

International Baccalaureate

IB Americas
Making the PYP happen in the classroom

Category 1

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Teacher Training Workshop

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The IB mission statement

The International Baccalaureate aims to develop inquiring, knowledgeable and caring young people who help to create a better and more peaceful world through intercultural understanding and respect.

To this end the organization works with schools, governments and international organizations to develop challenging programmes of international education and rigorous assessment.

These programmes encourage students across the world to become active, compassionate and lifelong learners who understand that other people, with their differences, can also be right.



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IB learner profile

The aim of all IB programmes is to develop internationally minded people who, recognizing their common humanity and shared guardianship of the planet, help to create a better and more peaceful world.

As IB learners we strive to be:

INQUIRERS

We nurture our curiosity, developing skills for inquiry and research. We know how to learn independently and with others. We learn with enthusiasm and sustain our love of learning throughout life.

KNOWLEDGEABLE

We develop and use conceptual understanding, exploring knowledge across a range of disciplines. We engage with issues and ideas that have local and global significance.

THINKERS

We use critical and creative thinking skills to analyse and take responsible action on complex problems. We exercise initiative in making reasoned, ethical decisions.

COMMUNICATORS

We express ourselves confidently and creatively in more than one language and in many ways. We collaborate effectively, listening carefully to the perspectives of other individuals and groups.

PRINCIPLED

We act with integrity and honesty, with a strong sense of fairness and justice, and with respect for the dignity and rights of people everywhere. We take responsibility for our actions and their consequences.

OPEN-MINDED

We critically appreciate our own cultures and personal histories, as well as the values and traditions of others. We seek and evaluate a range of points of view, and we are willing to grow from the experience.

CARING

We show empathy, compassion and respect. We have a commitment to service, and we act to make a positive difference in the lives of others and in the world around us.

RISK-TAKERS

We approach uncertainty with forethought and determination; we work independently and cooperatively to explore new ideas and innovative strategies. We are resourceful and resilient in the face of challenges and change.

BALANCED

We understand the importance of balancing different aspects of our lives—intellectual, physical, and emotional—to achieve well-being for ourselves and others. We recognize our interdependence with other people and with the world in which we live.

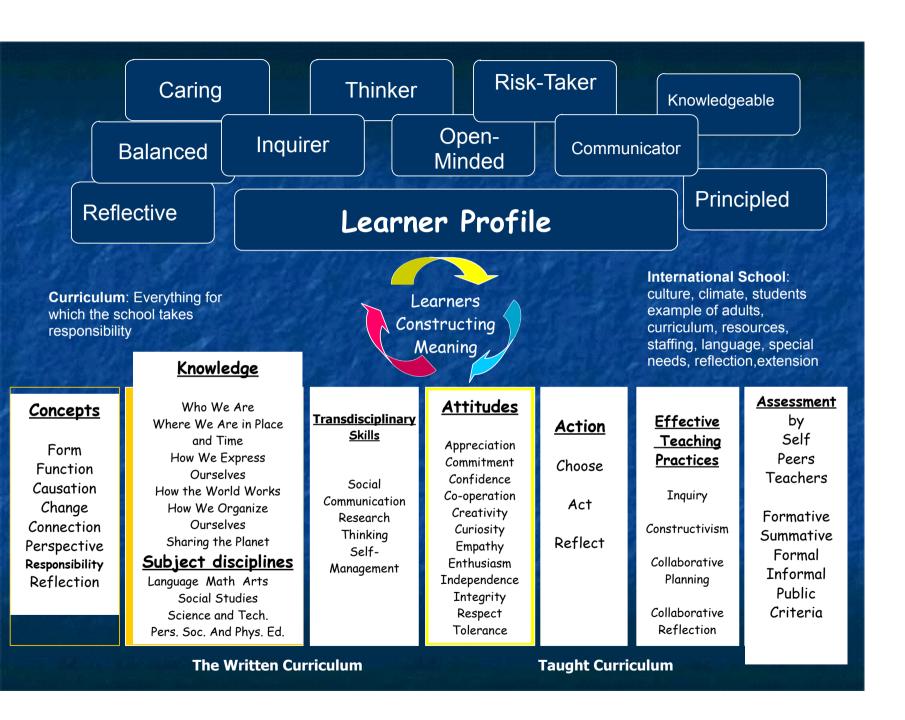
REFLECTIVE

We thoughtfully consider the world and our own ideas and experience. We work to understand our strengths and weaknesses in order to support our learning and personal development.

