



Portfolios in Clinical Medical Education

One Method to Foster Inter-Clerkship Growth




Introduction

- The Alliance for Clinical Education (ACE) is a multidisciplinary group formed in 1992 to enhance clinical instruction of medical students.
- ACE Mission: to foster collaboration across specialties to promote excellence in clinical education




ACE Member Organizations

- Association for Surgical Education (ASE)
- Association of Directors of Medical Student Education in Psychiatry (ADMSEP)
- Association of Professors of Gynecology and Obstetrics (APGO)
- Clerkship Directors in Internal Medicine (CDIM)
- Consortium of Neurology Clerkship Directors (CNCD)
- Council on Medical Student Education in Pediatrics (COMSEP)
- Society of Teachers of Family Medicine (STFM)




Panel Participants

- William Raszka, MD, Pediatrics
- Karen Brasel, MD, MPH, Surgery
- Imran Ali, MD, Neurology
- Mitchell Cohen, MD, Psychiatry
- Heather Harrell, MD, Internal Medicine
- Maya Hammoud, MD, OB/GYN
- Anne Walling, MB, ChB, Family Medicine



Session Objectives

- Define uses of academic portfolios in medical school curriculum
- Describe the potential of portfolios in sharing educational goals across clerkships
- Identify benefits for use of portfolios to assess growth across the clerkship year
- Discuss the inter-clerkship agreements necessary to assess growth across the clerkship year



Workshop Agenda

10:15	Types of portfolios
10:30	Potential for shared goals
10:45	Assessing growth
10:53	Ideal portfolio
11:00	Questions/Discussion

Portfolio: General Definition



- A purposeful collection of student work that exhibits the student's efforts, progress, and achievements
- Student participation in selecting content, the criteria for selection, the criteria for judging merit, and evidence of student self-reflection

Medical Student Portfolios



- Document students' progressive achievement of competencies
- Student self-assessment AND faculty assessment
- Challenge: avoid teacher-centered
 - Constraints of accreditation requirements
 - Established standards or competencies

Portfolios responsibilities



- Faculty members:
 - Identify/define competencies and standards
 - Define what constitutes acceptable evidence of accomplishment of competencies
 - Determine timelines and guidelines for evaluation
- Students:
 - Collect evidence (e.g. seeing the patients)
 - Document
 - Defend evidence of accomplishment

Types of Portfolios



- Working portfolio:
 - Evidence of what the student has completed
- Assessment portfolio:
 - Work demonstrating that the student has met specific learning goals and requirements.
- Reflective portfolio:
 - Evidence that attests to achievement as well as personal and professional development through a critical analysis and reflection of its contents

Reflective Portfolio Caveats

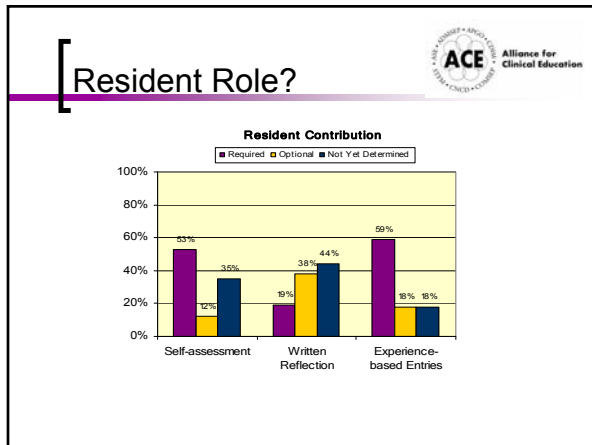
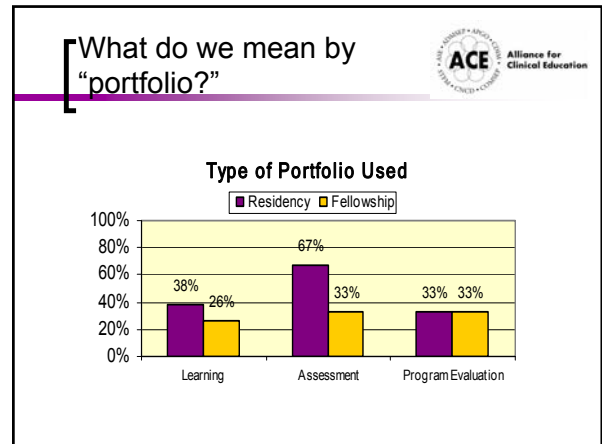
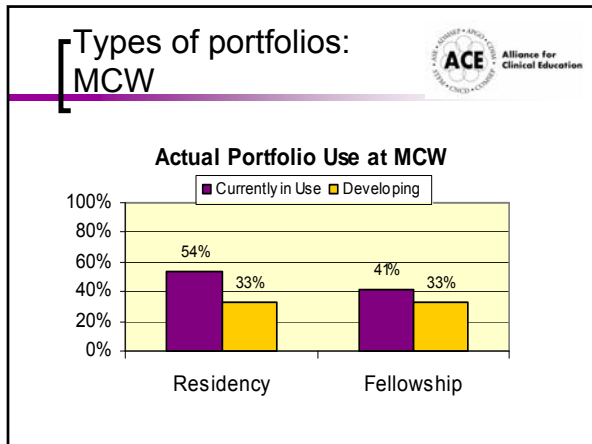


