

*A Digital Portfolio to
Support Learning and
Development*

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Pittsburgh, Pennsylvania

Session Purpose

- ❖ Provide an overview of Alverno College's Digital Diagnostic Portfolio in the context of the college's educational theory, research, and practice, emphasizing the application of portfolio technology in relation to the learning and development of the users.

Session Objectives

- ⑩ Draw relationships between portfolio assessment and the development of the Assessment Center Method
- ⑩ Emphasize the foundation of Alverno College's educational theory, research, and practice in student learning outcomes
- ⑩ Trace the development of the Alverno's Digital Diagnostic Portfolio in relation to its educational principles and practices
- ⑩ Examine the implementation processes on campus and, through implementation, what we are learning about teaching, learning, and assessment
- ⑩ Examine relationships among the session participants' experience with other portfolio assessment formats

The Assessment Center Method and the Rise of Electronic Portfolios

- ❖ Linking management, human resources development, and education practices
- ❖ Applications in post-secondary education and new opportunities to study assessment practices
- ❖ Technology resources and learning

Today's Assumptions

- ❖ Technology is a tool that can enhance student-centered learning
- ❖ Technology contributes more to information access and communication than it does to pedagogy given current practice
- ❖ Effective pedagogy begins with the learner and learning

Today's Learners

- ❖ Learners are seeking their education across different settings and institutions
- ❖ Learners are having to understand and use integrated and autonomous learning processes more fully during and after college
- ❖ Each student needs sophisticated learning outcomes once developed by a few

Who are “Educators”?

- ❖ professors
- ❖ teachers
- ❖ advisors
- ❖ administrators
- ❖ department heads
- ❖ student services personnel
- ❖ IT personnel
- ❖ educational researchers
- ❖ trustees and boards
- ❖ students

Educators' Classic Questions

- ❖ **Who** is learning?
- ❖ Who is learning **for**?

- ❖ What **ought** to be learned?
- ❖ What **can** be learned?
- ❖ What **are** learners learning?

- ❖ **How** and **why** does learning happen?
- ❖ **When** and **where** does learning happen?

Depth Model of Ability:

An ability is a multidimensional, complex integration of . . .

- ❖ knowledge
- ❖ understanding
- ❖ behaviors
- ❖ skills
- ❖ attitudes
- ❖ self-perceptions
- ❖ values
- ❖ motives
- ❖ dispositions
- ❖ habits

... integrated in the disciplines

... inferred from performance

Alverno's Eight Curriculum Abilities Integrated with the Disciplines/Professions

- ❖ Communication
- ❖ Analysis
- ❖ Problem Solving
- ❖ Valuing in Decision-Making
- ❖ Social Interaction
- ❖ Developing a Global Perspective
- ❖ Effective Citizenship
- ❖ Aesthetic Engagement

What Students Ought to Learn

- ❖ Learning outcomes that reflect how students think and understand and what they are able to do with what they know

“Each student will be able to apply principles of developmental biology to recognize and interpret normal and abnormal cell transformation.”

What Learning Ought to Last

❖ Broad outcomes for general education and for major programs of study

“Using principles or theories to organize and interpret information in a group”

Biology

“... to conduct and present experiential research in biology in such a way as to facilitate validity, replicability, and integrity of studies”

Educational Theory

Learning That Lasts is:

- ❖ integrative
- ❖ experiential
- ❖ self-aware and reflective, self assessed and self-regarding
- ❖ developmental and individual, transitional and transformative
- ❖ active and interactive, independent and collaborative
- ❖ situated and transferable
- ❖ deep and expansive, purposeful and responsible

