to under-resourced and marginalized communities. The learner is observed completing a service-learning project that requires them to connect with local and global peers from marginalized backgrounds. The learner is part of a course that includes community-based projects that expose students to under-resourced communities. The learner is part of a student organization that helps to facilitate events and discussions on sexism, racism, etc. 	 Level 1 Examples: The learner shows evidence of participating in anti-racism programs. The learner is able to state how one or more of their own biases can potentially influence their interactions with classmates, co-workers, and/or people in the community. The learner is observed interacting with a classmate's viewpoints and then comparing these perspectives with someone from an under-resourced and/or marginalized background. The learner actively participates in a course that contains materials (e.g., readings, videos, etc.) from diverse perspectives of under-resourced and/or marginalized communities.
L KSAs* - Knowledge Skills and/or Attitudes:	and discussions on sexisin, rucisin, etc.	

Feedback Table - Professional Development, Leadership, & Evidence-Based Practice (adapted from InTASC Standards)

1) Learner engages in and supports professional development opportunities related to improving their discipline-specific competencies. (Core Guideline)

The craft of any discipline is a lifelong pursuit, one that can be continually improved upon. Whether one is in healthcare, education, management, sciences, law, etc., there is always more that can be learned and developed. As a result, what is being taught in one's courses is only a small foundational fraction of what can be known for each field of study. In order to help foster ongoing growth, then, the learner needs to be involved in co- and/or non-curricular professional development opportunities. These opportunities should help the learner to identify and become more competent in the knowledge, skills, and/or attitudes that are integral to their specific discipline. This guideline is therefore intended to help ensure that learners are engaging in professional development (PD) in significant ways beyond what they are learning about in their classes. Not only should their PD help to better prepare them for their chosen career, it should also help them to establish a habit of continual learning that will serve them throughout their lifetime. At lower levels, this involvement can be simply participating in PD sessions whereas at the higher levels the learner will help to develop these sessions. Overall, the learner should be found continually and proactively pursuing deeper, broader, and more expert levels of proficiency in their discipline-specific craft.

Levels of Development Level 3 Level 2 Level 1 While this level continues to build upon the This level continues the previous one with the At this level, the learner will be found participating previous one, it is also characteristically different. learner continually engaging with co- and/or nonin co- and/or non-curricular professional curricular professional development (PD) that Here, the learner will be found not only engaging in helps them to improve in a specific discipline. lunch-and-learns offered by their school, However, rather than attending PD events as they become available, a learner at this level will be

relevant professional development (PD) opportunities, they will also help to develop these. Following Level 3 for many other guidelines, these development efforts should be collaborative in nature as they work with others to design, implement, and evaluate PD offerings. These coand/or non-curriculum PD efforts might occur at their school or with discipline-specific organizations that they are a part of. The PD events that they help to create should aid others in their own ongoing journey to continually improve in

discipline-specific competencies.

learner continually engaging with co- and/or non-curricular professional development (PD) that helps them to improve in a specific discipline. However, rather than attending PD events as they become available, a learner at this level will be more intentional with assessing their current competencies and identifying areas where they need improvement. To help with this, the learner will look to various sources and support systems such as asking peers and/or mentors to help them assess their knowledge and skills, attending workshops that help them to identify areas for improvement, etc. Based upon these intentional evaluations, the learner will then seek out co-and/or non-curricular PD opportunities that directly address these areas — ones that continue to improve noted strengths and/or helps with

in co- and/or non-curricular professional development (PD) opportunities that are readily available to them. These might include attending lunch-and-learns offered by their school, participating in regional trainings in their discipline, accessing online webinars on new findings in their field, etc. These PD offerings should help the learner to stay current in a specific discipline, particularly in the area(s) of focus that they are interested in. Regardless of the PD that they engage with, these should help the learner to be better prepared for a possible future career beyond what they are learning in their classes.

Examples:

 There are records of the learner attending lunch-and-learns offered by their school.

