



Solutions to Common Challenges

Documenting and Mapping Curriculum

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Using Online Curriculum Mapping tools, a procedure for documenting, mapping, viewing, reviewing, analyzing and evolving the operational curriculum in a classroom, school and/or district [a departure from the old paper binder days] was introduced in the mid 1990's by Heidi Hayes Jacobs. Several companies have created mapping software and google drive is home for the curriculum maps of many schools. The benefits of curriculum mapping include increased student achievement, optimized collaboration among teachers, vertical articulation and continuity of curriculum, lateral interdisciplinary cohesiveness, and an innovative, flexible approach to teaching and learning. The most important outcome is that from the students' perspective, all the disciplines hang together with integrity over time as a whole integrated set of knowledge, skills and dispositions that unleashes their potential and prepares them to participate in, and to lead with us, the shift toward the future we want--a healthy, just and sustainable future for us and for future generations..

Before I discovered mapping already existed, I was dreaming of a digital commons that could house the operating curriculum in a school or district. A place that would reflect the current operating curriculum, keep it alive, and be accessible and regularly used by faculty to close the gap between the formal and the learned curriculum. A place faculty could contribute to, and utilize.

I have worked with many many schools and districts and, for the most part, I have seen mapping underused, misused, under appreciated, and down right hated by faculty. I asked, why? In addition to collecting and developing compelling [rationales](#) for documenting and mapping (verbs, not nouns) I started tracking the patterns of behavior to be avoided.



The following is the list so far, of 7 Problems to avoid when documenting and mapping your curriculum:

1. SYMPTOM:

Veteran and master teachers are not regularly inclined to share their work with colleagues and new teachers

ROOT PROBLEMS

Teachers who put a lot of work into their unit plans and lessons:

1. don't want to share with people who don't appear to work as hard
or
2. don't share because other teachers plagiarize their work
or
3. Teachers who have developed their curriculum units and instructional materials hold them as their own Intellectual Property.

Either way, the focus isn't on what is best for student learning over time.

SYSTEMIC SOLUTIONS

Create a school culture that recognizes the importance of learning together and sharing effective curriculum and instructional practices so that all students have access to the best version of the intended curriculum. Administrators recognize that there are designers, adapters and implementers in every building and that as long as it is clear who is doing what, and the curriculum is delivered with fidelity, students can thrive.

Make the operating curriculum a commons in a school or district. We all depend on it and are all responsible for it. We hold it in an evolving trust for future generations of teachers and students. It should be articulated, documented, mapped, evolved and kept alive by continually creating and sharing more effective ways to deliver it with fidelity over time.

Create favorable conditions for veteran, master and new teachers to share, to collaborate, to learn from one another, and to co-create curriculum and instructional materials and/or to adapt "off the shelf" materials to the mission and vision of the school that close the gap between the formal and the learned curriculum. Not only because sharing is caring, but because there is value there in the wisdom of experience that should be shared, developed and grown ... to benefit student learning and the well being of our communities and of the places in which we live.

Give attribution to authors, adapters and adopters: Put authors' names on curriculum documents (and instructional materials if shared), and add a section on the template for adaptors and adopters. Protect the materials through Creative Commons licensing.



2. SYMPTOM

Digital maps are treated like the old paper binders produced for “the man”. Teachers don’t perceive that they have instructional value and they are dead on arrival.

Faculty does not see the instructional value of curriculum mapping. They are doing it to follow administrative rules.

Faculty does not use curriculum maps and unit plans to drive instruction.

SO

Lessons and instructional materials are disembodied from curriculum

ROOT PROBLEMS

Mapping is treated as a noun, not a verb. Maps are not updated regularly as a result of:

No regular time given to curriculum documentation, mapping, and revisions. Without this, teachers revert to only focusing on lesson plans.

AND

Administrators and teachers don’t generate whole curriculum analytics, they don’t do strengths and gaps assessments on the whole curriculum on an ongoing basis, and reports are not generated so they can’t be discussed and analyzed in critical conversations between faculty and administrators.