- Student buy-in (not extra work) is critical
- Learning v. assessment - reliability and validity
- Importance of student-faculty meetings

Portfolio Use in Medical Schools




- For specific courses in the curriculum
- In the experiential component of the curriculum: entire or specific rotations
- As an integrated component throughout the entire curriculum
- Following: two types of portfolios
 - Several residency/fellowship programs
 - Integrated medical school curriculum




- ### KUSOM, Wichita Pilot
-
- Developed from Year 3-4 Committee
 - 1:1 Student/Faculty mentor
 - Portfolio used to address 3 competencies
 - Develop reflective practice habits, using analysis of experiences to improve performance.
 - Accept and provide constructive feedback as part of a commitment to continuous learning and improvement
 - Recognize and address personal limitations, attributes or behaviors that might affect their effectiveness as a physician.

- ### KUSOM, Wichita Pilot
-
- Student selection of items generated from clerkships
 - 3 meetings over 3rd and 4th year
 - Pre-work, 1 hour meeting, post-work
 - Agreement among CDs to release students for a meeting


- ### KUSoM, Wichita Pilot
-
- Collaboration across clerkships
 - Decisions about type of portfolio
 - Selections of competencies
 - Potential items for portfolios
 - Pilot/full implementation timelines
 - Release of students
 - Shared goals

Potential shared goals 


- Role in Neurology Clerkship
- Variable, not clearly defined (yet)
 - Encounter Logs
 - Procedural Logs
 - Case Vignettes
 - Self Reflection
- Each with overlap among specialties

Potential shared goals 


- Portfolio Role in:
 - Development of Clinical Skills
 - Longitudinal assessment
 - Tied to formative and summative assessment
 - As part of life long learning portfolio

Potential shared goals 


- Integrated curriculum: Mental Status Examination
 - Taught in ICM, Neurology, Psychiatry and Medicine, and others
 - Skill development includes:
 - Perform MSE in uncomplicated patient
 - Assess MS in a patient with neurological or psychiatric complaints
 - Interpret and analyze information
 - Use self-reflection to improve performance
 - Apply EBM

Potential shared goals 


- Clinical Skill / Core Competency
 - Lumbar Puncture
 - Role of Lumbar Puncture
 - Observation of procedure
 - Performance of procedure with supervision
 - Interpretation and analysis of findings
 - Does competency=competency on another clerkship?
 - Can development of MSE skills be tracked and continued on subsequent clerkships?

