

Benefits and Solutions

To understand Eduperior and competency based education, please read the sixty benefits and solutions listed below. Eduperior makes these sixty benefits possible because Eduperior combines these critically important capabilities:

- Eduperior's competency based educational structure can easily function in currently used time based educational delivery systems, but where desired, Eduperior can be a bridge to a competency based delivery and measurement system.
- Practically free digital text books, lesson plans, assignments, and test items.
- Any course that can be made to be interactive can be made to be interactive within Eduperior's curriculum development structure.
- Student portfolios display grades for each competency within each course.
- Eduperior's Student Management System (SMS) provides reports to student portfolios, schools and colleges, and to local, state, and national education agencies
- Oversight of courses and the creation of course content is accomplished by outstanding educators who are Pathway Directors and Course Creators, not employees within Eduperior
- Continuous course improvement via feedback in forums
- Sharing of courses on international, national, college, school, and state Eduperior enabled web sites. Said differently, Eduperior enables the sharing of courses from any Eduperior enabled website to any other Eduperior enabled web site, anywhere in the world.

Definitions:

- **Competency:** means the same thing as 'Content Goals', 'Outcomes' or 'Objectives', 'Performance Based', Performance Goals. These terms may be used interchangeably in this document. A competency is a concise statement, normally only one line in length, and starts with an active verb.
- **Competency Components:** standards met by each competency, prerequisite competencies, interest approaches, instructional approach (lesson plan), assignments, test items, textbook pages for each competency statement.
- **Text book pages,** also called **Supplemental Instructional Material,** for each competency, when combined, provide an online or printable textbook. These pages can

contain internet links, and uploaded files such as slideshows, documents, spreadsheets, PDFs, autocad files, and recorded voice and mouse movements when an educator teaches the use any software application, such as Scientific Workplace for math instruction.

- **Interest Approach:** the difference between a good instructor and an excellent instructor is the ability to get and maintain student interest. Each competency has Interest approaches listed, in addition to lesson plans.
- **Instructional Plan:** Lesson plan for schools and Instructional Approach for colleges.

Benefits Provided by Competency Based Education

1. **Creates an aligned curriculum:** What is planned is taught, what is taught is learned, and what is learned is tested. Hence, there is a match among the three functions of curriculum and instruction.
2. **Aligns Content:** provides a structure for a universal integrated educational system that will lead to an efficient alignment of course competencies, lesson plans, text books, criterion referenced assessment, reporting, and **output to student portfolios**.
3. **Fairness:** shared curriculum will help create a more fair comparison of school accomplishment from district to district and state to state.
4. **Increases student achievement & motivation:** The learning expectations are clearly communicated and in chunks that can be accomplished. Eventual electronic testing enables frequent feedback that is free of causes that create usual test anxiety.
5. **Frees learning time:** When all education components (competencies, interest approaches, lesson plans, assignments, test items, and texts) are carefully aligned to competencies, then more content can be taught.
6. **Saves teacher time:** Sharing of competencies, lesson plan strategies, lesson plans, and test items will save each teacher about 1-2 hours per day in preparation time.
7. **Empowers open-entry and open-exit:** Instructional content will be parsed and packaged so students can enter, leave, and re-enter as needs and circumstance dictate.
8. **Facilitates articulation agreements:** The established competencies and test items used in K-12 schools and colleges can be compared and analyzed as the basis for articulation.
9. **Better harmony between 2 & 4 year colleges.** Educators and colleges more easily see and agree on what is to be taught in a 2 year college that is expected at the 4 year college.
10. **Mainstreams remediation:** Missing or failed content can be identified and addressed at the time it is most needed through individualized electronic approaches.
11. **Creates customized courses:** The structure makes it easy to extract curriculum components from existing courses to package in new courses. A complete customized course portfolio can be developed using existing competencies and related education components in less than a day, which normally takes months.
12. **Delivers professional development:** The embedded expert system monitors instructor curriculum making decisions. Accordingly, literature consistent decisions are reinforced and questionable decisions are identified at the time they are made.

