

The Teacher Taxonomy

Good teaching meets the needs of every individual student while accomplishing the goals of education. Formerly, a teacher was the conveyor of information. Today, the teacher is as much a manager of learning experiences as the sole source of instruction. Many teachers, for example, have found the management role comfortable in high technology classrooms when they find that students know as much or more about various technologies as they do.

The demand for excellence in recent years has heaped more and more pressure on teachers to perform. The emphasis on high standardized test scores often leaves teachers frustrated and feeling isolated. Examples of mandates to the teacher include:

- Teach more content in less time.
- Teach in such a way that students score high on achievement tests even when they don't speak English.
- Improve student learning by matching resources to their learning styles and abilities.
- Provide opportunities to develop independent learning and problem-solving skills.
- Provide a variety of methods for classroom teaching and learning activities.
- Stimulate creativity and experimentation.

Fortunately, there are people in most schools eager to partner with teachers to achieve such results. Counselors, special reading teachers, special education personnel, and library media specialists all work to assist teachers in creating a successful learning climate.

With regard to the library media program, the wise teacher may learn to capitalize on all the resources that the LMC has to offer. The idea is for a teacher to reach out from self-contained teaching to embrace a partnership with the library media specialist in resource-based learning activities.

TEACHING STYLE

Teachers by training and experience generally adopt a teaching style with which they become comfortable as their experience deepens. They determine what seems to work for them and their students as they settle into a comfort range of teaching techniques. In today's educational community, two major teaching styles are capturing attention. The first is behaviorist teaching, a style that predominates in teacher practice the world over but which is under heavy attack by theorists. The behaviorist teacher generally:

- Relies on lecture and textbooks as staples of teaching and learning.
- Is in control of the learning environment.
- Takes the role of "sage on the stage."
- Understands the ideas of goals and objectives, careful formulation of activities to achieve the objectives, and testing to match the objectives.
- Is concerned with delivering a prescribed amount of content to students and expecting them to master it.
- Uses testing to determine mastery or lack thereof and grades based on expected mastery.

We have all encountered behaviorist teachers, some of whom are extremely competent in helping learners master content. We are also aware of those who abuse this style. As the pressure to make students achieve increases, the behaviorist teacher tends to exert more and more control and may increase expectations, raise the amount of homework expected, and seek to increase the amount of content given per time unit. The teacher may also use drill and practice plus repeatable exercises, seeking to maximize the memorization of material connected to a particular discipline.

Behaviorist teaching is the oldest and most widespread technique and has some definite advantages plus a track record

of success. Students who perform well for a behaviorist teacher are "sponges" who consume huge amounts of information and details. They are able to reproduce facts and information precisely on a test. These students do well in mastering factual information and on true/false tests or multiple choice items. They can reproduce the ideas of the teacher in an essay as well as the ideas they have read in texts or other prescribed reading materials. They do well on the SATs and go on to college, where they encounter more of the same teaching style.

Behaviorist teachers often come under attack for concentrating on building "surface learning" of facts rather than building thinkers or problem solvers. They may be accused of having so much interest in the mastery of content that "process" tools of learning ("how to learn" skills) are neglected. Student learning styles may be ignored as the amount to be learned increases.

At the opposite pole to behaviorist teaching is constructivist teaching, a philosophy that began with John Dewey but has become more popular as brain research has developed and theorists such as Howard Garner and his learning styles work have been popularized. The constructivist teacher:

- Uses a wide variety of materials and technologies to present material to appeal to each learner.
- Guides the learning environment; becomes a shadow leader.
- Takes the role of "guide on the side."
- Asks students to take control of their own learning.
- Stresses the "process of learning" over mastery of content.
- Uses rubrics to have students participate in the assessment of both process and content mastery.

Constructivist teachers include students in the formulation of projects or quests. They assist students by creating quality questions to be solved or "engaging problems" inviting investigation. They may vary activities and strategies as the "quest" progresses and take into consideration the feedback received from students. They risk students not being able to master facts, trusting that students who know how to learn will perform satisfactorily on tests and in the long run will be powerful learners. Constructivist teachers take into consideration the variety of learning styles in their classrooms and create learning activities that appeal to all those styles. They are more concerned with the depth of learning than its breadth.

Constructivist teachers reinvent their schools or restructure teaching and learning. They may apply for membership in the Coalition of Essential Schools, an organization promoting constructivist principles. They do not accept the notion that students must master more and more surface learning as new knowledge in the disciplines is discovered.

