

OPERATION MANUAL : THE CURRICULUM LIBRARY

SEARCH INSTRUCTIONS:

Stipulate the type of lesson you want from the options organized in the tree view.

- You may choose options from any level within the tree view. Nodes that do not constitute an option will only expand or collapse if clicked. Chosen options will appear in the header bar for the eight major criteria.
- Click on the [+] to expand the list, click on [-] to collapse a list.
- Choose options from as many or few of the criteria as you wish, but you must choose an option for Course or Concept.
- The HELP icons that follow many of the options provide definitions.
- Choosing a different option within the same criterion will replace the original choice. Alternately, you may unchoose an option by clicking it again.
- When you are done specifying the type of lesson you want, click on the SEARCH button.
- The Search will provide you with the available lesson closest to what you specified, with lessons listed above and below it that are progressively further away from the best-fit lesson (zoom-in and zoom-out) according to the order in which you specified the criteria.

COURSE versus TRANSFERABLE CONCEPT:

The Course option leads to the transferable concepts typically taught within the listed courses. The No Conceptual Focus option should be selected if you are focusing on skills or topical content rather than on conceptual understanding. You may specify skills or topical content through the other major categories in the tree. Choosing a concept from under the Course option is the same as choosing it from the Transferable Concept option. A selection under Course will take you to the Transferable Concept tree, where you can confirm your selection or adjust your conceptual focus.

SEARCH REQUIREMENTS and ORDER:

You may choose as many or as few of the over 850 options organized into eight major categories of educational criteria, with one major requirement: You must make a choice from Course or Concept (see above description).

When you finally click the SEARCH button, the search engine prioritizes its search according to the order in which you specified the eight major categories. The exceptions are that Language of the Lesson (if you specified one) and Transferable Concept are always the first and second criteria used to search the database of available lessons. You may adjust the order of search under the CHANGE THE SEARCH ORDER button.

The Search will index the Curriculum Library's entire collection according to your specified criteria. It will provide you with the available lesson closest to what you specified, with lessons listed above and below it that are progressively further away from the best-fit lesson (zoom-in and zoom-out) according to the order in which you specified the criteria.

NAMING CONVENTIONS and SEQUENCE CODES in the CONCEPT BRANCH

The name of each of the transferable concepts is immediately followed by a letter, either upper or lowercase, that is its sequence code. You will find that some names include slashes or commas, and are sometimes notated by a pop-up list of terms. The key to both the naming conventions and the sequence coding is as follows:

KEY:

NAMING CONVENTIONS FOR TRANSFERABLE CONCEPTS	
What is a Concept	The listed concepts are transferable concepts. Although half the words in the English dictionary are technically concepts, a small sub-set of transferable concepts are those that are used for problem solving, critical thinking and considered decision making within a domain of knowledge such as science.
Slash:	The names are major synonyms for the same transferable concept.
Comma:	The transferable concepts are closely linked and synergistic. They should be taught in tandem.
Pop-up:	Other synonyms and common associations of the transferable concept.

LETTER SEQUENCE CODES	
A/a before B/b before C/c, etc.	
Same letter indicates that the order of instruction does not matter; the concepts could be taught in any order.	
CAPital letter indicates the concept is judged to be necessary to a minimal yet robust conceptual structure within a graduating high school senior's mind. This minimal conceptual structure would constitute healthy scientific literacy for all students. It can support and give rise to future conceptual learning.	
lower case indicates the concept is judged to be an enhancement, refinement, or strengthening of the minimal conceptual structure.	

The transferable concepts have been sequenced and prioritized according to cognitive learning theory. Thus the concepts are organized in the tree-view and sequence codes are established according to three parameters and associated patterns of cognitive developmental:

PARAMETER		DEVELOPMENTAL PATTERN Students learn from ... to
GENERALITY	How wide a variety of questions, topics, situations does it apply to?	General/Obvious ... to ... Specific/Subtle
COMPLEXITY	How many ideas (subordinate concepts) does the concept require be keep in mind <u>simultaneously</u> ?	Simple ... to ... Complex
ABSTRACTNESS	How far from direct sensation and perception is the concept?	Concrete ... to ... Abstract

A great deal of supporting research and theoretical explanation of the conceptual structure are available under the RESEARCH AND BACKGROUND RESOURCES tab on the home page.

SEARCH RESULTS:

Choosing more options with which to specify the lesson you want does NOT reduce the number of possible “hits” on the output side of the search process. The unique Curriculum Library search algorithm re-indexes its entire database of lessons according to your specifications, and in the order in which you specified the options. As you choose more options the end results of your search will be more finely sifted, but the number of lessons from which to choose will be the same. The best-fit, closest available matching lesson to what you want will be highlighted in the middle of the index. You can then explore lessons in ever-widening rungs of relevance above or below what you specified. How closely those rungs are spaced is dictated by how many options you specify when describing the lesson you want. Scrolling above the best-fit lesson is like zooming out according to the menus from which you chose options. Conversely, scrolling below the best-fit lesson is like zooming in according to the original menus.