13. **Promotes documentation consistency:** Established document formats provide a common look that enables students to move quickly to the substance of a course. External reviewers are able to assimilate intent, delivery, and assessment of courses without struggling with varying formats.
14. **Teacher satisfaction** rises significantly. (note 1)
15. **Teacher turnover** drops significantly when focusing on learning and helping students, with increased teacher engagement, a shift in professional culture, and changes in the teacher's role. (note 1)
16. **Tracks qualitative and quantitative dimensions:** Quality is improved and reports for administrative oversight and compliance are provided. Lagging indicators of student performance are a thing of the past.
17. **Addresses accreditation standards:** Institutional effectiveness questions can easily be answered. The content and assessment processes exploit the best attributes of competency-based education and criterion-referenced testing.
18. **Generates multiple delivery options:** Content can be identified, delivered, and assessed for group or individual access. Thus, foundation, developmental, and enrichment content can be offered simultaneously to course enrollees.
19. **Synchronizes matriculation:** Equalized and sequenced planning, delivery, and evaluation of content chunks enables students and teachers to move from one institution to another with minimal hassle.
20. **Employs criterion-referenced testing:** Student proficiency of content can be measured against established standards to help insure that the education/training is produced as advertised.
21. **Stores accountability data:** The decisions of teachers and the performance records of students are aggregated in the relational database and can be easily extracted for reporting and verification functions of the institution.
22. **Encourages distance learning:** The infrastructure for documented distance learning is embedded in the database so that traditionally delivered content can be easily adopted and adapted for alternate delivery modes.
23. **Generates competency forms on student portfolios:** Competencies are linked to assessment measures thereby enabling the software to produce a student portfolio. Future teachers, mentors, and employers can now efficiently visualize the student's capabilities.
24. **Promotes continuous quality improvement:** The aggregated relational database can be easily accessed to purge, modify, and add new content, instructional plans, and assessment measures.
25. **Embraces concept learning:** Competencies are created for one of these three: knowledge, skill, or soft skills. Thus, movement away from fact learning only to concept learning is encouraged.
26. **Redefines course, program, and degree boundaries:** Aligned curriculum and instructional elements, based upon a three-hour learning time for each competency, allows an institution to recognize a competency as the lowest common denominator. A course could be one competency and an associate degree can become an aggregation of 900 competencies.
27. **Frames universal curriculum:** At any traditional grade level (K-12) there is a limit as to the content that a student can master. For instance, a sixth grade student will be involved in learning for 180 six-hour days or 1080 hours. Crafting each competency around an average two-hour time frame

(sixth grade class 1/3 is presentation, 1/3 is lab, 1/3 interactive discussion) will produce 540 content goals. Dividing the 540 goals equally among five academic areas allots 108 competencies each for math, science, communication, social science, and humanities. It should be relatively easy to frame a generic curriculum.

28. **Links state standards and competencies:** State standards tend to be broad statements that cannot be directly taught nor tested. At the very least, normative testing occurs in which results are a comparison to other students --- not the competency. The standards need to be broken into smaller parts. The competencies are the parts and may be linked for documentation and reporting requirements.

29. **Eliminates content voids and duplication:** analysis is more easily done to identify competencies that are replicated or missing.

30. **Reduces curriculum resource documentation costs:** Reams of paper and file drawers of paper per course can be replaced by using computer files.

31. **Systematizes curriculum revision:** Each instructor using the system can have an equal democratic voice in adding, deleting, and modifying the database. The electronic nature of the system permits openness for input and review purposes.

32. **Empowers educator oversight academies:** Local institutions, districts, states, and nations could form linchpin structures that provide creditability and oversight for specifically designated content areas.

