Name:

# **DDC Worksheet**

Note: the page numbers in the headers agree with the page number in the assignment packet.

65 min.	1. General layout and principles of use of DDC
General layout	Look at the volumes (if you have access to a printed version of DDC) or look at the sample pages starting on p.145 and familiarize yourself with the general layout of the classification by reading through the first and second "summary" (including the summary of the "Tables"). Then skim the third summary, reading thoroughly only the section 370, 380, and 620 (all attached). Then skim 370 and 380 in the schedules (vol. 2), skim 629.2 (vol.3).
	<b>Do the WebDewey exercise</b> (below), parts A and B <b>now</b> , before going through the rest of the worksheet, part C later.
	DDC consists of five <i>logical parts</i> , arranged in four physical volumes:
	<ul> <li>Physical volume 1 Introduction (general principles) Manual (extensive notes on the usage of individual classes, especially comparing usage of two or three classes ) Tables (concept with their numbers that can be used to build new classes starting from classes found in the schedules) Physical volumes 2 + 3 The schedules (the heart of DDC, the classified listing of many classes Physical volume 4 Relative index (alphabetical index, also a descriptor-find index, access to classes that complements access through the classified arrangement</li></ul>
	<b>WebDewey</b> provides access through hierarchical browse ( <i>Schedules</i> and <i>Tables</i> ) with links to the Manual. Search takes the place of the <i>Relative Index</i> ; the <i>Relative Index</i> entries include many words not in the class conceptions, providing more access points for the search function.
Fundamental rules of use	<ol> <li>Never assign a class number simply taken from the alphabetical (relative) index; always check the number in the schedules before using it. Finding the appropriate class number is often quicker in the schedules (scan the right section) than in the alphabetical (relative) index with subsequent check in the schedules.</li> <li>Always read the instructions given in the schedules and in the manual very carefully. There are many exceptions to general rules!</li> </ol>
Focus of	For determining the proper DDC class always ask yourself:
document	What is the <b>focus of this document</b> ? Where does this document belong basically?
	See examples on the next page

#### Example 1. Sheep

The anatomy of sheep		Keeping sheep. A farmer's manual		Sheep hunting for profit and pleasure	
<b>500</b> 590 599 599.6	Natural sciences and mathematics . Animals [natural history and descriptive biology] Mammalia (Mammals) Ungulates	<b>600</b> 630 636 <b>636.3</b>	Technology (Applied Sciences) . Agriculture and related Animal husbandry Sheep	<b>700</b> 790 799 799.2 799.27 799.27 799.27 6	The arts. Fine & decorative . Recreational and performing Fishing, hunting, shooting Hunting Specific big game Ungulates Bovidae
599.64 Bovidae 599.649 Sheep					••••••••••••••••••••••••••••••••••••••

#### • Always interpret the meaning of a class caption in context

599.649 means the *natural history and descriptive biology of sheep* 799.27|649 means the *hunting of sheep* 

- The classes 799.27/6, 799.27/64, and 799.27/649 are built from the pattern under 599; more on building classes in Section 3. (the symbol | separates components of a built class number.)
- All these numbers are found under *sheep* in the relative index where you can also see that *sheep's milk* and *sheep's wool* are in different places still.

#### Example 2. Taxicabs. Document: Urban transportation services using taxicabs

The document is clearly focused on *Commerce, communication, transportation*, specifically local transportation. It would therefore be wrong to use

629.222 32 Taxicabs

which is part of 600 Technology and means Technical aspects of taxicabs. The correct class is

300	The social sciences (the main class)
380	. Commerce, communication, transportation
388	Ground transportation
388.4	Local transportation [Urban transportation is local]
388.41	Vehicular and pedestrian traffic
388.413	Activities and services
388.413	2 Vehicular services
388.413	21 Services by private passenger automobiles
388.413	214 Taxicabs and limousines

Now give the class number for **The economics of trucking services** (Hint: check out 629.22 and 388.3 and note that trucking services could be local or long-distance, thus do not fit under 388.4):

### A 388.324 Trucking services

Note: The economics aspect is implied by being under class 380 Note: Very similar, but with emphasis on trucks as a type of vehicle is the following class which is built by method 2.3:

388.34 Social sciences > Commerce, communication, transportation > Transportation. Ground transportation > Vehicular transportation > Vehicles > Trucks (629.224 is trucks)

### **Document focus examples**

40 min. <b>2.</b>	Building new precombined classes May need to ask in class about this
Introduction	The DDC schedules (vols 2 and 3) enumerate many precombined descriptors, but packing all the concepts of a document theme into one class often requires still more precombination. DDC allows for building new precombined descriptors (classes). Since each built class is represented by a built class number, this is often called <b>number building</b> .
	Any Dewey class number (enumerated or built) has a decimal point after the third digit and a blank space after the sixth digit. We show the division of a built number into its components through  . ( <b>The symbol</b>   setting off components of a built number <b>is not part of the "official" Dewey number</b> . Nevertheless, in this assignment include the   for your own understanding.)
	To build the number for a new precombined class, one starts with a class number given in the schedule and appends digits from another place, often from a table, as explained in this part of the worksheet.
	Note: In Dewey number building instructions, "add" it means "append". In LCC number building instructions, "add" means "use a calculator".