Schools don’t formatively analyze student work, regularly read the feedback, self-correct, and iterate curriculum and instructional materials.



SYSTEMIC SOLUTIONS

Create an explicit system for documenting and mapping, and for keeping the maps updated and useful. Instructional leaders lead the development of the maps. There are designers, adapters, and implementers in every building and district. Leaders can identify who should be designing, developing and mapping, piloting, and contributing to revisions over time.

Time and attention is paid during school and after school and summers to keep maps updated regularly and iterated with instructional materials. Curriculum mapping is focused work and time and professional development and coaching must be provided for it on a regular schedule. When there are robust maps, teachers use the maps in critical conversations regularly and use them to drive instruction. Teachers should be involved in building unit plans and in translating them into instructional materials.

Professional learning and coaching is given so teachers understand what they are expected to teach and how to translate the curriculum into instructional materials.

A curriculum map should be “alive” and current. The map should be a living document that reflects the formal, operating, taught, assessed, and learned curriculum and is informed by/contributed to by teachers and administrators. A living curriculum document that has instructional value that guides teachers as they develop instructional materials. Teachers and administrators can iterate between the curriculum and instruction. When maps are kept updated, the analytics they can generate are accurate and teachers and administrators can use them to continually improve curriculum and instruction.

3. SYMPTOM

Quality/scoring criteria is applied differently in different classrooms (effort, performance...). There is often no calibration across grade levels or disciplines.

ROOT PROBLEM

There is no shared understanding/agreement among faculty and administrators of what quality/scoring criteria is, and/or what it looks like in student work.

SYSTEMIC SOLUTIONS

The curriculum maps can include shared (and agreed upon) rubrics and checklists, and have student work samples attached as anchors. This can include the range of student work products from “beyond expectations to below expectations. Students can use the student work samples to make meaning out of the quality/scoring criteria and to co-develop rubrics, checklists and anchors with teachers).

4. SYMPTOM

Teachers build lessons without the benefit of the structure and guidance of an operating curriculum

ROOT PROBLEM

There is not enough professional learning devoted to familiarizing faculty with the operating curriculum (probably because it isn't written anywhere) so teachers can't distinguish the curriculum (the what and why) from their instructional materials (the how).



SYSTEMIC SOLUTIONS

Distinguish curriculum from instruction. Curriculum represents what we can count on students learning, and when we can count on it. Instruction is the way each teacher delivers the curriculum. If we can count on the continuity of the curriculum, then we can prepare for the autonomy and creativity of the instructional strategies teachers use to deliver the curriculum with fidelity.

Hint:

Faculty and administrators can develop a shared understanding of the difference between consensus and diary versions of curricula. Each faculty member can copy the consensus curriculum and can tailor it with fidelity for instructional purposes (i.e., stages 1 & 2 color coding, sequencing, and organizing, and stage 3, adding instructional materials like lesson plans, handouts, etc.) to ensure continuity of curriculum and creativity of instruction.

5. SYMPTOM:

There are gaps and redundancies in targeted standards in the operating curriculum.

ROOT PROBLEM

Units and lessons are designed and *then* aligned to standards, instead of starting with a year long context of standards--laid out year by year, course by course, unit by unit--and designing each unit to the appropriate standards, skills progressions, and proficiency scales.

SYSTEMIC SOLUTIONS

Develop multi year-long contexts of standards, year by year, course by course, unit by unit, for each course. Then the units will target and assess for all required standards and can be developed over time in the appropriate sequence with attention to Depths of Knowledge, skills progressions, and proficiency scales.

6. SYMPTOM

Young people are graduating without the requisite knowledge, skills and dispositions they need to thrive over time.

ROOT PROBLEMS

There are big gaps between the formal/required curriculum, the operating curriculum/unit plans, the taught curriculum, and the learned curriculum as measured by the assessments that produce student work.