These teachers appeal to quite a different kind of student: one who enjoys taking responsibility for learning, who enjoys working collaboratively in group projects, and who enjoys solving problems. Students who are creative and like to solve problems using various strategies do well in constructivist classrooms. But those students who need to be told what to do and how to do it at every turn become frustrated with an apparent lack of guidance.

There are probably few teachers who fit the mold of pure behaviorist or constructivist teaching. Some behaviorist teachers may use constructivist ideas to create variety and a change of pace for the students. At times, the constructivist teacher grabs control to steady the ship and to shorten the time between problem creation and solution.

Whatever the teaching style being used, library media specialists try to reach out to teachers, seeking to build powerful learning experiences. Their message is that no matter the teaching style, two adults armed with a wide variety of materials and technology can make a larger difference with a higher percentage of learners than if the teacher tries to teach alone. They maintain that the odds increase as two adults partner to support the typical group of learners.

Thus the teacher taxonomy in figure 4.1 shows a progressive stance from teaching in isolation to the embracing of the LMC and its staff as a central component of teaching and learning strategy.

The Teacher's Taxonomy of Resource-Based Teaching and Learning

1. SELF-CONTAINED TEACHING

The teacher delivers instruction and creates learning activities with materials and technology in a single classroom environment with no real need for the LMC facilities, materials, or information technology. Materials are either owned by the teacher or accessed via networks from the classroom.

2. TEACHING WITH A BORROWED OR ELECTRONICALLY ACCESSIBLE COLLECTION

When materials or equipment are lacking for a particular instructional sequence, the teacher borrows materials from the LMC, the public library, or other sources for use in the classroom during a unit of instruction.

3. USING THE LIBRARY MEDIA STAFF AS AN IDEA RESOURCE

The teacher relies on the library media staff and the technology resource persons for ideas and suggestions for new materials to use, activities to pursue, training in the use of all forms of media and technology, reference information, what materials are available (when, where, and how), and professional materials and information.

4. USING THE LIBRARY MEDIA STAFF AND RESOURCES FOR ENRICHMENT OF A UNIT

The teacher uses the LMC facilities, materials, activities, and staff to supplement unit content—to provide the "icing on the cake" for a unit. These activities are not considered essential to the central elements of teaching but do enrich the learning experience.

5. USING LIBRARY MEDIA RESOURCES AS A PART OF UNIT CONTENT

Library media center materials/activities are integral to unit content rather than supplementary in nature. Students are required to meet the teacher's objectives while using library media information.

6. THE TEACHER AND LIBRARY MEDIA SPECIALIST EXPERIMENT WITH PARTNERSHIPS IN TEACHING AND LEARNING

The teacher and library media staff experiment by working as teaching partners to construct teaching strategies and learning experiences that will increase student achievement. One or both partners are testing collaborative strategies, new ideas, or changes in learning activities or are experimenting with new technologies.

7. TEACHER/LIBRARY MEDIA SPECIALIST PARTNERSHIPS BECOME A NATURAL PART OF TEACHING AND LEARNING

Teachers and library media specialists enjoy partnerships as they plan, execute, and evaluate learning experiences. Their collaboration is a natural part of the professional experience.

8. CURRICULUM DEVELOPMENT

Teachers consult with library media specialists as curriculum changes are being considered. Advance planning for changes and their impact on LMC materials, facilities, technology, and activities are considered.

Figure 4.1: The teacher's taxonomy of resource-based teaching and learning.

THE TEACHER TAXONOMY EXPLAINED

Level 1 — Self-contained Teaching: The teacher delivers instruction and creates learning activities with materials and technology in a single classroom environment with no real need for the LMC facilities, materials, or information technology. Materials are either owned by the teacher or accessed via networks from the classroom.

For a variety of reasons, many teachers feel compelled to stick strictly to the textbook and other classroom materials as a complete pool of resources for their teaching. Over the years a teacher may have acquired a personally owned classroom collection that is available as needed. Also, a textbook adoption may consist of a total package of materials designed to provide an entire curriculum. The package may include the textbook, workbooks, audiovisual materials, and computer disks or accompanying web sites. The designers of these packages encourage strict adherence to the objectives designed for the package. While textbook/package teaching does have merits, many teachers feel the need to reach beyond the content of the text to make learning come alive for a particular group of students who are not responding well to whatever is happening. Library media specialists concur with this thinking and spend a good deal of time encouraging teachers to experiment on other levels.