	2.1 Building new precombined classes 1: General tables
General tables	The most prominent number-building feature in DDC is the use of the general <i>Tables</i> (v. 1), which apply to all Dewey classes. Numbers from these tables are never used alone but combined with base numbers from the schedules. The following instructions introduce <b>Table 1. Standard subdivisions</b> and <b>Table 2. Geographical areas</b> .
Table 1. Standard Subdivisions	Numbers from Table 1 may be combined freely with any number from the schedules, e.g., <i>modern Indic languages</i> (491.4), <i>classification of</i> (Table 1 / -012 ): 491.4 012. (Note: The '-' in front of 012 just shows that this number must not be used alone; the hyphen does <b>not</b> become part of the number: 491.4-012 is wrong!) Example 2: 530 .0712 <i>12th grade physics</i> (530 Physics, Table 1 / -0712 Secondary ed.) Now build the class number for <b>Railroads (385) directory (of persons and organizations) (T1 / -025):</b> <b>B 385 .025</b>

	2.1 Building new precombined classes 1: General tables, continued
Table 2. Areas.	Areas from Table 2 can be added according to the following rules:
	<ul> <li>(1) By direct addition when so noted in an instruction in the schedules Examples:</li> <li>378.73 Higher education in the US (as instructed at 378.49)</li> <li>372.9 <i>Historical, geographical, persons treatment of elementary education</i> has a note to add directly from Table 2, T2 / -52 is <i>Japan</i>, thus</li> <li>372.9 52 <i>Elementary education in Japan</i></li> </ul>
	<ul> <li>(2) Through the interposition of "Standard Subdivisions" notation -09 from Table 1 whenever there is no special instruction. Example: 385 <i>Railroad transportation</i> has no special instruction about adding areas directly, thus 385 .09 52 Railroad transportation in Japan</li> </ul>
	The "linkage" function of the standard subdivision -09 is fully explained under
	Table 1, -093-099Treatment by specific continents, countries, localities; extraterrestrial worlds History and description by place, by spec. instance of the subject
	Add "Areas" notation 3-9 from Table 2 to base number - 09. e.g., the subject in the <i>United States</i> - 09 73, in <i>Brazil</i> -09 81, in <i>North America</i> -09 7.
	Class persons associated with the subject regardless of area, region, place in - 092; treatment by areas, regions, place not limited by continent, country, locality in -091; history and description of the subject among groups of specific kinds of persons in -088, among specific racial, ethnic, national groups nondominant in their continents, countries, localities in -089.
	Now build class numbers for the following::
	<b>River transportation (386.3) in the U.S. (T2 / -73)</b> (no instruction with 386.3)
	C 386.3 09 73 (no instruction with 386.3, therefore must use 09 to combine with 73 from Table 2)
	The role of trucks in transportation in Germany (area -43)
	D 388.344 09 43
	Again: Add area numbers without intervening 09 only if instructed to do so.

	2.1 Building new precombined classes 1: General tables, continued
Other general tables	Never add numbers from Tables 3-7 unless an instruction tells you that they can be used.
Combination from several tables	When so instructed (and only then), you can build a very specific class by adding from two tables. As an example, go to Table 1 / -025 and read the instruction. You see that one can build the class 385 .025 52 <i>Railroad directories for Japan</i> .

15 min.	2.2 Building new precombined classes 2: Local tables
	Local tables are found in the schedules and apply only to a specified range of classes. For example, at the beginning of 372.3 - 372.8 <i>Elementary education in specific subjects</i> (DDC21 vol.2, p. 779), there is a table that applies only to this range of classes. This table "hijacks" -04 of Table 1. Read this table and the instructions, and then build the class number for
	Curriculums (043) for elementary school science (372.35):
	E 372.35 043
	For a more extensive local table see 362-363 <i>Specific social problems and services</i> (vol.2, p.682), which gives such concepts as 1 <i>Social causes</i> and 62 <i>Standards</i> , or 616.1- 616.9 <i>Specific diseases</i> (v 3, p.68).