LEARNING THAT LASTS

- Active, Independent
- Integrative
- Experiential

- Self-aware,
Reflective,
Self assessed,
Self-regarding

- Developmental, Individual

- Interactive, Collaborative

- Situated, Transferable

ASSESSMENT-AS-LEARNING

performance

performance in contexts
related to life roles

explicitness of

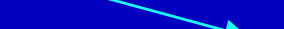
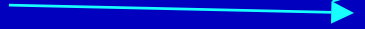
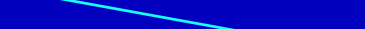
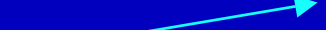
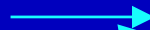
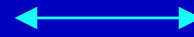
- expected outcomes
- public criteria

self assessment

cumulative nature
expansiveness
multiplicity

feedback

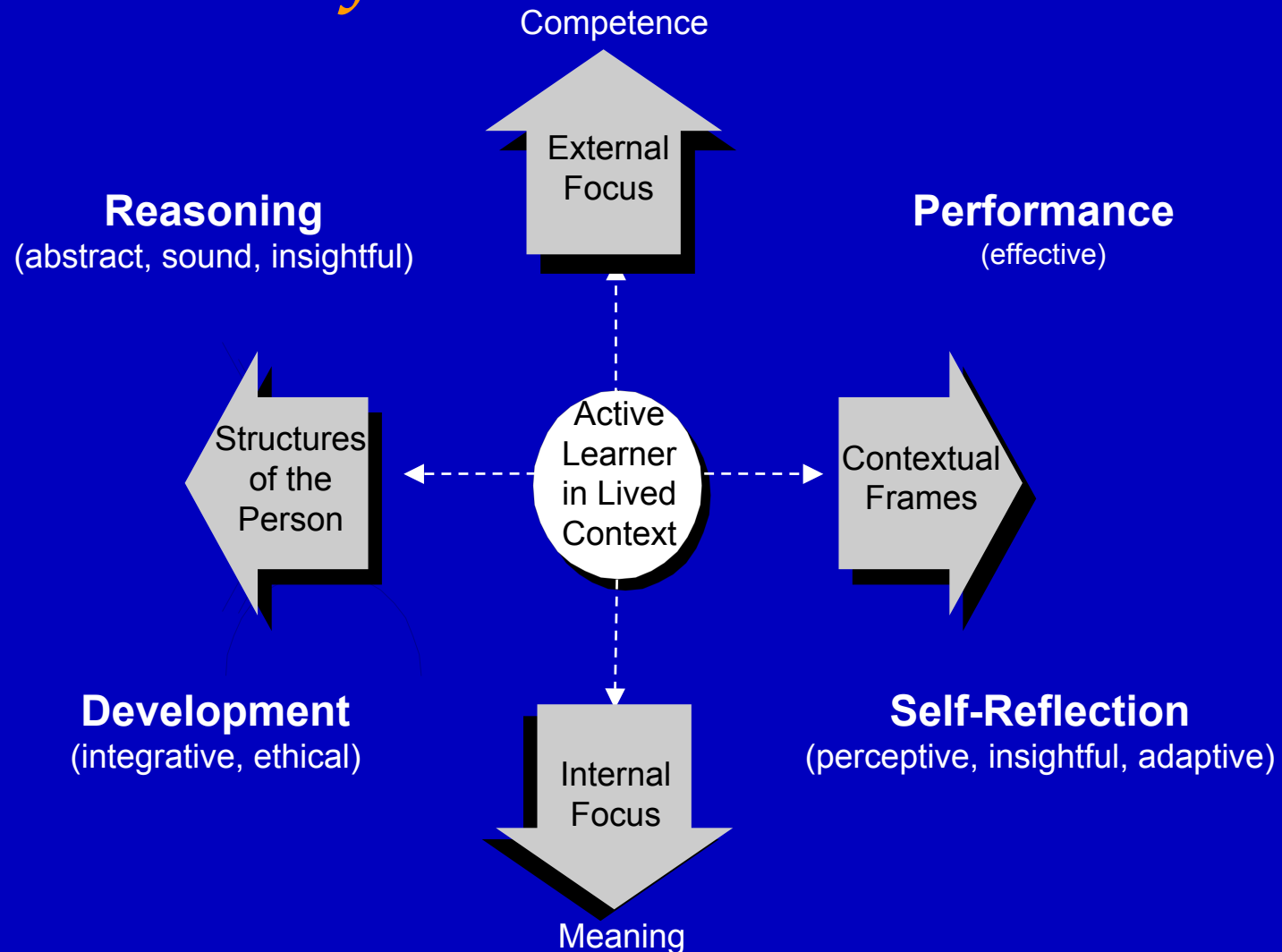
externality
multiple in mode and context