Level 2 — Teaching with a Borrowed or Electronically Accessible Collection: When materials or equipment are lacking for a particular instructional sequence, the teacher borrows materials from the LMC, the public library, or other sources for use in the classroom during a unit of instruction.

The need to reach beyond the classroom for materials and equipment causes teachers to seek out libraries and media centers that are both convenient and reliable. At this level, the teacher is an independent borrower, knowing exactly what is needed and when. Problems develop when borrowed materials must be scheduled far in advance of the presentation date, such as scheduling a video six months to a year in advance. Such obstacles and other harassment integral to the borrowing process itself may be terribly discouraging, yet the results are often worth the effort.

Level 3 — Using the library media staff as an idea resource: **The teacher relies on the library media staff and the technology resource persons for ideas and suggestions for new materials to use, activities to pursue, training in the use of all forms of media and technology, reference information, what materials are available (when, where, and how), and professional materials and information.**

Because the library media specialist deals with materials and information technology much of the school day and watches students and teachers use these materials, a bank of good teaching ideas naturally develops. This resource can be tapped by the teacher if a good communications line with the library media specialist can be established. Idea sharing can occur at brief moments during a coffee break, at lunch, or during a brief encounter in the hall. At other times, the teacher is advised to seek out the library media specialist for specific ideas and suggestions. The specialist might have a tendency to flood a client with ideas and materials in appreciation for being asked, so a teacher is advised to describe carefully and on a regular basis the specific areas of interest.

Level 4 — Using the library media staff and resources for enrichment of a unit: **The teacher uses the library media center facilities, materials, activities, and staff to supplement unit content—to provide the "icing on the cake" for a unit. These activities are not considered essential to the central elements of teaching but do enrich the learning experience.**

There are numerous LMC activities and projects available that with a little planning will provide richness and extend the activities in the classroom in meaningful ways for students. The activities can be simple or complex, short or of extended length, and can provide an exciting element or a refreshing change of pace to a unit of instruction. Activities can range from research in books or online information resources to creating Internet web sites; from oral dramatic presentations for other classes to visiting with a community resource person. Such activities can, however, be counterproductive and turn into babysitting sessions or a waste of time if adequate planning is neglected.

Level 5 — Using library media resources as a part of unit content: **Library media center materials/activities are integral to unit content rather than supplementary in nature. Students are required to meet the teacher's objectives while using library media information.**

Many students must be motivated through their assignments to use library media materials to accomplish a learning task. When library media specialists understand the objectives of the unit of instruction and the type of activity needed to accomplish a task, they can provide the type of activity in the LMC desired by the

teacher. At this level, the teacher spends considerable time with the library media specialist explaining unit objectives and planning for LMC activities. Those activities are required rather than considered as supplementary to unit objectives. Advance planning is essential to the success of a level 5 unit, and teacher participation in the LMC activity is vital.

Level 6 — The teacher and library media specialist experiment with partnerships in teaching and learning: **The teacher and library media staff experiment by working as teaching partners to construct teaching strategies and learning experiences that will increase student achievement. One or both partners are testing collaborative strategies, new ideas, and changes in learning activities or are experimenting with new technologies.**

One of the most exciting teaching experiences can occur when teachers and library media specialists join together as teaching colleagues to create, teach, and evaluate a unit of instruction. This process requires extensive advance planning, mutual concern, and the ability to share ideas in a give and take situation. At this level, both partners are willing to try a new or fresh approach to teaching and learning, working on techniques that may reach a larger percentage of the learners, and to take advantage of having two adults rather than one involved in the teaching process.

Level 7 — teacher/library media specialist partnerships become a natural part of teaching and learning **Teachers and library media specialists enjoy partnerships as they plan, execute, and evaluate learning experiences. Their collaboration is a natural part of the professional experience.**

By level seven, the library media specialist and the teacher have become partners, trusting each other to be creative enough during the planning and execution stage of a unit activity to enhance student learning. Both partners seek opportunities to work together often and feel comfortable in doing so.