The IB learner profile represents 10 attributes valued by IB World Schools. We believe these attributes, and others like them, can help individuals and groups become responsible members of local, national and global communities.



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IB Abbreviations, Terms and Acronyms

IB: International Baccalaureate: A global network of schools, educators, students and parents and parents whose mission is to "develop inquiring, knowledgeable, and caring young people who help create a better world through intercultural understanding and respect."

IBA: International Baccalaureate Americas
This region includes North America, South America and the Caribbean.

PYP: Primary Years Program

A transdisciplinary framework of international education for students aged 3-12 designed to foster the development of the whole child.

MYP: Middle Years Program

A program of international education designed to help students ages 11-16 develop the knowledge, understanding, attitudes and skills necessary to participate actively and responsibility in a changing world.

DP: Diploma Program

A challenging two-year program of international education for students aged 16-19 that leads to a qualification that is widely recognized by the world's leading universities.

MTPYPH or MIH: Making the PYP Happen in the Classroom This is the guidebook, which is a curriculum framework for international primary education.

Curriculum: In an IB school "curriculum is all those student activities, academic, and non-academic, for which a school takes responsibility, since they all have an impact on student learning." The curriculum model in an IB school consists of three interrelated parts: The Written Curriculum (What do we want to learn?), Taught Curriculum (How best will we learn?), and Assessed Curriculum (How will we know what we have learned?)

Learner Profile: A set of ten attributes that the IB defines as an internationally minded student

Essential Elements of the PYP: Knowledge, concepts, skills, attitudes and action that foster the development of the whole child and provide a balance for the written curriculum.

Concepts: Mental constructs or frames of mind that are universal, timeless, abstract and transferable

8 PYP Key Concepts: These are broader "macro" concepts that provide a framework that helps to drive teacher and student initiated inquiries.

Related Concepts: Concepts that are more "subject specific"

Programme of Inquiry (POI): A collaboratively-developed framework for inquiry, which includes the entire school's transdisciplinary units, based on the six transdisciplnary themes of the PYP.

Transdisciplinary Themes: Six universal themes, with relevance within and across traditional subject areas and within and across cultures which provide the framework for the school's POI.

Transdisciplinary: Broad knowledge, skills and understandings that transcend the boundaries of the traditional subject areas

Transdisciplinary Skills: Broad groups of skills which can be applied within and across all subject areas. These include thinking skills, research skills, communication skills, self-management skills and social skills.

PYP Attitudes: The twelve attitudes of the PYP directly support the development of the traits of the Learner Profile. These attitudes are daily expressions of fundamental values, beliefs and feelings about learning, the environment and people.

UOI (Units of Inquiry): The in-depth units of study which correspond to the six transdisciplinary themes.

Planner: The organizing document that each grade level develops to guide student inquiry. The concepts described in the planners will contribute to the school's POI and forms the scope and sequence for the school's program.

THE PYP KEY CONCEPTS AND QUESTIONS

THE THE TONCE	EP 15 AND QUESTIONS						
FORM What is it like?	CONNECTION How is it connected to other things?						
 What is? Where do we get? What does it look/sound/smell/feel like? What are the components of? What kinds of? What are the main? What are the basic rules of? 	 What are the links between and? Why is suitable for? What are the similarities/differences? What connections exist? How does affect? How can this be used in everyday life? Where do you see in everyday life? What would this look like at home? 						
FUNCTION How does it work?	PERSPECTIVE What are the points of view?						
 What can be used for? How does work in a system? What is the purpose of? How do people? What happens to? How do the rules of work? What does do? What information does give us? How can you show? 	 How does look if it's? What are the different points of view supported by the evidence? What are the implications for me? How do different people decide? Why do different people think? How can we understand others' point of view and help them to understand ours? 						
CAUSATION Why is it like it is?	RESPONSIBILITY What is our responsibility?						
 How can you make? Why does/did? How does suit its environment? What causes to change? What motivates individuals to? Why do we need? In what ways is influenced by? 	 How can people ensure? Who should decide? What factors do we need to consider when making a decision? What should people do to? How can people prevent? How can people help? 						
CHANGE How is it changing?	REFLECTION How do we know?						
 What differences are there over time? How is changing? How has changed over time? In what ways does differ from place to place and over time? What is the role of in shaping society/influencing others? What could you change to make? 	 How will we know when? In what ways can we observe? What makes better than? Why is more reliable/easier/harder/more enjoyable than? How reliable is? Why should we believe? 						