WANNA HELP?

In the list of lessons presented after a Search is carried out, some of the lesson titles begin with the prefix, **Wanna Help?** These lessons are resources or instructional materials chosen or partly designed by another educator who is looking for collaborators to develop completed lessons. Contact the lead author who submitted the “Wanna Help” lesson for arrangements to collaborate.

HOW TO SUBMIT A LESSON

BEFORE BEGINNING the process of submitting a lesson, you must have three things ready:

1. A file or folder stored on your computer with the lesson contents ready to upload. Supported file formats: Word documents (.doc), Compressed files (.zip), Acrobat documents (.pdf), PowerPoint files (.ppt), Excel spreadsheet documents (.xls), or Open documents (.odt).
2. All authors of the lesson must already be registered. If any of the authors are not registered, please contact

them and have them register with The Curriculum Library before you submit the lesson. You will need to know the exact spelling of the names they used to register when you submit the lesson.

3. At the end of the Submit process you will need to specify the percentage ownership of the lesson copyright for each author. (If you are the sole author then you would designate your percentage ownership as 100%.) Therefore you also need to know the percentage ownership of the lesson for each author before you begin the submit process.

CHARACTERIZE YOUR LESSON

Don't Worry! If you are not sure how to proceed, just make a logical choice. A Mentor Teacher will be contacting you shortly after your submittal and will sort out any tangles with you.

1	Characterize the lesson you are submitting by click-choosing from the options organized in a tree view of eight major categories. Only the COURSE OR CONCEPT category is required, but the more detail you provide the more useful the lesson will be to teachers who are looking for something specific.
2	You may choose options from any level within the tree view. Options that only lead on to more detailed options and cannot themselves be chosen as a characteristic will only expand or collapse if clicked. Click on the [+] to expand the list, click on [-] to collapse a list. To un-choose an option you must click it a second time.
3	Chosen options will appear in the header bar for the eight major criteria.
4	Choose options from as many or few of the categories and sub-categories as you wish, but you must choose options for <u>Course or Concept</u> . Ideally you should characterize the lesson according to all 22 sub-categories of criteria, divided into the eight major categories. Any of the 22 criteria that you do not specify will automatically be coded as NOT APPLICABLE.
5	You may make multiple choices for any of the 22 sub-categories to reflect multiple perspectives on the lesson. When you make two choices from the same sub-category you are effectively creating two separate characterizations for the one lesson. Making such multiple characterizations repeatedly could quickly create a huge number of categorizations for just one lesson, so you are limited to a total of 16 different categorizations. As you categorize your lesson a counter will be displayed keeping track of the total number of categorizations you are producing.

6	When you have fully characterized the lesson you are submitting, enter the lesson title and a brief synopsis of the lesson. You may also include a snippet of the lesson, usually some portion of the first page. The snippet is the last thing a downloader will see before clicking on <i>Download Lesson</i> .
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COURSE versus TRANSFERABLE CONCEPT:

The Course option leads to the transferable concepts typically taught within the listed courses. The No Conceptual Focus option should be selected if you are focusing on skills or topical content rather than on conceptual understanding. You may specify skills or topical content through the other major categories in the tree. Choosing a concept from under the Course option is the same as choosing it from the Transferable Concept option. A selection under Course will take you to the Transferable Concept tree, where you can confirm your selection or adjust your conceptual focus.

UPLOADING YOUR LESSON

Under the category of Lesson Authors, specify the authors and percentage ownership for each author of the lesson. This allocation will be used to disburse royalty payments for the use of the lesson. So be sure that all the authors of a multi-author lesson are already pre-registered before you begin submitting the lesson.

- You may include notes pertaining to each author. For example, you may want to note who might have been the lead author, or who was responsible for graphics, research, pilot testing, etc.
- Many authors also allocate around 10% of the ownership to “collaborator collaborator,” adding a note that “10% is available for collaboration with educators who improve the lesson significantly.”
- The mentor teacher who reviews and approves your lesson (see Mentor Teacher below) will be allocated 10% of the copyright. If you do not explicitly include this 10% for the “mentor mentor,” then the 10 percentage points will be subtracted from the ownership designation for each of the authors according to their proportional ownership.

Then click the button **Choose File** to browse your computer and locate the lesson file. When you “open” this file in your browser it will be transferred to the Submit Lesson page of the Curriculum Library.