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Levels of Development			
Level 3	Level 2	Level 1	
 The learner serves on a student government group and they actively work with others to develop PD events for the student body. The learner is an active participant in a discipline-specific organization and they work with peers to deliver workshops and develop resources that help colleagues to improve their proficiencies. The learner works with student retention efforts on campus to identify best practices and help faculty, other students, and staff to align their courses and programs with these practices. The learner collaborates with a peer to offer training sessions to colleagues on discipline-specific knowledge, skills, and/or attitudes (KSAs). 	is demonstrating the self-regulated learning skills that they will need to help them to continually improve across the whole of their career. As a result, increased achievement in their courses should be a measurable outcome of these efforts. Examples: The learner can describe how they have worked with a study group to assess their knowledge/skills and then identify coand/or non-curricular PD opportunities to help them to address areas noted in these evaluations. The learner asks an instructor to help them better understand what is going well and what might be improved in their disciplinespecific knowledge, skills, and/or attitudes (KSAs) and then identify PD events that help them to improve in these areas. The learner uses evidence-based guidelines to self-assess their discipline-specific KSAs and then identifies resources that will help them to address noted areas for improvement. The learner participates in a co- and/or non-curricular workshop that helps them to evaluate one or more of their discipline-specific competencies and then improve in	 The learner can show evidence of attending regional trainings in their discipline. The learner is observed accessing online webinars on emerging trends in their area(s) of interest. The learner subscribes to and regularly reads journals and new texts in their field. 	

these areas.

2) Learner actively participates in leadership roles and responsibilities that improve the school's education and culture.

As may be seen by these guidelines, the **institution's culture greatly influences the quality of education**. Level 3 for most guidelines are highly collaborative in nature and educational research studies are finding that the more positive and interactive a school is, the higher the student achievement (Hattie, 2009, p. 80). This **culture is at least partly, if not largely, determined by the roles and responsibilities** that students, faculty, and staff have. As a result, it is imperative that each individual play an active part in helping to continually shape and guide the organization's actions, attitudes, policies, etc. This means that **learners should therefore be found taking on leadership roles at their institution**. At lower levels, this involvement will entail supporting positive and collaborative initiatives. At higher levels, the learner will be found leading quality improvement projects, actively mentoring others, etc. The basic premise here is that **the more committed to quality learning and development a student is, the better the education will be** for them.

Levels of Development

Level 2

Level 3 Extending the work of the previous level, a learner at Level 3 will be **found taking a more proactive** role in identifying and initiating institutional change projects at their school. At Level 2, the learner was an active participant on already existing leadership teams that designed and carried out these kinds of projects. At this level, however, there will be strong evidence of the learner taking the initiative to identify opportunities for schoolwide improvement that are intended to increase student achievement. A learner at this level will also be found working to empower others to be more actively involved in leadership roles at their school. Overall, the learner is committed to continuous improvement of their institution as evidenced by this kind of mentoring as well as by the initiatives that they take a lead role in launching.

Level 2 builds upon Level 1 when the learner is found participating in school initiatives that work to achieve specific goals. These projects may be a part of a task force that the learner is on, ventures that their department is leading, initiatives that are being led by discipline-specific organizations, curriculum rewriting efforts, accreditation-related improvements, etc. At Level 1, the learner may simply take part in these as a participant. At this level, however, the learner will be an integral part of the core planning and implementation team that is leading these projects. In addition, the learner will also be found at this level mentoring others. Such mentoring can happen formally via structured programs or informally as the learner works with a peer to improve in their courses. Overall, this level is characterized by the learner taking on roles at the school where they help to implement organizational projects as well as more proactively mentor others.

At this level, the learner will be aware of initiatives at their school that relate to supporting its vision and mission. The learner may serve on committees, attend events related to the school's mission, intentionally work to develop collegial friendships with peers, etc. Here, the learner is an active part of already existing initiatives, behaviors, etc. of the school. They positively support the institution's culture and work to develop collaborative relationships with other students, faculty, and staff.