33. **Embraces academic freedom and creativity:** For perspective, algebra is algebra. Clients clearly reveal that around 80% of the content goals in a given course will be agreed to without debate. It is about the remaining 20% of content that disagreements erupt. Hence, apply the 80-20 rule at the option of any instructor. Tie down the intent and evaluation (80-20) and leave the entire delivery to the discretion of the instructor. The problem is solved.

34. **Equalizes credit allocations:** Institutional credit policies, consistent with accreditation standards, are customizable by course to ensure that a credit of learning is the same whether lecture, lab, clinical, academic or career-technical in nature.

35. **Promotes faculty delivery technique exchanges:** Getting and maintaining interest is the single most important factor that distinguishes an average instructor from an excellent instructor. Creativity is stimulated through modifying existing ideas. The system makes it easy for instructors to share instructional strategies.

36. **Provides learner constituent content access:** All the generated curriculum and instruction documents can be posted on the web for review by students, parents, employers, mentors, and prospective students. It is great when we are all on the same page.

37. **Supports student on-demand communication:** View-only portfolio competency forms for each course provides the student with immediate feedback of proficiency assessments. Additionally, software enhancements provide hot-button connections to support documentation in instructional plans.

38. **Allows internal & external institutional networks:** Syllabi, instructional plans, and exam items can be sent and received via e-mail attachments. Accordingly, database exchanges can be shared among instructors whether they be next door or across the sea.

39. **Promotes result oriented instruction and assessment:** Students can easily and efficiently be assessed for content proficiency regardless of whether instruction has been given, is being given, or has been completed. Life experience assessment is the same as for enrolled students.
40. **Conducts inside-out curriculum evaluation:** Checks of the infrastructure decisions made during curriculum and instruction development processes can be run to isolate expert system overrides. The results provide the basis and locus for diagnostic and corrective interventions.
41. **Stores instructional related database information:** Text and references, course descriptions, test item analysis results, and audio-visual and multimedia needs are all available electronically for administrative planning and support without bothering the instructor.
42. **Engenders seamless curriculum:** Most content is not age dependent. Most traditional courses, programs, and degrees are rigid and do not allow for individual differences and choices. Using the content goal as the building block promotes a variety of ladder and lattice arrangements and thereby produces a seamless curriculum.
43. **Recognizes self-pacing values:** Conventional instructional structures start and end courses based upon the academic calendar. Inherent in this approach is that all students learn at the same rate and in the same way. Alternatives for content delivery produce an asynchronous option for differences in learning rate and methods. For example, one significant area of concern is smart kids who drop out or give up and stay in.
44. **Chunks content:** Chunks that are teachable, testable, consistent with concentration spans, sequenced, convertible to credit, and adaptable to various delivery strategies are ideal. This system provides checks and balances to guide curriculum and instruction developers to craft ideal chunks.
45. **Structures employer-based instruction:** Skill and belief oriented content goals can be efficiently extracted from the database to formulate training plans and their respective performance checklists.
46. **Connects students, teachers, administrators, counselors, and community leaders:** The Internet becomes a conduit for sharing information and interactions among the educational constituents. The power of this technology has been barely tapped but will surely become a tool of choice. Hot links are provided for making the connections.
47. **Drives text and instructional resource development:** Textbooks, written by one or two persons, have traditionally driven content. Today, most texts are obsolete upon release. A generic set of content goals representative of thousands of instructors can become the outline for mini-subtexts that are electronically disseminated. Instant and continuous updates will be possible.
48. **Promotes textbook cost competition:** As new editions of traditional text books come into circulation, educators are forced to spend time comparing old editions, reviewing new material and refreshing their curriculum - a tedious and unnecessary task, as most changes between editions consist of cover design, page sequence, and pictures. The integration of content goals, lesson plans, test items, testing, and free or inexpensive online textbooks postures educational agencies to do what is best for education rather than what is best for the publisher's pocket book. Books can be a part of a highly integrated efficient educational system.
49. **Guarantees course section consistency:** If you have a common syllabus and test item pool, likeness of sections for the same course will evolve. The delivery can vary but the expectations for results will conquer.

