Examples of Intellectual Development Cues

Based on Models of Intellectual and Ethical Development

William G. Perry, Jr. and Belenky, et al (Women's Ways of Knowing)

and

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EARLY POSITONS: Dualism and Received Knowledge

<u>View of Knowledge</u>: Focus on facts and content—WHAT to learn. Emphasis on right answers, not on methods to find answers. Learning=information exchange. Knowledge is dichotomous—right or wrong; all or nothing. Emphasis on literal interpretation. Knowledge is know by and received from Authority figures. Authorities possess knowledge and reveal it. Truth is absolute and universal and is external to the learner.

<u>Role of Authority</u>: The Authority figure is the source of truth (teacher/textbook). Authorities are good or bad (right or wrong). The Authority is fundamentally responsible for the learning that takes place. <u>The Authority holds all knowledge and power.</u>

<u>Role of Learners and Peers</u>: The responsibility of the learner is to accurately receive knowledge and to reproduce it on demand. The self is a passive receiver of knowledge and while peers are a very real part of the classroom environment, they are rarely seen as a source of knowledge. Small group work and projects may be seen as a waste of time.

<u>Role of Assessment</u>: Assessment is understood as evaluation of the accuracy of what a person knows. Evaluation should emphasize right answers, should be clear and straightforward, and should "test" what has been directly taught. Evaluation is often directly related to one's sense of self—good and bad answers are related to good and bad people.

<u>Primary Intellectual Tasks</u>: Memorization. Learning basic information and definitions of words and concepts. Learning to identify parts of the whole. Beginning to be able to compare and contrast, but not with a nuanced understanding. Learning to provide an explanation of why one answers as one does.

Classroom Atmosphere: Often the focus is on the physical environment. The learner often expects and prefers a structured, traditional formal instruction process. This is often reinforced by inferior teaching evaluation formats which emphasize the role of the instructor but neglect to ask about the role of the student in the learning process.

Language: Use of absolutes and dichotomies. Simplistic. More literal plot/content orientation. Lack of understanding of the history of the development of ideas.

Sources of Challenge: Ambiguity. Diffuseness or its appearance; multiple perspectives on the same thing. Uncertainty—especially by an Authority. Discomfort with any disagreement between respected Authorities. Requests for interpretation by the student often bring anxiety.

Sources of Support: High degree of structure. Concrete examples. Experiential learning. Joy in the opening of the world of knowledge. Careful sequencing and timing of presentations of diversity and diverse perspectives. Safe learning environment where students are respected and treated with courtesy. Modeling on the part of the instructor. Chance to practice skills and learn what assessment of learning entrails.

NEXT LEVEL POSITIONS: Early Multiplicty and Subjective Knowledge

View of Knowledge: Emphasis on learning the RIGHT WAY TO FIND the right answer. HOW to learn. Much pressure to learn the right process to find the right answers. Good learning is practical, useful, and relevant. Most knowledge (still fact) is known and all is knowable. This is the first understanding of knowledge having to do with process and procedures. There is a certainly that there exists a right way to find the right answers. There is a realization, however, that some knowledge domains are "fuzzy". There is also a growing sense that knowledge can be subjective and related to one's own experience. This realization is both exciting and freeing and the source of much confusion. It can lead to a perspective that things aren't correct or incorrect, but "just different".

Role of Authority: The Authority is the source of the right way to find the right answers, of how to learn. Complexity is often seen as quantity, not qualitative difference. Authorities are seen as roles models of how to learn and the right way to learn—student looks to Authority for right methods. There is an emphasis on the relationship between the Authority figure and the students.

Roles of Learners and Peers: The responsible student role is to learn how to learn, how to work hard. Peers become the source of a variety of perspectives (seen as opinions), but the Authority figure has the final say in what is correct. Peers and respectful relationships in class are seen as important. Peers are

now more legitimate in the learning process—small discussion groups and project groups. Students are beginning to understand "perspective taking".

Role of Assessment: Evaluation is a primary issue. Students place emphasis on hard work, amount of time and effort spent in learning. There is much focus on quantity. A primary question is: how are my answers judged? Fairness is a major issue—fairness in judging, in assignments, in amount of work, and in the distribution of work in small group projects. Hard work should equal good grades.

Primary Intellectual Tasks: Students are learning to do compare and contrast tasks with comfort. They can see multiples—perspectives, parts, opinions, but are only moving into an understanding of analysis and being able to see things as similar and different at the same time.

Classroom Atmosphere: Students are comfortable with a variety of teaching methods, but need help in seeing how the methods foster learning. Students are more comfortable in less Authority structured learning experiences and are able to see more connections with in and out of class learning experiences such as field work. Experiential learning is valued. Variety in ways of learning is valued.

Language: Students are able to use quantity terms, qualifiers—demonstrating a break with absolutes. Often use vague terms and over generalizations. Still have difficulty in making transitions for one set of ideas to another.

Sources of Challenge: The view that uncertainty is just temporary is unsettling. Complexity is initially seen as quantity, not qualitative difference. Realizing that learning is a process more complicated than acquiring fact and information is both exciting and frightening. There is often a great effort to determine which of the multiples is really "right".