Level 8 — Curriculum development: **Teachers consult with library media specialists as curriculum changes are being considered. Advance planning for changes and their impact on LMC materials, facilities, technology, and activities are considered.**

Too often, the adoption of a new textbook or curriculum comes as a surprise to the library media specialist. It is only an accident if a LMC collection can support a curricular change. Most often, it takes several years to gear up the collection of the LMC to the new text. Just as the support becomes effective, it is time to change the text again. One of the best ways to prevent

this rollercoaster effect and its subsequent disservice to students is to encourage the library media specialist to report to the curriculum committee how well the present LMC collection can support any of the proposed textbooks or curriculum guides. Bringing the library media specialist into the planning at an early stage allows the committee to make its choice with better information and gives the library media specialist the opportunity to order new materials or request funds to buy new materials before the proposed text is used. In addition to explaining LMC collection support, the library media specialist can serve as a contributing member of the curriculum committee in its dealings, as time permits.

BUILDING PARTNERSHIPS

Teachers pride themselves on having academic freedom, on being experts in their subject areas, on building a sense of autonomy. Why, then, accept a partnership in the educational process? The answer is that no matter how strong or excellent a teacher is, improvement can be achieved by reaching out to others for ideas of merit.

Incorporating good ideas from others presumes a certain openness, a flexibility of approach. It reflects neither weakness nor uncertainty. Teachers who forge partnerships with library media specialists do so because they perceive that a collegial approach to education is superior to an isolated one. Partnerships presume mutual trust, a sense that both persons have something to contribute.

But what can a library media specialist know about differential equations? The latest theories of nuclear physics? The nuances of good writing? Likewise, what can a teacher be expected to know about the latest materials for teaching differential equations? The latest use of computers that will improve student comprehension? The creation of Boolean searches of online databases? To communicate successfully, the library media specialist may have to read the textbook or a summary essay in a subject encyclopedia or may even have to attend a teacher's class presentation. On the other hand, the teacher might have to participate in an in-service training session for online searching or ask for one-on-one assistance in using a computer simulation to best advantage. Whatever it takes to communicate successfully, both the teacher and the library media specialist make the effort, knowing that the results will be worthwhile.

Library media specialists often complain that teachers will not plan units of study far enough in advance for the LMC program to have any real impact. Likewise, teachers may assume that the library media specialist has no real interest in what is going on

in the classroom. Such assumptions are common and lead to empty LMCs, underused resources, misused technology, and feelings of ambivalence.

The school administrator, who is the instructional leader, can often create the atmosphere and the policies to stimulate teacher-library media specialist communication. Administrators can begin by providing common planning time and monitoring the success of jointly planned activities. Teachers might demand quality support from the LMC and encourage the administrator to see that a sound program is in place. Teaching need not be an isolated activity. Students deserve to have the best educational program and the best materials that will stimulate their interest.

Teachers who have experienced difficulties incorporating the LMC into instruction might be included in special professional development sessions for joint unit development or take advantage of summer planning workshops with other teachers and library media specialists. The administrator might also encourage the library media specialist to be a functioning member of department planning meetings or cross-disciplinary planning sessions. Teachers, administrators, and library media specialists cannot assume that good things will happen automatically. All groups need to lobby for planning time and for an opportunity to evaluate the success of every joint project. No matter the obstacles, the teacher, the administrator, and the library media specialist vow to cooperate and do it.

Both the teacher and the library media specialist should study chapter 7 & 8, which details the steps in creating resource-based teaching and learning units. However, a few suggestions here illuminate the process.

- The teacher and the library media specialist cooperate in the creation, the execution, and the evaluation of topical studies and units of instruction.
- The library media specialist is a part of the teaching team. Likewise, the teacher is an integral part of the library media program.
- The library media specialist knows *in advance* the precise requirements of and the deadlines for assignments involving LMC materials and technology.
- The objectives of topical studies or units of instruction are identified so that new skills can be taught and other skills reinforced.

- Appropriate materials from a wide variety of sources and technologies are available for student and teacher use. Easy access is a must.
- Resources are available in sufficient quantities to meet student demands.
- The necessary equipment and appropriate working spaces are available for students when required.
- Students are taught information skills, technology skills, and thinking skills as they interact with the LMC resources to achieve curricular assignments.
- Evaluation techniques are developed to examine not only the learning outcomes but also the effectiveness of the process.
- Opportunities are provided for students to use LMC resources for pleasure and enjoyment.¹

Teachers sometimes will want access to the LMC for a specific time and at other times will want individuals or small groups of students to have access to the center at any time during the school day. The important factor is that the center should be available from the beginning to the end of the school day on a flexible schedule.

THE TEACHER AND THE CENTRAL PROGRAM ELEMENTS OF THE LMC

Library media specialists seek to achieve four programmatic elements that will make a difference in academic achievement if implemented in partnership with teachers. The first, collaboration, has been discussed above as the central element of the teacher taxonomy. The other three are outgrowths of that idea.