Can learners construct complex rationales for these questions? If so, their learning is more likely to last.

- ❖ What do I know, and how can I do what I know? (**Using Metacognitive Strategies**)
- ❖ What am I able to do across settings, and how can I improve? (**Self Assessing Role Performance**)
- ❖ Who am I, and who should I become? How and why am I committed to others and to making a personal contribution? (**Engaging Diverse Approaches, Views, and Activities**)

Dimensions Organizing Domains of Growth in the Person



Domains of Growth

❖ Reasoning

(classical liberal arts education)

(Critical Thinking)

❖ Performance

(professions education)

(alumna Ability Factors)

❖ Development

(value and service education)

(development of the person)

(Integration of Self in Context)

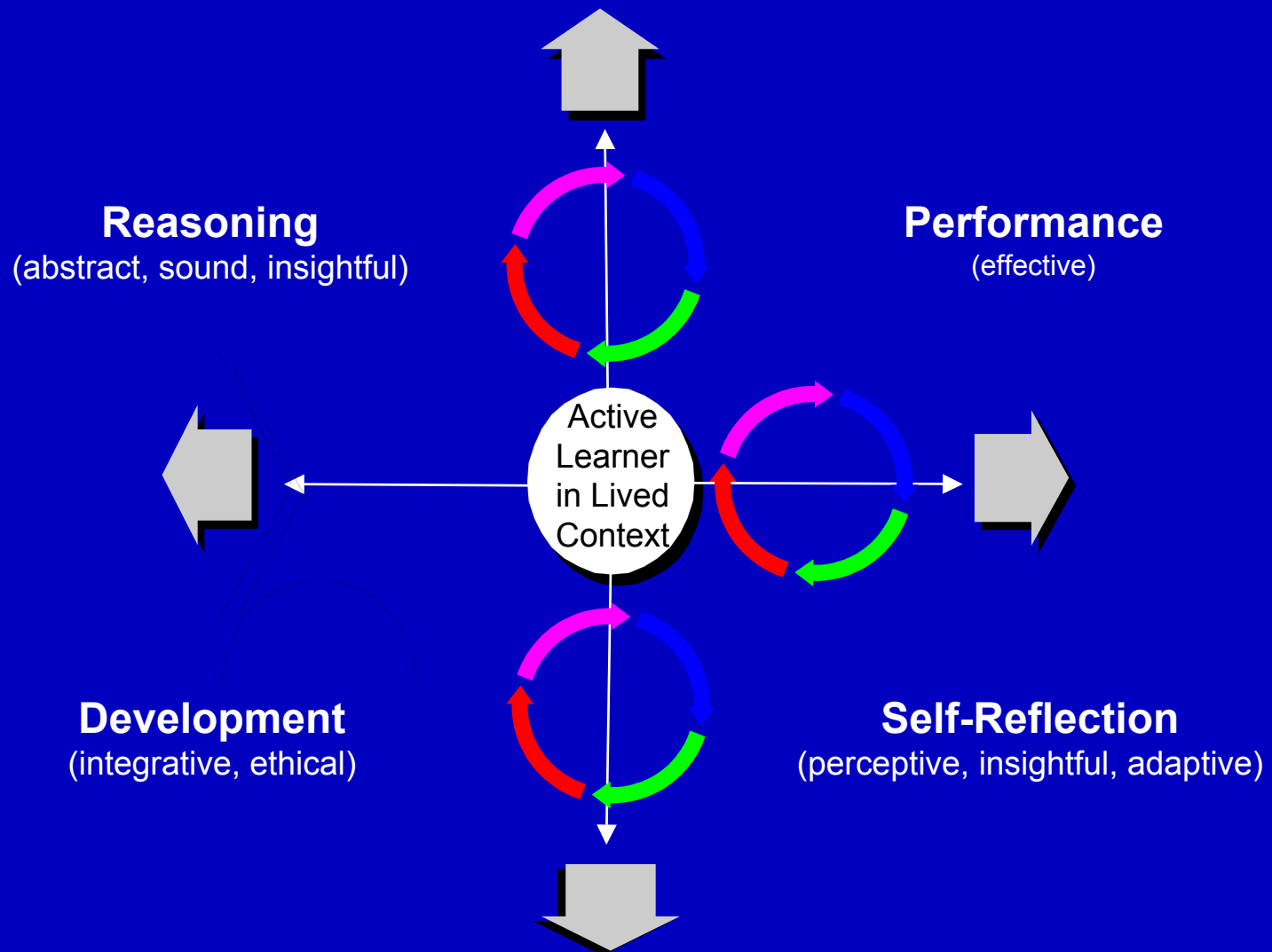
❖ Self-Reflection

(residential education)

(perspective on own learning and growth)

(identity as learner, performer, contributor)