50. **Shifts administrative structures:** A data-based driven curriculum and instruction system will promote changes in hiring, promoting, student records, scheduling, attendance, and recruitment to name but a few. Instructors will become the stewards of content and assessment.
51. **Identifies pace setter instructors:** Creative ideas, whether in planning, delivering, or evaluating, are easily recognized when they are captured in a relational database. The responsible instructors can be used to infuse the innovations to other instructors and thereby speed up the change process.
52. **Reorients departmental structures:** Structures based on career orientations will surface, developmental education will become integrated, and academic instruction will become applied. The goals of students will become more important than faculty and courses being housed in a “discipline” department or division.
53. **Maximizes portfolio functions:** The grade-oriented transcript will be re-engineered to include competency proficiency. Emphasis will be placed upon what the learner knows, can do, and beliefs possessed.
54. **Exploits apprenticeship concepts:** Students with clinical, practicum, O-J-T, co-op, and apprenticeship credits get employed faster and experience fewer firings. Real work life settings can now be effectively used to have content proficiency verified. The content goals from in-house instruction will serve as the final performance assessment checklist.
55. **Balances business and industry involvement:** Educational institutions can clearly communicate their intent via content goals. Business and industry leaders can provide specific and targeted feedback. In the final analysis there is very little difference between a job description element and a content goal, thus providing a foundation for optimal collaboration.
56. **Parses implementation elements:** A teacher may start by downloading and using only the content goals for a course, then later add testing, and or begin to use the integrated lesson plans. Full adoption can occur in easy stages. Teachers will not need to transform their practices. Or, a teacher may change content goals in a syllabus, or create syllabi, test items/tests, and teaching plans. Accordingly, adoption and adaptation can and does vary. The expert systems approach assists instructors in making continuous quality improvements. Full use by all members of the faculty produces a dynamic database for incremental design improvements and administration.
57. **Diminishes undesirable external influence:** The clarity brought about by the inherent processes being proffered will expose unwarranted and inappropriate interference. Attacks on educational processes and products will have to be objective.
58. **Allows empowerment:** Students too easily become passive, accepting, and move toward mediocrity with some of the current education methods. Students may move toward self paced exploration, self-direction, and creativity, yet still track results for students who do testing.
59. **Enables creative collaboration by educators:** Provides a virtual work place which enables educators to assemble their own curricula from numerous individual sources instead of forcing them to rely on single comprehensive packages from national textbook factories. This will not remove academic freedom but will achieve coherence without stultification. Or, textbooks from any source can be created that are a match to the content goals.
60. **Reduce basals to reference books:** Core texts will be slimmed down to set forth as clearly as a dictionary the essential skills and information to be learned at each grade level in each subject, and

fact-checked by experts in the field, and then reviewed by master teachers (Academy Directors and Associate members) for scope and sequence.

61. **Provide core content that allows creative addition by others:** Links, video, animation, stories, slideshows, historical novellas, educational games, can be provided as additional plug-ins by creative third parties.

62. **Reforms education:** American education is in a state of crisis. Education as a central platform plank for three national elections is sufficient evidence to support this statement. Our heritage includes education for all, local control, academic freedom, and a recognition that education is an investment and an essential element for capitalism and democracy. It is correct to preserve this heritage. However, the pressures of limited resources, teacher burnout, legislative edicts, global competition, and natural resistance to change are severely eroding our heritage. Our curriculum and instruction has taken on a basic survival stature. The instructional intent is principally a set of fear-based non-teachable state standards. The delivery is a random set of activities. The assessments are tests created and administered by large companies that provide only an indication of how one school's students perform compared to another school's students. The Integrated Plan recommended in this document provides a viable and proven solution to the crisis.

For additional information or discussion please contact Wade Whitmer

Notes:

1. Benefit #14 & 15: When Failure is Not an Option page 19. Nellie Mae Education Foundation www.nmefdn.org