How to Write a Central Idea

- Pair two or more concepts from your unit of study into a sentence conveying an important idea
 that will transfer through time and across cultures.
- Use active, present tense verbs to convey timeless characteristic. Avoid using personal or proper nouns. Use qualifiers (may, can often) if your generalizations may not hold across all examples.
 (e.g. Migration may lead to cultural conflicts.)

Science	Social Studies	Economics
Order	Conflict/Cooperation	Markets
Organism	Patterns	Supply and Demand
Population	Populations	Cost
System	System	Interdependence
Change	Change/Continuity	Beliefs/Values
Evolution	Culture	Goods/Services
Cycle	Evolution	Conflict
Interaction	Civilization	Cooperation
Energy/Matter	Migration/Immigration	Perceptions
Equilibrium	Interdependence	Patterns
•		Power

Put two or more of the concepts together and state your general idea.

Example: Unit of study: "Study of electric circuits" Systems? Interaction? Energy?

Central Idea: A system is a group of parts which interact to complete a new whole.

Lines of Inquiry: The parts of an electric circuit

The role of conductors and insulators

Other systems in nature

The role of conflict as a function in systems

OR

Central Idea: An electric circuit creates an opportunity to get a power source out to many people.

Lines of Inquiry: The structure of an electric power grid

Forms creating electrical energy: wind, water, solar, nuclear Patterns of development as connected to opportunities for power

IB PYP TRANSDISCIPLINARY SKILLS

COMMUNICATION SKILLS

- Listening
- Speaking
- Reading
- Writing
- Viewing
- Presenting
- Non-Verbal Communication

RESEARCH SKILLS

- Developing good questions
- Making good observations
- Making a plan
- Gathering information
- Recording and organizing data
- Interpreting data; Figuring out what it means
- Presenting your findings to others

THINKING SKILLS

- Seeking and acquiring knowledge
- Comprehending material
- Applying knowledge to solve problems
- Analyzing or taking information apart to better understand something
- Synthesizing or combining small ideas together to make a bigger thought.
- Evaluating information and ideas.
- Thinking about things from different points of view.
- Thinking about how you think and learn



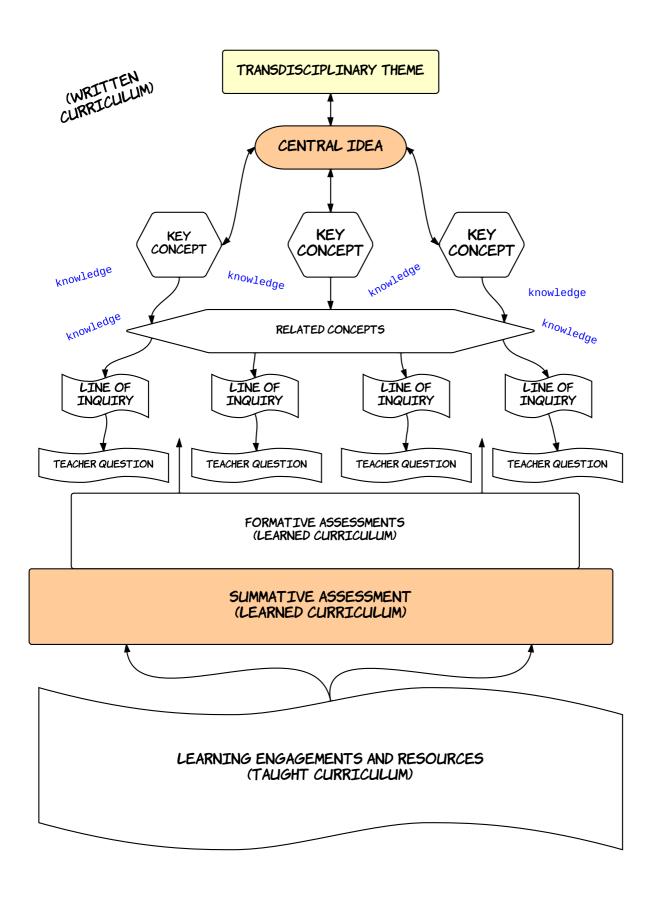


SELF-MANAGEMENT SKILLS

- Organizing yourself and your belongings
- Using your time productively
- Looking after yourself; getting proper exercise, rest and nutrition
- Making wise choices
- Thinking about your behaviors
- Safety
- Developing and using motor skills