Transformative Learning Cycles Integrating Domains of Growth



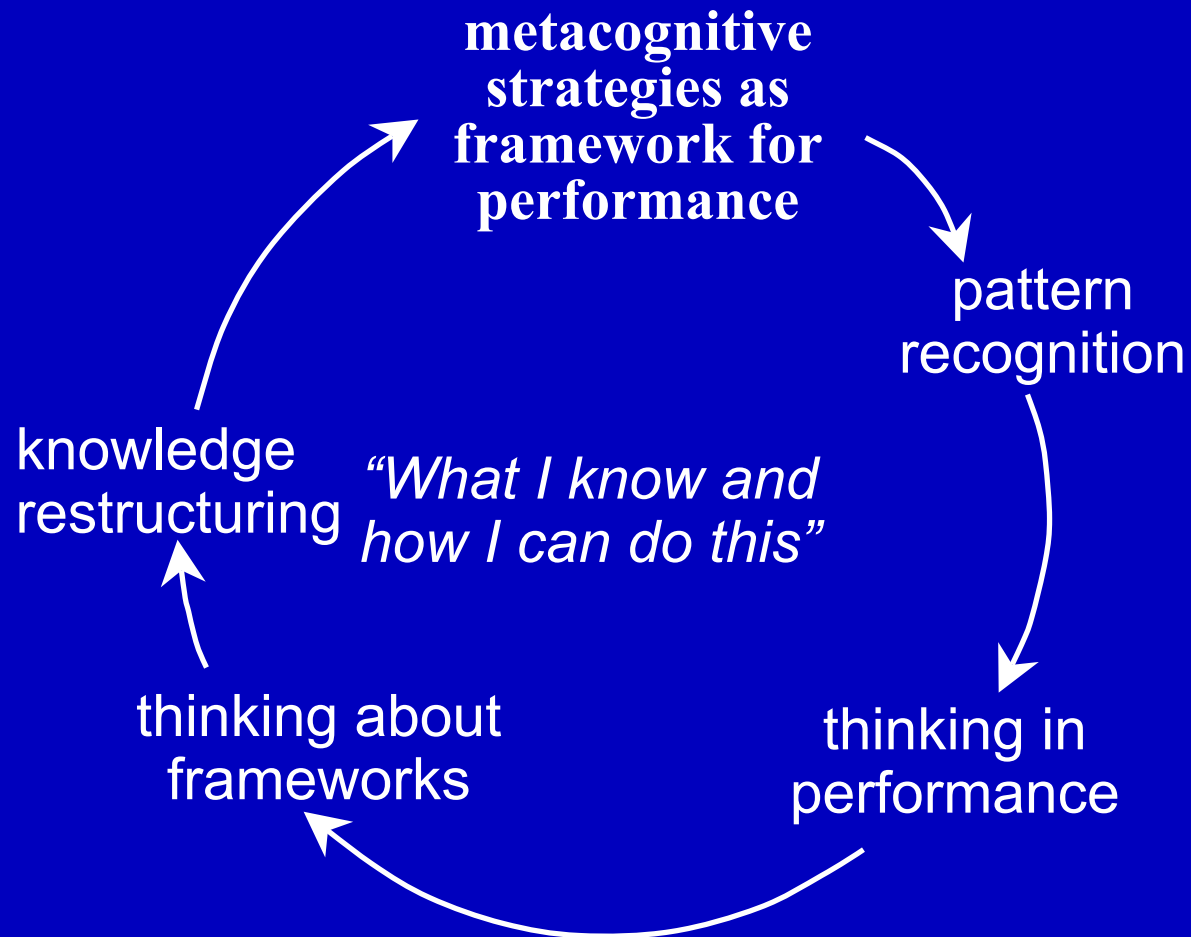
Transformative Learning Cycles

- ❖ Using Metacognitive Strategies
- ❖ Self Assessing Role Performance
- ❖ Engaging Diverse Approaches, Views, and Activities

Transformative Learning Cycle

- ❖ Student capacity for reasoning, for **using metacognitive strategies** that restructure their knowledge and enable them to think while they are performing, is essential to learning that lasts.