Potential shared goals 

- Required Minimums set for 1 clerkship
 - W/U and follow 15 different patients
 - Complete 5 full admission evaluations
 - Perform 15 full MSE
 - Perform 2 Mini-MSE (Folstein) screens
 - Participate in 1 family meeting
- Performance directly observed or findings presented to faculty

Potential shared goals 

- Required Clinical Experiences - Current
 - Evaluate or observe evaluation of:
 - Unipolar or Bipolar DO, Schizophrenia or other Psychotic DO, Substance Use DO, Cognitive DO
 - Evaluate or observe evaluation of:
 - Anxiety DO, Personality DO, Child/Adolescent DO, Somatoform DO, Eating DO
 - Observe delivery of ECT
 - At least 40 individual meetings with patients

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Potential shared goals

- More direct faculty/housestaff observation of students performing essential skills possible
- Continuous skill development possible
- Increased required clinical experiences across 2 clerkships
 - Movement DO, dementia, delirium, secondary depression, somatoform DO, chronic pain, neuropsych/cognitive testing, observe OT/PT
- Inter-disciplinary case conferences and journal club foster inter-clerkship collaboration

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Potential shared goals


- Specialty content
 - Aspect of PE
 - Procedure skill
- Non-specialty content
 - Reflection
 - Personal limitations
 - Professional growth

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UF Experience


- Pilot portfolio years 1&2
 - Enhanced version of existing advisor program
 - Reflections and tracking of academic progress
- Medicine Clerkship
 - Competency-based extensive portfolio
 - Separate portfolio advisor
- Pediatrics Clerkship
 - Limited "portfolio" submissions
 - Submitted, end of clerkship to CD



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Facilitating shared growth assessment

- Evaluation Criteria
 - Consistent standards across specific activities
 - Caution if linking evaluation to grade
- Convenience: Electronic portfolio
 - Facilitates cross-talk between courses/advisors
 - Facilitates feedback between learners and advisors
- ED-2 (what) vs Growth (how well)
 - Electronic ED2 log ≠ portfolio
 - ED 2 forced clerkship directors to agree on core presentations, skills, procedures
 - Portfolio moves conversation to level of mastery


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Assessing growth: barriers

- Longitudinal advisement
 - Who?
 - How often?
- Faculty development
 - Major if summative/high-stakes




Driessen EW, et al. (2005) The use of qualitative research criteria for portfolio assessment as an alternative to reliability evaluation: a case study. *Medical Education* 39:214-220.

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The Ideal Portfolio


- Components:
 - Carefully selected and agreed on by curriculum committee
 - Produce achievement of learning outcomes
 - Include reflection on and evaluation of the material in order to promote life-long learning principles
- Assessment:
 - Mostly formative
 - For summative, criteria has to be standardized; validity and reliability
 - Assessment instrument should be designed in a way to demonstrate that competencies cut across courses and years in the program

The Ideal Portfolio



- Advantages:
 - Help to assess and promote critical thinking
 - Encourage students to become accountable for their own learning
 - Act as a focus of discussion between student and advisor
- Disadvantages:
 - Depends on student maturity and motivation, does not suit all learning styles
 - Reluctance of students to engage in self-reflection
 - Conflict between summative assessment and the developmental value of a portfolio
 - Time it takes to complete and assess them

The Ideal Portfolio



- Implementation:
 - Students need to receive clear guidelines on their purpose, content, and structure
 - Have a clear portfolio template to begin with, and show them examples of what is expected
 - Good assessor guidelines by giving clear criteria for assessment with regular feedback and facilitating sessions
 - Grading criteria should be explicit
 - Use holistic approach to assessment
 - Use of e-portfolios

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ANGEL ePortfolio 2

Learner-Centered & Institution-Focused to Provide Evidence of Educational Achievement

ANGEL ePortfolio extends the traditional portfolio concept by blending a strong learner-centered focus with highly flexible tools to power institutional assessment and reporting.

Collect Artifacts Digitally


Students collect and organize their work from both inside and outside the classroom. From their latest class essay to photos and comments posted during study abroad, ANGEL ePortfolio enables students to organize documents, recordings, photos, and video clips. ANGEL also supports the unique concept of "linked" artifacts, where required from the learning management system, learning objects, grades and instructor comments are linked from editing and certified for assessment purposes.

Reporting capabilities weave throughout ANGEL ePortfolio enhance course requirements, and enable self-evaluation that reinforces understanding, engages learners, and places learning in a broader context.

[Learn more](#)

[Access Performance](#)

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ANGEL ePortfolio 2

Learner-Centered


A digital destination where learners collect and organize their work from both inside and outside the classroom, ANGEL ePortfolio 2 provides learners a comprehensive toolset to transform artifacts from their coursework, co-curricular, life and work experience into cohesive, digital representations of themselves.