SOCIAL SKILLS

- Accepting responsibility
- Respecting others
- Cooperating
- Resolving conflicts
- Group decision making
- Leading or following as the situation requires



Criteria	Yes	No
1. Does it allow for more than one answer or more		
than one way to solve problems?		
2. Is it intrinsically interesting and gratifying?		
3. Does it allow each student to contribute		
according to his/her own aptitudes?		
4. Does it require multiple skills and behaviors?		
5. Does it take them beyond what they already know?		
6. Does it have students apply what was learned to		
a new situation rather than memorization or regurgitation of facts?		
7. Is it connected to the central idea (or use		
language directly from the central idea)?		
8. Does it involve a task as well as an evaluative tool?		
9. Does it allow for development of the learner		
profile, attitudes, and transdisciplinary skills?		
10. Does it allow for conceptual understanding?		
11. Does it allow for transfer of knowledge?		

PYP Checklist for themes, skills, concepts, learner profile and assessments Grade Level: ______ Date: ______

Who We Are	Transdisciplinary Skills	Social Skills	Research Skills	Thinking Skills	Communication Skills	Self-Management Skills	Key Concepts	Form: What is it like?	Function: How does it work?	Causation: Why is it like it is?	Change: How is it changing?	Connection: How is it connected to other things?	Perspective: What are the points of view?	Responsibility: What is our responsibility?	Reflection: How do we know?	Learner Profile	Balanced	Caring	Communicator	Inquirer	Knowledgeable	Open-Minded	Principled	Reflective	Risk-Takers	Thinkers	Assessments	Criteria: is known and understood in advance	Observations: Whole class or one-on-one	Performance: Authentic, goal-directed tasks	Process-focused: Assessment of Iransdisciplinary skills	Selected Response: tests and quizzes	Open-ended tasks: original drawing, alagram, solution	Portfolio: demonstrate growth and creativity	Reflection: self- and peer reflection	Different points of view identified	knowledge	Synthesize and apply their learning (not just recall
who we are																																						
Where We Are in Place and Time																																						
How We Express Ourselves																, in																						
How the World Works																					,																	
How We Organize Ourselves							- - - -																										a					
Sharing the Planet																e =																						

"GRASPS"

When developing summative assessment tasks, consider using the acronym "GRASPS" from <u>Understanding by Design</u> (Wiggins & McTighe)

G: Goal...What is the "enduring or transferable conceptual understanding" that you want for your students. Be sure to include language from the Central Idea within your summative assessment!

R: Role...What is the role your students will take?

A: Audience...Who is the desired reader/viewer/listener of their work/project?

S: Situation/Scenario...What is the situation or scenario in which the communicator (student) and the audience are working? (Try to make it an authentic, "real-world" task).

P: Performance/Product...What will the students create?

S: Standards...What are the criteria for success? (You should try to involve students when developing criteria).

ASSESSMENT STRATEGIES AND KEY CONCEPTS

The following words will help design tasks for assessing for conceptual understanding using the key concepts. This guideline can be used in designing formative and summative assessment tasks with the planner. Many of these tasks will require a number of stages to complete, often following the research skills of the transdisciplinary skills. In this way assessment can be linked to the PYP curriculum elements, i.e. skills, concepts, knowledge. In order

Locate

Create

Form / What is it like?

Define Describe List Observe

Function/How does it work?

Explain Construct
Demonstrate Design
Operate Rearrange

Change / How is it changing?

Notice

Contrast Demonstrate Compare Infer

Connection / How is connected to other things?

Match Contrast Organise Categorise Combine Compare

Distinguish

Identify

Causation / Why is it the way it is?

Support an opinion Apply Deduct Analyse Rearrange Design

Perspective / what are the points of view?

Compare Suppose Respond Respond Contrast Imagine

Responsibility / what is our responsibility?

Criticise Support Debate

Organise Support an Opinion

Reflection / How do we know?