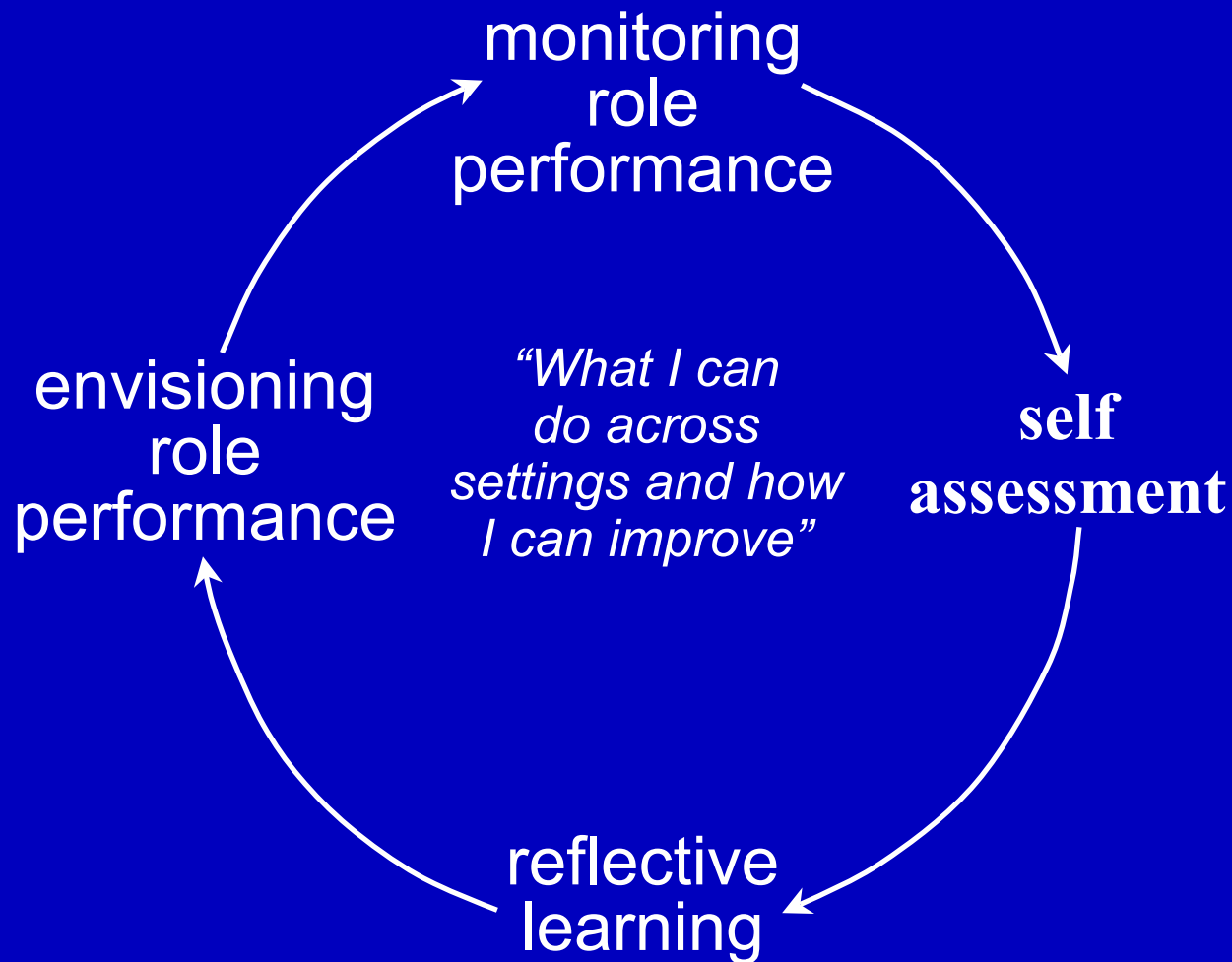
Using Metacognitive Strategies



Transformative Learning Cycle

- ❖ Student capacity for **self assessing role performance**, using criteria and standards from diverse sources, is essential to learning that lasts