Finally, click the button **Add Lesson**. On the page that follows a successful submittal you will be informed of the name of the mentor teacher assigned to your lesson. The lead teacher will be contacted through e-mail by the mentor teacher responsible to the concept(s) that you chose for the lesson. Your mentor teacher will review your lesson, the characterizations you chose when you submitted it, help you with any changes, and authorize the final inclusion of your lesson to the CW. Your mentor will also familiarize you with our community of teachers.

MENTOR TEACHERS

Mentor teachers are awarded 10% ownership in the lessons they review to compensate them for their time and effort to review the lesson content and the characterizations you chose when you submitted it, help you with any changes, and authorize the final inclusion of your lesson in the Library. Mentor teachers can also help you with using the Curriculum Library and with curriculum planning, alignment, coordination, or documentation. Mentors are also responsible for answering any questions you might have on the Curriculum Library community of teachers and the resources available to you. They are also responsible for ensuring that teachers who use the Curriculum Library for a significant portion of their class materials either submit their own lessons to the Library or purchase a site license.

All teacher-authors are encouraged to become mentors themselves. In order to become a mentor teacher you must:

- submit between 5 and 10 quality lessons, depending on their length and sophistication, within the same area of the conceptual structure. At least one of the authors must have pilot tested the lessons with his/her students and revised it as a result of the classroom experience.
- take and pass the on-line professional development program (See the **Professional Development** tab on the home page)
- be recommended by an acting mentor teacher.

COPYRIGHT AND OWNERSHIP COMPLAINTS

Any complaint of ownership, copyright infringement or plagiarism following the submission of the lesson will immediately result in your lesson being removed from The Curriculum Library. The lead teacher will be then be notified of the complaint and it will be up to the authors to settle the issue with the complainant before the lesson is reinstated in the Curriculum Library.

UPDATE A LESSON

When you click on this button, a list of all the lessons in The Curriculum Library that you have authored will be listed. All authors of a multi-author lesson may access and update the lesson. It is up to the authors to communicate and coordinate the updates among themselves.

You have the option of searching the lessons either by ID number or by a word search of the titles.

Once you have found the lesson you want to edit, you may choose the lesson to access the last rendition of the final page of the Submit A Lesson process. At that point you may change the characterizations at will, or edit the title, synopsis or snippet.

You may change the authors or their percentage ownerships or author descriptions.

Click on Upload Content File in order to upload a new version of the lesson content.

CONCEPT SELECTIONS

This category is required because higher order thinking can be defined as the ability to transfer a generic concept to a new context for the purposes of problem solving, critical thinking or considered decision making. For those times when you are teaching for skill or content mastery rather than conceptual understanding, you must choose the option of "Not Conceptually Focused" or "Not Applicable - No concept." You may specify skills or topical content through the other major categories in the tree.

The Course option leads to the transferable concepts typically taught within the listed courses. Choosing a concept from under the Course option is the same as choosing it from the Transferable Concept option. A selection under Course will take you to the Transferable Concept tree, where you can confirm your selection or adjust your conceptual focus.

The concepts that are organized into the tree structure were identified as transferable concepts. They are unitary, definable concepts that are useful for problem solving, critical thinking or considered decision making. They are each defined by their generalizations (or enduring understandings) that describe each concept's links to other concepts within the conceptual structure. The generalizations for each concept are behind each one's help icon.

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SCIENTIFIC PROCESS SELECTIONS

This tree of options lists scientific processes, from the familiar scientific method to engineering design processes. Choosing options from this menu leads to lessons that are focused on learning such processes – the process itself is the learning goal. This category of options is meant for lessons that specifically teach to these scientific process skills, rather than include scientific processes as part of the structure or presumptions of the lesson. Such embedded as well as generic skills are found under [Instruction and Assessment Format](#) → [Instructional Format](#). Use these options if the lesson you are looking for or submitting focuses on conceptual or topical mastery while students practice a scientific process or skill that they have already learned, whether well or not.

TOPIC, CONTENT SELECTIONS

The topic or content tree presents lists of topics that are fact based and specific to a particular context. Higher order thinking can be defined as the ability to transfer a generic concept to a new context for the purposes of problem solving, critical thinking or considered decision making. Thus this topic/content category is the necessary complement to the concept category if you are teaching for conceptual understanding. In broad strokes, “all” transferable concepts could be applied to “any” particular topic. It is the combination of concept and topic that activates higher-order thinking.

If your purpose is to focus on topical information rather than conceptual understanding through topics, then you would choose the option of "Not Conceptually Focused" or "Not Applicable - No concept" from the concept category before choosing a topic from this category. The corresponding lessons have little if any conceptual dimension to them.