

Applying Quality Improvement Principles to Curriculum Evaluation and Integration

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Curriculum Evaluation

Problems

- Sub-optimal response rate
- Non representative opinion
- “Negative” criticism
- Comments directed to individuals
- Few suggestions for improvement
- Destructive not constructive

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Curriculum Evaluation

Problems

- Faculty dismisses feedback
- Faculty reacts defensively
- Students perceive faculty as unresponsive
- Faculty manages curriculum
- Learners are marginally involved
- Time

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Curriculum Evaluation

Barriers for Students

- Students perception of futility
- Students fear reprisal - ANONYMITY
- Students do not understand the importance of helpful feedback
- Students may not know how to give helpful feedback
- Time

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Curriculum Evaluation

Barriers for Faculty

- Faculty may not understand the role of the course in a coherent curriculum
- Educational activities receive lower priority as education scholarship is valued less
- Tension of performance accountability as teaching is evaluated
- Time

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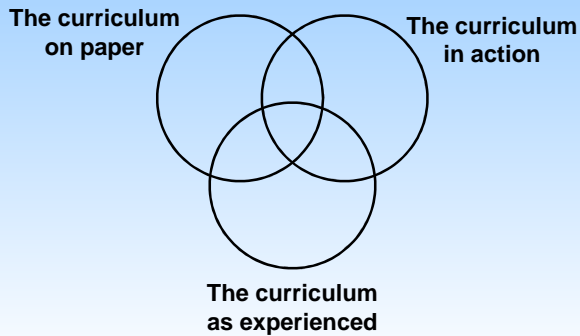
Curriculum Evaluation

Barriers - Cultural

- Education usually occurs in a collegial culture. Collegial cultures shun accountability.
- Teaching is evaluated, not accomplishment of learning.
- Individual courses are evaluated not integration of the course into a coherent curriculum.

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Descriptive Curriculum Model



Coles and Grant: Med Educ 19:405-22, 1985

Continuous Quality Improvement

Continuous quality improvement is a team-based management strategy that emphasizes improvement of the processes by which an organization delivers its product and / or service

Quality Improvement Theory

- An organization is a network of processes (or activities)
- Improvement occurs by;
 1. Identifying the processes by which the organization delivers its product or service
 2. Enabling the people who work with the processes to understand their work in relation to customer needs
 3. Empowering people through problem solving teams to implement process improvements

CQI Theory and Curriculum Management

Identify the processes by which an organization delivers its product or service.

- Our service is student learning
- We identified the “processes” or activities we engage in to achieve student learning

Processes That Influence Learning

- | | |
|---------------------------|-----------------------------|
| • Schedule | • Instructional Methods |
| • Learning Objectives | • Examinations |
| • Content | • Faculty (Teaching) |
| • Instructional Resources | • Integration of Curriculum |

CQI Theory and Curriculum Management

Enable the people who work with processes to understand their work in relation to customer needs.

- Enable faculty to understand how their activities (processes) influence student learning
- We designed a survey instrument to evaluate how our activities or “processes” influence student learning

Curriculum Evaluation

Training for Students

- Professionalism - You were admitted to a profession because of your citizenship and behaviors. Your participation is confidently expected.

Curriculum Evaluation

Training for Students

- Learners experience the actual and hidden curriculum.
- Students are best able to evaluate what they experienced and compare it to what was planned.

Curriculum Evaluation

Training for Students

- Faculty who teach volunteer time to your education
- Do not make negative comments about people. Comment on behaviors that would make faculty more effective.

Curriculum Evaluation

Training for Students

“The Golden Rule”

For each criticism state the specific remedy or suggestions for improvement

Logic of Survey Instrument

- Student learning is guided by explicit, clearly communicated objectives.
- Learning activities and resources are coordinated to help students achieve objectives.
- Examinations help students and faculty assess the extent to which objectives were accomplished
- Learners assess how well each learning experience is integrated into a coherent, comprehensive curriculum

Outcome-Based Education 3 Essential Components

- 1) Communication of explicit learning outcomes and standards that must be achieved
- 2) Learning experiences designed and directed to facilitate the desired level of achievement of the learning outcomes
- 3) Assessment processes that ensure that individual students have achieved the learning outcomes and standards

CQI Theory and Curriculum Management

Empower people through problem solving teams to implement process improvements

- We reengineered our curriculum evaluation system to involve teams of students as curriculum advisors

Evaluation System (Former)

- Students fill out survey instrument after course examination
- Comprehensive comments sent to involve faculty and deans
- Faculty discusses evaluation at curriculum committee (one permanent student representative)

Evaluation System (CQI)

- Student teams assigned before course - can provide anonymous formative feedback during the course
- Students fill out survey instrument after examination and all responses are compiled into the **comprehensive** evaluation
- Student evaluation team reviews comprehensive evaluation and writes **consensus** evaluation

Evaluation System (CQI)

- Comprehensive and consensus evaluations to deans, involved faculty, and curriculum committee
- Faculty and student evaluation team discuss evaluation at curriculum committee
- Consensus evaluation and action plans disseminated to students

Comprehensive Evaluation

- Seven to seventeen pages long
- All written comments
- Scoring of questions (Likert Scale)

Consensus Evaluation

- One page "Executive Summary"
- What should be improved
- How "specific suggestions" to improve

Comprehensive Evaluation

Schedule

- “Dr. ----- should be more respectful of students schedule. He has a tendency to ramble about minutia.”
- “Dr. ----- tells too many stories in class”
- Dr. ----- answers questions with voluminous details, we got sidetracked often.”