Self Assessing Role Performance



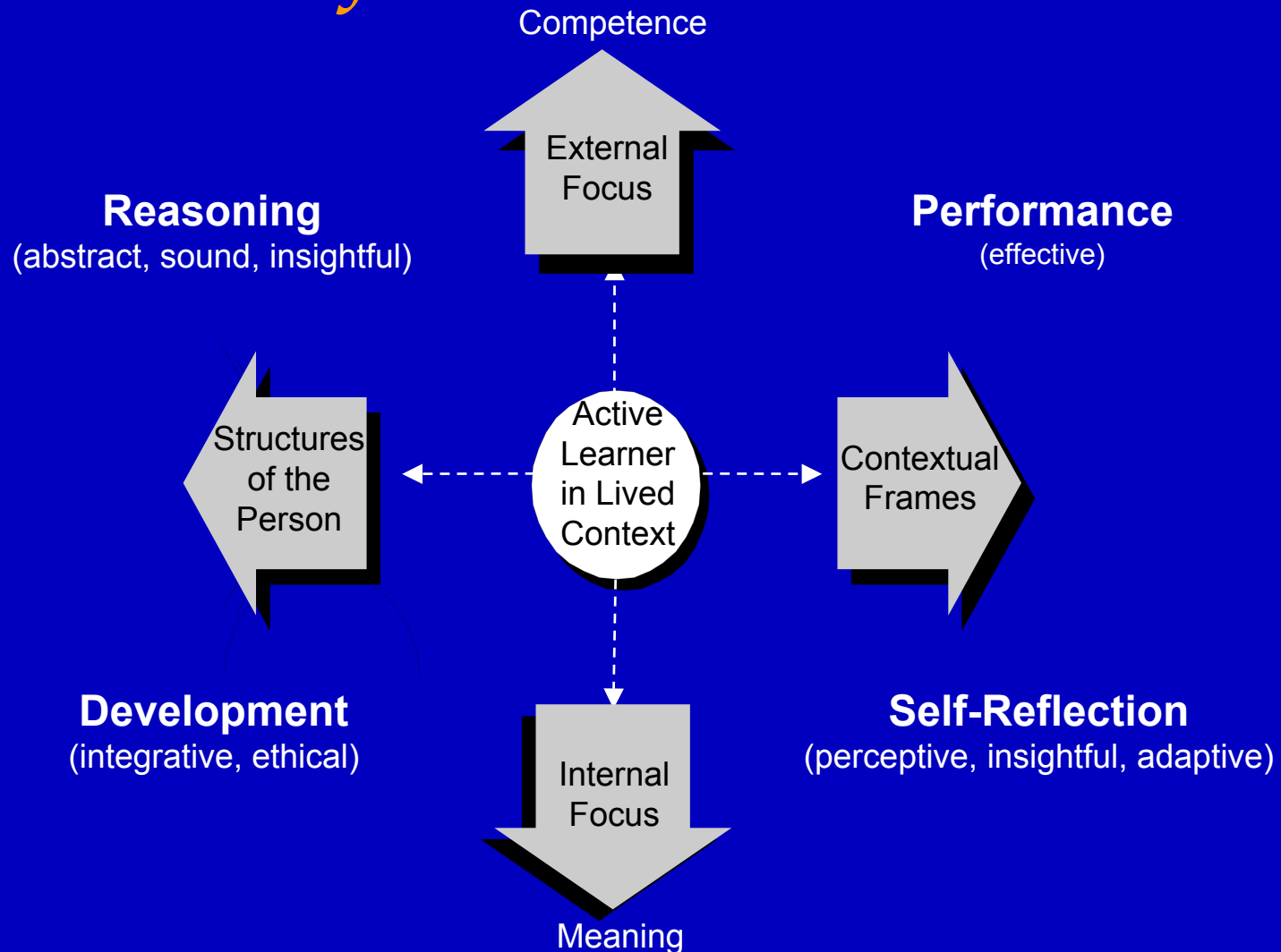
Transformative Learning Cycle

- ❖ Student capacity for engaging diverse approaches, views, and activities is essential to learning that lasts

Engaging Diverse Approaches, Views, and Activities



Dimensions Organizing Domains of Growth in the Person



Integrated IT tools and services support ability-based learning and performance assessment:

- ❖ communication and interaction with students re progress in the curriculum on eight abilities integrated in the disciplines
- ❖ teaching strategies supported by course design and management software
- ❖ videotape portfolios of communication and social interaction performance on assessments
- ❖ Diagnostic Digital Portfolio for self assessment and reflective learning

Student Assessment-as-Learning

A process in operation at Alverno College, integral to learning, that involves observation and judgment of each student's performance on the basis of explicit criteria, with self assessment and resulting feedback to the student.

It serves to confirm student achievement and provide feedback to the student for the improvement of learning and to the instructor for the improvement of teaching.

Self Assessment *is the ability of a student to observe, analyze, and judge her/his performance on the basis of criteria and determine how s/he can improve it.*

Self Assessment *is a required part of assessment as well as a goal of the process. It is an essential ability for the autonomous lifelong learner.*



Self Assessment is:

- ❖ **Developmental**
- ❖ **Based on public criteria**
- ❖ **Enhanced by feedback**
- ❖ **Elicited by multiple approaches**

Student Self Assessment

Four components or skills are inherent in self assessment:

- ❖ *observing*
- ❖ *interpreting/analyzing*
- ❖ *judging*
- ❖ *planning*

Diagnostic Digital Portfolio

Diagnostic - analyzing the cause or nature of a situation

Digital - readable and manipulable by computer (text, audio, video)

Portfolio - a collection representative of a person's work

Diagnostic Digital Portfolio

- ❖ Developed by Alverno faculty and staff for students to connect their academic progress in text, audio, and video in a relational and searchable database
- ❖ Web-based electronic tool that allows the student, faculty, and academic staff to upload assignments and assessments, feedback and self assessments for review on a regular basis, anytime, anywhere
- ❖ A student and faculty can track the students' growing development as a learner and help the student develop strategies for improvement

The Diagnostic Digital Portfolio is designed to include key performances that a student completes in selected courses, internships, and volunteer work.