Level 1

Examples:

- The learner is observed actively serving on committees and contributing to the committee's work.
- The learner is observed attending events related to the organization's mission.
- There is evidence of the learner intentionally working to develop collegial

Levels of Development		
Level 3	Level 2	Level 1
 The learner is observed starting a quality improvement project to address the lack of tutoring support at their school. The learner shows evidence of conducting their own analyses to identify additional community-based volunteer opportunities for students to be involved in. The learner is observed bringing others together to identify challenges at their school and brainstorm solutions. The learner starts a peer mentoring program that empowers new students to be more involved in leadership roles at the school. 	 The learner is observed taking an active part on a task force that is leading a curriculum rewriting effort. The learner proactively works with faculty and staff at their school to support initiatives that are being led by discipline-specific organizations. The learner actively contributes to a committee that is assessing accreditation-related improvements. The learner participates in a structured peer mentoring program. 	friendships with other students, faculty, and staff. The learner is able to articulate the organization's vision and can state how they intentionally work to support and implement this vision in their classes, with peers, etc.

3) Learner conducts evidence-based practice and/or scholarly projects that improve their discipline-specific competencies. (Core Guideline)

In any field of study, **improvements often come incrementally via an integrated combination of learning, action, and reflection**. In other words, we learn about our discipline, we try what we learn, and then we can reflect on how things are going. This basic cycle is the foundation of evidence-based practice, which should be applied to every discipline. This guideline is therefore intended to encourage learners to engage in these kinds of approaches to help improve their discipline-specific competencies. **Learners need to establish habits of continually learning about how to engage in their fields of study better, apply what they are learning, and then gather data that helps them to identify areas of strength as well as improvement. Such endeavors can be done informally as they engage in these activities or more formally via scholarly projects where they follow structured research methods that assess their knowledge, skills, and/or attitudes (KSAs). This work might come as an integral part of their classes, via co-curricular activities, in jobs or internships that they have, etc. At lower levels, learners will be found working individually to improve their own capabilities whereas at higher levels they will be found collaborating with others to have a wider impact on their institutions or disciplines more broadly. Overall, learners should intentionally and continually use evidence/data to help improve their discipline-specific capabilities**.

Level 3 Level 2 Level 1 Level 3 further extends the work of the two This level builds upon the previous one when the At this level, the learner will have clear habits of previous levels. There should still be strong learner teams up with others to work towards gathering data on their course-related evidence of the learner collaborating with others evidence-based improvements in their course competencies and then continually working to to engage in evidence-based practice (EBP) and/or **related competencies**. As with the previous level, improve the quality and effectiveness of their scholarly projects that are intended to improve these efforts can be more informal ones where the knowledge, skills, and/or attitudes (KSAs) based discipline-specific practices. At this level, however, upon the data that they have gathered. The learner and their collaborators use data to improve there will be two significant additions. First, the one or more of their core KSAs. Or they can work essential component of this level is the learner learner will be **found working on projects that** together to complete more formal scholarly intentionally gathering data that will help them to have a broader impact on discipline-specific projects that provide insights into the theory better assess and subsequently improve their theories/practices. An example of this would be and/or practice of a specific discipline. The learner discipline-specific competencies from an evidencestudying the practices that are being used by at this level will therefore be found actively based perspective. The learner should therefore be experts in a specific discipline in an effort to help partnering with others to complete evidenceable to identify the data that they are gathering as improve the field. Second, the learner will then based practice and/or scholarly projects that are well as how they are using this data to guide work to widely disseminate the results of these intended to improve their competencies in incremental changes to their KSAs. specific disciplines. projects with peers at their institution and **beyond**. This dissemination can take the form of Examples: campus-wide presentations, poster presentations **Examples**: • There is evidence of the learner using at a conference, journal articles, book chapters, • The learner is observed participating in a formal and informal assessments from one policy making, etc. At this higher level, the learner study group that is focused on continually or more of their classes to help evaluate and improve their capabilities.

Levels of Development