Reading. The research is clear that the more young people read, the better they will be at comprehension, spelling, grammar, and writing style.² Simply stated, amount counts. Collaborating with the library media staff, much can be done to see that every student becomes a capable and avid reader throughout their school experience. A few suggestions might provide an entrée to a planning session:

- Get a rotating collection (from the LMC) of high-interest materials into the classroom.

¹ Adapted and updated from *Partners in Action: The Library Resource Centre in the School Curriculum* (Toronto: Ontario Ministry of Education, 1983), 25.

² Stephen Krashen. *The Power of Reading*. Englewood, CO: Libraries, Unlimited, 1993 and McQuillan, Jeff. *The Literacy Crisis* Portsmouth, NH: Heinemann, 1998.

- As a teacher, read-aloud every day and provide sustained silent reading.
- Let students choose a wide variety of materials to read for assignments rather than everyone reading the same item.
- Include reading in every unit of instruction whether it be science, social studies, or language arts.
- As a teacher, be a reader who recommends good things to students on a regular basis.

Enhancing learning through technology. **The challenges for all teachers are just beginning when the computers are set up, the networks are operational, and the systems are loaded with a wide variety of information products. It is one thing to have an information-rich environment and quite another to make that environment have an impact on learning. To get ideas, many teachers try using collaborative planning with the LMC staff or the students themselves and getting great teaching ideas from the Internet or from professional development sessions. For any tired out unit now placed in an information technology environment, the fastest way to see results is to do one of two things: change the beginning question to something relevant and engaging and/or change the nature of the final product. Either or both strategies are quite likely to increase student motivation, particularly when students are encouraged to use technology both as an information source and as a medium of unlimited creative expression.**

Building information literacy. ***Information literacy* describes a student's ability to master the research process: the wise use of a wide variety of information sources in the solution of a quest or problem. No longer should the teacher expect the library media specialist to teach students the basics of information location. Every student should be in command of his or her own learning style and system of doing research. Library media specialists can help teachers integrate these twenty-first-century skills into the normal units of instruction so that students master not only content but also process at the same time. Constructivist teachers who use the research process as the scaffolding for an entire unit or inquiry will find library media specialists anxious to help build process skills at critical times throughout the research.**

TAKING THE SELF-TEST

How open is each teacher to the collaborative process with the library media staff and the resources and technology under their direction? A simple self-check form may indicate a position today and change over time. Reproduce the teacher taxonomy (Figure 4.1) and indicate how often each level of the taxonomy would describe a teacher's normal practice.

Summary Chart: Teacher's Self-Evaluation Checklist

I use materials and technology available in my classroom.

20% of the time	40% of the time	60% of the time	80% of the time	100% of the time
2 units in 10	4 units in 10	6 units in 10	8 units in 10	10 units in 10

2. I borrow materials or equipment temporarily for a unit of instruction.

20% of the time	40% of the time	60% of the time	80% of the time	100% of the time
2 units in 10	4 units in 10	6 units in 10	8 units in 10	10 units in 10

3. I use the library media staff as an idea resource in my teaching.

20% of the time	40% of the time	60% of the time	80% of the time	100% of the time
2 units in 10	4 units in 10	6 units in 10	8 units in 10	10 units in 10

4. I use the library media center for activities that “enrich” my teaching.

20% of the time	40% of the time	60% of the time	80% of the time	100% of the time
2 units in 10	4 units in 10	6 units in 10	8 units in 10	10 units in 10

5. What my students do in the LMC is an integral part of unit content.

20% of the time	40% of the time	60% of the time	80% of the time	100% of the time
2 units in 10	4 units in 10	6 units in 10	8 units in 10	10 units in 10

6. I experiment using the library media staff as partners in a unit of instruction.

20% of the time	40% of the time	60% of the time	80% of the time	100% of the time
2 units in 10	4 units in 10	6 units in 10	8 units in 10	10 units in 10

7. Partnering with the library media staff is a natural part of my instructional routine.

20% of the time	40% of the time	60% of the time	80% of the time	100% of the time
2 units in 10	4 units in 10	6 units in 10	8 units in 10	10 units in 10

8. Library media staff participate when textbook adoption or major curricular change happens.

Rarely or Never	Frequently	Always

Figure 4.2: Teacher's self-evaluation checklist.