Evaluate Support Analyse
Judge Value Appraise
Debate

Possible Products and Performances

Written	Oral	Visual
Advertisement	Audio tape	Advertisement
Biography	Conversation	Banner
Book report or review	Debate	Cartoon
Brochure	Discussion	Collage
Collection	Dramatic reading	Computer graphic
Crossword puzzle	Dramatization	Data display
Editorial	Interview	Diagram
Essay	Oral presentation	Diorama
Experiment record	Oral report	Display
Historical fiction	Poetry reading	Drawing
Journal	Puppet show	Filmstrip
Lab report	Radio script	Game
Letter	Skit	Graph
Log	Song	Map
Magazine article	Speech	Model
Memo	Teach a lesson	Painting
Newscast	Others	Photograph
Newspaper article		Poster
Play		Power point show
Poem		Questionnaire
Proposal		Scrapbook
Research report		Sculpture
Script		Videotape
Story		Web site
Test		
Web site		

Source: Understanding by Design Professional Dev elopment Workbook, Grant Wiggins and Jay McTighe, 2004

Possible Student Roles and Audiences

		i i
Actor	Eyewitness	Pilot
Advertiser	Family member	Playwright
Artist/illustrator	Farmer	Poet
Author	Filmmaker	Police officer
Biographer	Firefighter	Radio listener
Board member	Forest ranger	Reader
Boss	Friend	Reporter
Boy/Girl Scout	Geologist	Researcher
Businessperson	Government official	Reviewer
Candidate	Historian	Sailor
Carpenter	Historical figure	School official
Cartoon character	Intern	Scientist
Caterer	Interviewer	Ship's captain
Celebrity	Inventor	Social worker
CEO	Judge	Statistician
Chairperson	Jury	Storyteller
Chef	Lawyer	Student
Choreographer	Library patron	Taxi driver
Coach	Literary critic	Teacher
Community member	Meteorologist	Tour guide
Composer	Museum	Trainer
Client/customer	director/curator	Travel agent
Construction worker	Museum goer	Tutor
Dancer	Neighbor	TV viewer
Designer	Newscaster	TV or movie character
Detective	Novelist	Visitor
Editor	Nutritionist	WEB site designer
Elected official	Observer	Zookeeper
Embassy staff	Panelist	
Engineer	Parent	
Expert in	Pen pal	;
,	Photographer	

Source: Understanding by Design Professional Dev elopment Workbook, Grant Wiggins and Jay McTighe, 2004

Framework of Assessment Approaches and Methods

How might we assess student learning in the classroom?

SELECTED		PERFORMANCE-BAS	SED ASSESSMENTS	
RESPONSE	CONSTRUCTED	PRODUCTS	PERFORMANCES	PROCESS-FOCUSED
ITEMS	RESPONSE			
☐ multiple-	\square fill in the blank	□ essay	□ oral presentation	☐ oral questioning
choice	word(s)	☐ research paper	☐ dance/movement	☐ Observation
□ true-false	phrase(s)	□ log/journal	□ science lab	("kid
□ matching	☐ short answer	☐ lab report	☐ demonstration	watching")
	sentence(s)	☐ story/play	□ athletic skills	□ interview
	paragraph(s)	□ poem	performance	□ conference
	☐ label a diagram	□ portfolio	□ dramatic reading	□ process
	☐ "show your work"	□ art exhibit	□ enactment	description
	☐ representation(s)	☐ science project	☐ debate	☐ "think aloud"
	• web	□ model	☐ musical recital	☐ learning log
	concept map	□ video/recording	☐ keyboarding	
	flow chart	□ spreadsheet		
	graph/table			
	• matrix			
	illustration			

