Benefits of a Vertical Integration for At-Risk Students

By
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Disclosure
I have no financial relationships to disclose of any kind.
What are the AAMC Core Competencies for Entering Medical Students???
The AAMC Core Competencies for Entering Medical Students

Pre-Professional Competencies
- Service Orientation
- Social Skills
- Cultural Competence
- Teamwork
- Oral Communication Reliability and Dependability
- Resilience and Adaptability
- Ethical Responsibility to Self and Others
- Capacity for Improvement

Thinking and Reasoning Competencies
- Critical Thinking
- Quantitative Reasoning
- Scientific Inquiry
- Written Communication

Science Competencies
- Living Systems
- Human Behavior
There is a big miss-match on expectations between what the students think they need to know and do, and what we expect them, from day one, to know and do....
The lack of an adequate bridge in medical education between the first two years of heavy didactics on biomedical sciences and the last two years of clinical exposure makes the present medical curriculum disjointed.
Furthermore, many medical students, after being primarily observers during their clinical rotations feel, and many are, ill prepared to take on the work and responsibility of patient care in a residency setting.
Therefore, **vertical integration** of the curriculum should help mitigate the gap by reinforcing biomedical sciences across the four years of medical education and preparing trainees from year 1 to acquire clinical competence and responsibility.
Clinical competencies

Professional competencies

Learning strategies, skills and models

Biomedical Knowledge
We want to implement a series of vertical integration activities…
These activities will be preceded by a set of workshops to introduce the students to new learning strategies, skills and models and provide them with a set of tools to help them better navigate through the medical curriculum and eventually their clinical practice.
MULTIPLE VERTICALLY INTEGRATED ACTIVITIES

FIRST YEAR
SECOND YEAR
THIRD YEAR
FOURTH YEAR
One of the goals of these workshops is to have the students become capable of self-assessment, self-redirection, and formulate a self-improvement plan.
For students to develop into life-long learners it is also important that they learn good social and communication skills, problem solving, and critical thinking. They also need to be reliable, responsible, dependable, resilient and adaptable. All of these skills are particularly important and useful for at-risk students.
At-risk students may need more time, more resources, and more effort. By teaching them the skills they need to be their own evaluator, will help them attain better control of their own barriers and road blocks, and see the end of the road more clearly.
The workshops will introduce the students to new learning strategies, skills and models to improve themselves. These workshops will therefore provide them with a set of tools to help them better navigate through the medical curriculum and eventually be successful in their clinical practice.
At-risk students need goals:
• Setting goals influences motivation
• Having goals influences one’s choices and consequences that are reinforcing
• Clear and attainable goals affect the extent of student engagement
• Goal attainment increases self-efficacy, self-satisfaction and higher standards for future performances
• Setting small goals leads to progression

Avoidance goals vs Mastery goals
Strategies to help at-risk students:
1. Give more time to acquire the knowledge
2. Provide different opportunities to obtain the knowledge
3. Give many opportunities for practice and learning
4. Set realistic and reachable goals
5. There is leeway and forgiveness
6. Convey high performance expectations
7. Set a positive environment for the learning community
8. Use effort and achievement for assessment
9. Use scaffolding for complex tasks
10. Give assignments that use prior knowledge
11. Design activities to promote higher order thinking
12. Promote authentic engagement
13. Remedial programs should be in place and be mandatory.
LOGIC MODEL TO DEVELOP VERTICAL INTEGRATION ACTIVITIES

Activity | Skills | Resources and Tools | Outcomes | Student Assessment | Feedback
--- | --- | --- | --- | --- | ---
1 | | | | | Moves on
2 | | | | | Moves on with correctives
Assessment
Remediation
Moves on
Thanks to the Office of Faculty Development

Dr. Swati Goel, Assistant Dean, Office of Faculty Development
Ms. Patsy J. Hayden, Program Coordinator

for allowing me to explore my new found passion on medical education reform ....