A key performance is simply an assignment, internship, assessment, or independent learning experience that a student completes as part of own degree program.

In most cases, the digital portfolio will not include the actual performance, but the feedback and self assessments a student does as part of that key performance.

However, there is a description of each key performance so the student is reminded of the context and nature of the performance.

- ❖ Designed to assist students to reflect on their academic progress at key points (“integrating moments”) in the curriculum and plan for future development
- ❖ Builds on college’s ability-based curriculum framework that provides students with a common language of learning outcomes to chart their own progress
- ❖ Provides a means for students to record their performance, internships, volunteer and community service work and to build an electronic résumé

Central Features

- ❖ Key performances assist students in mapping their development over time and identifying patterns of learning
- ❖ Organized by:
 - Curriculum Abilities, Levels, Criteria
 - Major and Support Advanced Outcomes
- ❖ Personal & Professional Development
 - Student self assessment and reflective learning
 - Learning and career inventories, résumé software to assist student learning, employment, graduate school enrollment

Learning Purposes of the Diagnostic Digital Portfolio

- ❖ Consistently use feedback to improve across learning experiences
- ❖ Show agency in analysis of prior performances, feedback, self assessments
- ❖ Articulate reflection and analysis of learning patterns and goal setting from samples of student achievement
- ❖ Show integrated learning, development, and performance during college and beyond

Student Portfolio Samples

- ❖ First social interaction assessment
- ❖ Interaction with professionals:
Independent learning experience
and assessment
- ❖ Interaction in student teaching
assessment

Social Interaction

Self Assessment Sample



My major goal is to expand on my closure and evaluating behavior. Especially evaluating behavior. Being able to make personal judgments about the group process and participation of group members is a skill that I definitely wish to improve upon. I need to be able to take in all the information and adequately assess what has taken place within the group setting and what needs to happen to move the group forward. This sort of spills into leading behavior. All the behaviors in one form or another are connected.

Interaction with Professionals

Feedback from Faculty

Observer



- ❖ You did an exceptional and effective job of answering all of the professionals' questions in a very enthusiastic manner.
- ❖ You really kept the discussion going!!!
- ❖ In your self assessment you mentioned that you thought you might be using too many technical terms without describing them – but I do not believe this was the case. You seemed to watch for responses in your audience very effectively and add to your explanations when you needed to.



Evaluation Approaches

Use

Number and nature of key performances

Frequency of use via log-ons

Think aloud performance interview

Learning

Structured reflections on DDP use
embedded in external or on-line
assessments

Reflective learning interview

Performance Comparisons

Links between DDP use and student
progress record

Student Use Across Semesters

- ❖ Spring 2001: 400 students logged on an average of 3 times each.
- ❖ Fall 2001: 900 students logged on an average of 5 to 6 times each.
- ❖ Spring 2001: 2% logged on 10 or more times.
- ❖ Fall 2001: 15% logged on 10 or more times
- ❖ Diagnostic Digital Portfolio makes the learning process more transparent

Ability-Based ICT Learning Environment

❖ Strengths

- Educational theory-based and learning-centered that builds a common language of learning so learners integrate learning outcomes – connects teaching, learning, and assessment

❖ Areas to be developed

- Students should refer to the portfolio more as a learning process and less as a storage device

It's not about the
technology...

...It's all about *learning*

A Digital Portfolio to Support Learning and Development

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www.ddp.alverno.edu

Student Assessment as Learning:

www.alverno.edu/educators/publications.html

Self Assessment at Alverno College:

www.alverno.edu/educators/publications.html

Learning That Lasts:

www.josseybass.com

A Digital Portfolio to Support Learning and Development

References

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