Evaluate your planners

Section	Title	Criteria	Score
1	Central Idea	One concise statement that is true	
		Expresses an enduring understanding via a relationship	
		between at least two concepts	
		Connected to the transdisciplinary theme	
		Globally transportable	
		Engaging, relevant, challenging, significant	
		Should be compelling to learners of all ages and abilities	
		Not value-laden	
		No proper nouns	
	Summative	authentic	
	Assessment	directly related to central idea	
		students demonstrate understanding, knowledge, skills	
		teachers and students invovled in development	
		differentiated	
		assessment tool available to teacher & students	
2	Lines of Inquiry	Directly relate to the central idea (unpack it)	
		Include 3 – 4 lines of inquiry	
		Show an organized breakdown of the central idea	
		Develop concrete connections to the central idea	
		Reflect the school's scope and sequence	
	Teacher	open-ended	
	Questions and	connect to lines of inquiry	
	Provocations	provoke thought and interest	
		lead to action	
	Concepts	no more than 3 key and/or related concepts	
		connected to central idea	
		frame inquiries at beginning of unit	
		Lead to open-ended questions	
3	Assessing Prior	Pre-assessment(s) identify current level of understanding,	
	Knowledge	knowledge, skills and areas for growth	
	Assessing	variety of strategies	
	Student Learning	variety of tools	
		age appropriate	
4	Learning	Promote discovery and construction	
	Experiences	Students make connections among concepts	
		Authentic, active, varied	
		Differentiated	
		opportunities for action	
		Include specialists' engagements	
	Transdisciplinary	addresses specific skills	
	Skills	addresses specific attitudes	
	Learner Profile	addresses specific attributes of the Learner Profile	
		opportunities for authentic demonstrations	

THE INQUIRY CYCLE										
Inquiry	 is messy and recursive, a cycle rather than a linear process, that progresses through phases is permeated with reflection and critical thinking (uses technology) builds connections through the skills of literacy involves reading, writing, speaking, and listening to learn 									
Learners	 acquire deep understandings about empower them to learn on their ow 									
	What the Students Do	What Teachers Do								
Connect-and-Wonder Phase	 Connect the inquiry topic to what they already know, to themselves, to the ideas of others (text-to-self, text-to-text, text-to-world) Build background knowledge to reveal complexities, areas of interest, or framework of accurate information about the topic Ask questions and make predictions and hypothesize to develop the schema to which the new information will be attached 	 Help students build connections and background knowledge Provide a context for learning through language, developing content-specific vocabulary and knowledge of text structures and patterns Tie the learning to curriculum 								
		erPhase: guided imagery, KWL charts, , webbing, word walls, pre-reading aids, ion, media resources, concept maps, peer								
Investigate Phase	Use strategies for comprehending text and making meaning Support students using multiple strategies for comprehending to and making meaning									
	Strategies for the Investigate Phase: find multiple sources; analyze sources for relevance, currency, point of view, accuracy, etc; distinguish fact from opinion; skim; scan; find the main idea; assess the importance of ideas; find supporting detail; use text patterns and text organizers; paraphrase; summarize; infer; take notes in a variety of formats; compose reader responses; create patterns of organization; monitor comprehension; generate new questions and predictions, etc.									

Construct Phase

- Think about answers and ideas, then build new understandings connected to previous knowledge
- Draw conclusions about questions and hypotheses
- Explain what they understand and what is new knowledge
- Provide scaffolding for novice inquirers
- Incorporate multiple appropriate strategies to aid students in clarifying their thinking



Strategies for the Construct Phase: interpret using inferencing; find patterns and relationships; test against predictions; compare new information with previously held ideas; recognize author's point of view and its impact on the message; use visual literacy to organize ideas and extract meaning from different formats of text; construct reasonable explanations using supporting evidence; follow a decision-making process; use visual organizers; use oral strategies to clarify thinking, such as class conversations, peer-to-peer dialogues, questions, and quick speaks; use writing strategies such as quick writes, directed writing, journalling, and interactive writing to clarify main ideas

Express Phase

- Use the writing process: prewrite, write, revise, edit, publish
- Assess their own products
- Provide feedback to others
- Choose format for expression based on the topic and audience
- Organize ideas appropriately
- Use writers' workshop approach to help student craft a written product
- Help students use graphic organizers, models, collaborative approach, conferencing, technology tools, and rubrics



Strategies for Express Phase: Use writing process; consider the audience; choose from amongst various formats, including oral presentation, visual and/or multimedia display, etc.; present bibliographic and/or source information

Reflect Phase



- Think about the product and processes
- Revise and improve work
- Acknowledge new understandings
- Ask new questions about the topic
- Set new goals for learning

• Guide reflective processes

Strategies for the Reflect Phase: Peer feedback, self-assessment

Barbara Stripling "Using Inquiry to Explode Myths about Learning and Libraries" in CSLA JOURNAL (28:1. Fall 2004. 15-17).

Based on Barbara Stripling's "Using Inquiry to Explode Myths about Learning and Libraries" in CSLA JOURNAL (28:1. Fall 2004. 15-17).