Sources of Support: Students still need structure to help guide them as they move into more and more diversity, complexity, and ambiguity. Clarity of evaluation and assessment procedures is helpful. This is also true for assignment instructions. Students often enjoy new freedom in learning and find a comfort in the belief that right procedures will ultimately produce right answers.

NEXT LEVEL POSITIONS: Late Multiplicity and Procedural Knowledge

View of Knowledge: Students experience a "flip" in perspective—now they often see some areas as having certainty, but most areas of knowledge as being fundamentally uncertain. This can lead to a cynicism about "playing the learning game". The new certainty is that there is no certainty in most areas. " Everybody just has their own opinion." There is a new emphasis on HOW TO THINK. Independent thinking is valued. Students are beginning to see the difference between opinion and supported opinion. There is a strong emphasis on learning the procedures of academic fields and disciplines. Different realms of knowledge are recognized.

<u>Role of Authority:</u> Authority knows the right way to think. Personal expertise and authority arise from training and modeling and experience. Students often assert independence from authority and can discount expertise as "just your opinion". The instructor is often a role model for how to think and ways of thinking. Students often vary from an adherence to authority and the experience as "right" and a rejection of authority and of learning as a cynical game.

<u>Roles of Learners and Peers:</u> Students are responsible for doing independent thinking and using supportive evidence. Students increasing appreciate the history of ideas and the development of schools of thought and theoretical stances. Students are active agents in their own learning. Genuine empathy for others becomes possible. Perspective taking is appreciated. Peers perspectives are legitimate if they use adequate supportive evidence. A primary student role involves learning to think for oneself and to learn to use supportive evidence. Independence of thought is valued.

<u>Role of Assessment:</u> Students are often caught in playing the "learning game" of "giving them what they want"----do you want to know what I think, or what I really think? Students are learning to understand qualitative criteria as legitimate and are beginning to understand "rubrics" of assessment.

<u>Primary Intellectual Tasks:</u> Students understand analysis and can do some synthesis. They can critique something using both positive and negative issues. They use supportive evidence well. They can often relate the learning in one class to another....movement toward integrative learning. They are learning to think in abstractions and understand the relationship of theory and practice.

<u>Classroom Atmosphere:</u> Students endorse greater flexibility and greater student responsibility for their own learning and for shaping an effective learning environment.. Students enjoy assignments that require alalysis and synthesis.

<u>Language:</u> Students often use absolutes within what appears to be a multiplistic framework. Phrases using "must" and "should" reappear in papers and essays. Students often use buzz words in writing. Students are better at thinking about their own thinking process.

<u>Sources of Challenge:</u> The main challenge is the demand for use of evidence to support perspectives and analysis. There is often confusion between what are good sources of evidence and what aren't. Another major challenge is learning to accept responsibility for one's own learning.

<u>Sources of Support:</u> Students enjoy diversity. They tend to balk at too much structure. They have a comfort with different ways of learning, although they may prefer some modes over others.

MATURE POSITIONS: Contextual Reasoning and Constructed Knowledge

<u>View of Knowledge:</u> Knowledge is constructed in context. There is a strong emphasis on HOW TO THINK IN CONTEXT. Knowledge is disconnected from absolutes. Serious learners strive for expertise.

All knowledge is constructed by self and others in relationship. Knowledge systems can be examined, shaped, shared, and subject to critique in context. All knowledge is contextual and is disconnected from "Absolute Truth". However, right and wrong, adequate and inadequate, appropriate and inappropriate can still exist within a context and are judged by "rules of adequacy". Learners are responsible for making thoughtful, evidence based ethical judgments.

Role of Authority: Authority is a source of expertise—role of expert/guide/consultant within the framework of "rules of adequacy" and within context. Mutuality of learning is sought between faculty and students and among groups of people. Diversity is a source of knowledge.

Role of Learners and Peers: The primary role of the learner is to exercise the use of intellect of self learning and the learning of others. Collaborative learning makes sense. Students can shift from context to context and can apply criteria and rules of adequacy to unscripted situations and problems. Students are active agents in their own learning. Genuine empathy becomes possible. Students see their responsibility as seeking/creating knowledge and taking learning seriously.

Role of Assessment: Students can separate evaluation of work from evaluation of the self. Students are comfortable with and seek feedback and connect thoughtful critique to caring. Evaluation and assessment are related to improvement and new learning. Assessment is seen as a part of deeper learning.

Primary Intellectual Tasks: Students relate learning in one context to learning in other contexts. They look for relationships in learning. They seek complexity and can evaluate, conclude, support their own analysis without becoming defensive. They can synthesize, adapt, modify, and expand concepts. They are good with abstraction and application.

Classroom Atmosphere: Strong value on intellectual dialogue. Comfortable with respectful exchange. Mutual feedback is sought and given. There is joy in learning and an excitement about ideas.

Language: There is an increasing emphasis on meta-thought. Language reflects nuanced understandings and complexities. There is the ability to synthesize and present coherent themes.

Sources of Challenge: Students are often comfortable with ambiguity and multiple perspectives and may find it difficult to make commitments to stances or a primary perspective. They are faced with the dilemma of choosing between or among equally good alternatives. They are highly challenged to new heights of intellectual synthesis.

Sources of Support: Students truly enjoy diversity, complexity, and options in learning. They have a feeling of intellectual mastery and a willingness to place themselves in new and challenging learning situations. They are comfortable seeking aid of appropriate authority/expertise.