It is impossible to audit the curriculum for evidence of the desired attributes of Education for Sustainability, Character Education, Social Emotional Learning, Academic Standards, 21st Century Skills, etc.



SYSTEMIC SOLUTIONS

Document and map the operating curriculum and generate reports to regularly monitor how close the courses and unit plans are to the required formal curriculum, how closely aligned the targeted standards are with the assessed standards, and to what extent the depths of knowledge, skills progressions and proficiency scales are articulated and appropriately assessed for. Over time, faculty can close the gaps by reconciling the operating curriculum with the formal curriculum, and the instructional materials with the operating curriculum.

7. SYMPTOM

Maps are used to assess teacher compliance/performance. Teachers soon revolt, and mapping stops all together.

ROOT PROBLEM

The purpose and beauty of mapping is not well understood by administrators. Many mapping consultants will advise schools to have the faculty map what they have done, instead of what they will do next time to improve the curriculum. The intention is for the map to report reality—an accurate snapshot of what was done. Those types of maps may have value to administrators who are assessing teachers' curriculum mapping performance, but do not contribute to the performance of the curriculum, and have no instructional value to teachers.

SYSTEMIC SOLUTIONS

The most up-to-date and robust version of the curriculum should be what is being mapped (verb not noun), and it should be done in a way that makes it possible for instructional materials to be designed and developed with fidelity to the curriculum.

If the purpose of documenting and mapping the curriculum is to develop the richest most effective “living” curricula for our students, then documenting and innovating at the same time makes more sense. The map should reflect a school or district's aspirations AND have instructional value at the same time. Lessons and instructional materials can then be iterated over time in conjunction with the ongoing improvement of the curriculum.

Glossary:

Formal Curriculum: The formal description (a few paragraphs) of what is taught when, in a State, district or school. The list of required academic standards and other core attributes are part of the formal curriculum.

Operating Curriculum Mapping: The reflective and iterative translation of the formal curriculum “unpacked” into sequences of courses, units with selected standards appropriate to each unit, rationales, transfer goals, content and skills, big ideas and questions, assessments and performance criteria. It's role is to ensure continuity. It is “the What and the Why”.

Taught Curriculum: What is actually taught—i.e., the experience of translating the operating curriculum with and for students, in a specific amount of time, often guided by instructional materials. The lessons, activities, learning experiences produce student work (products, projects, performances...) as evidence of the learned curriculum which should closely resemble the formal and operating curriculum . It is



“How” the curriculum is implemented. Its role is to ensure autonomy, differentiation and creativity and is meant to deliver the curriculum with fidelity and to support strong positive relationships between teachers, between disciplines, between students and between teachers and students.

Assessed Curriculum: The relatively small percentage of the curriculum that produces evidence of what students are thinking and learning, what they are like, what they know and what they can do as a result of the curriculum and instruction they experience.

Learned Curriculum (including the hidden curriculum): What students actually learn as a result of their experiences in school.

Null Curriculum: What is not in the curriculum that is worth considering.

Sample Mapping Softwares:

www.RubiconAtlas.org

<https://eduplanet21.com>

www.TODCM.org

www.chalk.com

www.Toddleapp.com

Sample Digital Learner Centered/Self Directed Learning Management Systems:

Altitude Learning Platform <https://learnercentered.org/>

<https://liftlearning.com/>

<https://www.schoolology.com/>

Useful References:

<https://www.learningpersonalized.com/its-time-for-curriculum-mapping-3-0/>

<https://www.jaymctighe.com/wp-content/uploads/2011/04/UbD-and-the-Primary-Years-Program-PYP.pdf>

<https://www.chalk.com/resources/webinar-post-pandemic-curriculum-mapping/>

<https://www.bing.com/shop?q=curriculum+mapping+heidi+hayes+jacobs&FORM=SHOPPA&originIGUID=AD147D6266A4434494F09D6470F8D335>