- Familiar file browsing functionality and drag-and-drop make learners comfortable using ANGEL ePortfolio and promote quick adoption.
- Support for multiple file types from documents and spreadsheets for social recordings, photographs and video clips that represent all types of learning.
- Engaging capabilities enhance course requirements, enable self-evaluation that reinforces understanding and engages learners in the process of ePortfolio.
- ACE leads course design that instructors and others can subscribe to enabling coaching and creating connections between learners and mentors.
- Adaptability of personal objectives present visual representations of progress toward individual goals to

EM2 Certified Artifact and Evidence

ANGEL ePortfolio Collect, Assess, Achieve.

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ANGEL ePortfolio 2

Institution-Focused

Powerful Assessment and Reporting

ANGEL ePortfolio's assessment and reporting capabilities meet the need of educators, administrators and institutions to provide additional evidence of learning outcomes and student performance. Easily customizable, ANGEL ePortfolio's flexibility and openness make setting custom rubrics, table creation and granular reporting simple.

Customize Learning Objectives

Define objectives for courses, schools, departments, or your entire student body. Each adds an entire objective. Develop goals to meet objectives. Identify content required to meet goals. Users attach evidence to related goals with a click.


Create Rubrics Automatically

Creating rubrics of learning objectives and the goals and criteria required to meet them couldn't be easier. You fill in the blanks, ANGEL creates rubrics for you.

Flexible Reporting

Measure the success of your ANGEL ePortfolio initiative with reports showing learner progress toward defined objectives including number of artifacts produced, artifact ratings. Track learner ePortfolio activity.

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blackboard Portfolio for Vista & CE

Collect. Leverage. Share.

What's New?

The Blackboard Portfolio for Vista and CE™ is a personal portfolio solution that helps student requirements to display learners' work learning. All the power of the portfolio. The Portfolio tool is necessary to the course environment, as it's used for students and faculty to create and for institutions to manage and monitor.

Now that you've got a set of tools, the Portfolio solution is a complete environment that allows students to collect, present and reflect upon a broad set of skills and experiences over time.

Now the Blackboard Portfolio for Vista and CE™, institutions can allow students to:

- Collect Learning Materials: Course artifacts, multimedia objects, documents and presentations can be created and instantly organized into a single unit. Institutions can display completion to guide students to review outcomes and portfolios can be engaged with personal learning goals and action plans.
- Leverage Innovative Technologies for Reflection: Institutions can create public and personal reflection spaces, such as blogs, journals and discussions.
- Share Portfolios: Students can share their portfolio in different ways and media sources, feedback, and collaboration on assignments.


For more information, please call (800) 424-4326, option 4

Request More Information

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THE BLACKBOARD PORTFOLIO - EASY FOR EVERYONE

It's easy to be successful with the Blackboard Portfolio, because everyone from students and faculty members to technology and academic administrators will find the solution easy to use and manage. The similarity and seamless integration between the Portfolio edition and the course environment promotes rapid adoption and means less work for faculty and staff!

Easy for students and faculty to learn, saving training and support costs:

- Single sign-on/shared login page
- Familiar user interfaces
- Shared tools and workflows
- Common file manager
- Easy "Close to Blackboard" feature in the course environment
- Support for faculty portfolios as well


Easy for institutions to manage, saving hardware expenses, resources, and time:

- No separate installation
- Shared system administration
- Access to user data from the course environment for easy enrollment
- Tools to help manage usage, such as portfolio quotas and system restrictions
- Flexibility to create and distribute templates to guide students

"The Blackboard Portfolio for Vista and CE will give our students the ability to easily add content from their online courses and provide them with the flexibility to create highly professional, personalized portfolios."


James Yelder
Educational Technology Specialist
University of Maryland System
University of Medicine and Dentistry of New Jersey

TO LEARN MORE ABOUT BLACKBOARD PORTFOLIO,
PLEASE VISIT THE WEBSITE AT: WWW.BLACKBOARD.COM/PORTFOLIO

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Discussion

Questions

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Updated presentation will be available at
www.allianceforclinicaleducation.org
 by November 12, 2007