Comprehensive Evaluation

Schedule

- “An inordinate amount of extraneous material was covered.”
- It is a waste of student time for Dr. ---- to talk about his research interests and his treatment preferences.”

Consensus Evaluation

Schedule

- “The lectures should begin and end on time. Class time should focus on major concepts with clinical correlation and less details (doses of drugs). Questions during lecture should be for clarification only and require only brief answers. More detailed questions could be answered individually after class”

Results

Faculty-student teams have worked to:

- Write objectives
- Revise syllabi
- Proofread handouts
- Plans schedules
- Discuss teaching strategies
- Review controversial exam questions
- Integrate courses

Opportunity to Learn by Doing

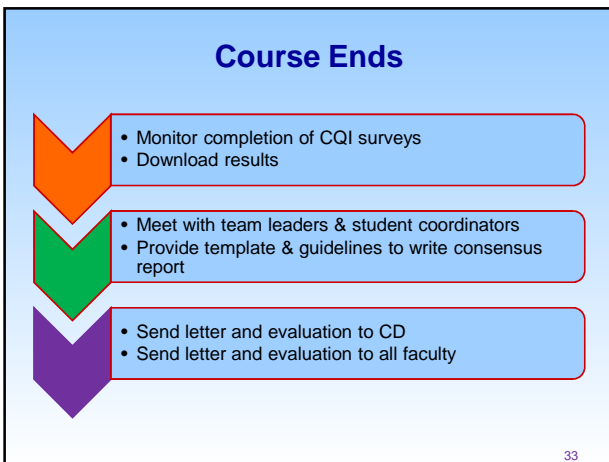
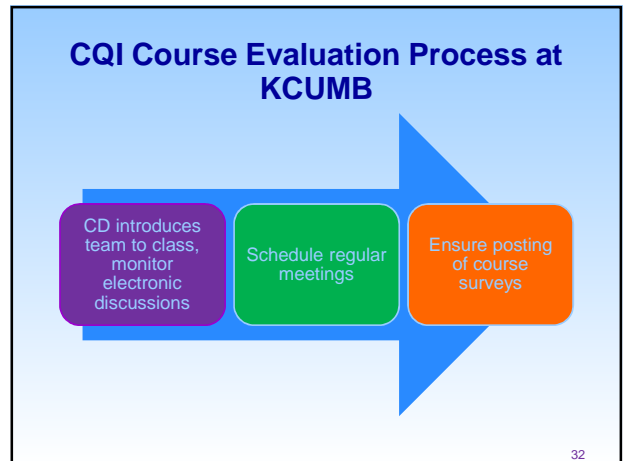
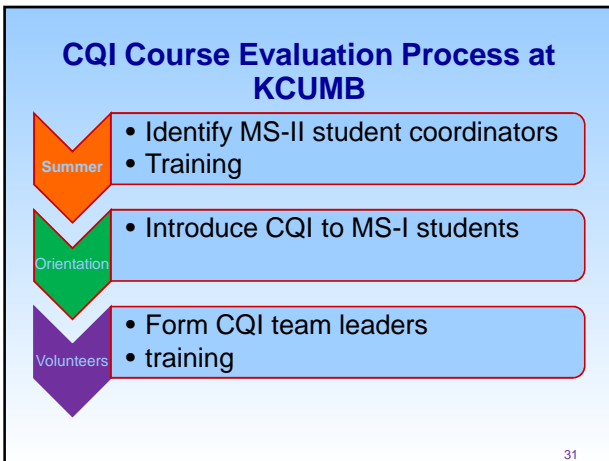
- Teamwork
- Leadership
- Professionalism
- Systems thinking
- Quality Improvement
- Evidence-based decision making

Applying Quality Improvement Principles to Curriculum Evaluation and Integration

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- ### Impact
- **Just in Time feedback**
 - **Meaningful, constructive evaluation**
 - **Students learned to function as part of a team**
 - **Students learned how to provide objective constructive feedback**
 - **Students recognized the importance and responsibility of providing feedback**
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- ### Impact
- **Increased awareness of professionalism and professional behavior**
 - **Increased understanding of students on how the academic world functions**
 - **Students ownership of curriculum**
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Comments and Questions

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Post Session Discussion Questions

- **What are the benefits/opportunities of utilizing the CQI course evaluation model at my institution?**
- **What would be the challenges in implementing such a model at my institution?**
 - **At the administrative level**
 - **At the faculty level**
 - **At the student level**
- **How can these challenges be addressed?**

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