15 min.	2.3 Building new precombined classes 3: Applying the pattern of subdivision found in a different place in the schedules as a model
Pattern models	Consider a variation on the taxicab example from Section 1 (Example 2). In Section 1 emphasis was on <b>transportation services</b> using a type of vehicles, here the <b>focus is on the vehicles themselves</b> , but in a transportation context (rather than their technical construction), such as a document that is a register of taxicabs in Chicago. This is an example of choosing the proper class based on focus on a detailed level, but the main focus here is on building classes. There is no enumerated class for this topic, the classification only goes as far as shown here:
	300The social sciences (the main class)380.380.388.388.3.388.34Vehicular transportation
	To class more even more specifically, follow the instruction given for 388.342348: Add to 388.34 the numbers following 629.22 in 629.222-228, e.g., <i>taxicabs</i> 388.34 232. In other words, the subdivision of vehicles given in the technical class is reused here, saving space in the schedule.
	Now build the class number for <b>Trucks</b> (transportation focus) (But different from A, here focus is on trucks as vehicles used in transportation, not on trucking <u>services</u> .)
	<b>F</b> 388.34 4 388.34 4 Social sciences > Commerce, communication, transportation > Transportation. Ground transportation > Vehicular transportation > Vehicles > Trucks (629.224 is trucks)

	2.4 More examples for building classes
More examples	For further examples see the model catalog. But note that in the model catalog, numbers for area and historical period have been added far beyond what is usual, resulting in long numbers. The common practice often omits the area 73 U.S. and the modern time periods. DDC 18 allowed for even more specific (and longer) numbers: 09 followed by area notation followed by time notation taken from 930-990; the official rules of DDC22 (started in DDC19) allow only subdivision by place and <b>not</b> further subdivision by time. Example:
	DDC18: 386.4 09 73 0917 Canal transportation in the U.S. in the Administration of Franklin D. Roosevelt
	DDC21: 386.409 '73 Canal transportation in the U.S.
	Any individual system can, of course, apply DDC any way its designers see fit if they are not worried about compatibility.

45 min.	3. Probing the conceptual cross-reference structure (Broader Term, Narrower Term, Related Term)	
Cross- reference structure	For each example, give the class number and list 5 - 7 cross-references (class number and full caption) that <i>should</i> be there, followed by (Sched) if they are given in the schedules, (Rel) if they can easily and obviously be located through the Relative Index, and (No) if they are not given either place. Remember that semantic factoring can be used to detect cross-references needed. Use the Relative Index to find the class numbers for the concepts to which cross-references should be made, but do not spend more than 45 min. on this section.	
	Note: A cross-reference "should" be there if it would help the user to know about the classes referred to. Of the cross-references that should be there by this definition, Dewey includes very few. Your task is to supply the missing cross-references, or at least some of them.	
Exa	mple XXX (next edition of the assignments will give an example here)	
G School nu	rsing services	
Class number a	and full caption:	
Sch Sch	ial sciences > Education > Schools and their activities; special education > ools and their activities > Student welfare > Student health and related topics > <b>ool nursing programs</b> cross-references here to any of the classes listed below	
Cross-referen	<b>ces</b> (class number and full caption) (NT = Narrower Term, etc.)	
1 NT <b>372.1 7</b>	<ul> <li>Elementary education &gt; Organization and activities in elementary education &gt; School organization and activities in elementary education &gt; Student welfare in el. ed. &gt; Student health and related topics in el. ed. &gt; School nursing programs in elementary education</li> </ul>	
2 NT 373.1 7	<b>1 2</b> Secondary ed. > > School nursing programs in secondary education	
3 NT 374.1 7	<b>1 2</b> Adult education > > School nursing programs in adult education	
4 NT 378.19	7 12 Higher ed. > > School nursing programs in higher education	
All these are built following instructions, for example at 372.11-18 to append to base number 372.1the number following 371 in 371.1 - 371.8. There should be a note at 371.1 - 371.8 Schools and their activities that the class numbers under this class are used to build corresponding classes under each educational level.		

1			
5 BT <b>362.173</b>	Social sciences > Social problems and services; associations > Social problems and services > Specific social problems and services > Social welfare problems and services > Problems of and services to persons with illnesses and disabilities > Physical illness > Specific services > <b>Services</b> <b>of nurses</b> This class covers the social provision of nursing services, the next class the technology of nursing services (i.e. the craft of nursing. Comprehensive works go here. This has no cross-reference to 371.712 [From Relative Index under Nursing]		
6 RT <b>610.73</b>	Technology (applied sciences) > Medical sciences; medicine > Education, research, nursing, related topics > <b>Nursing and services of allied health</b> <b>personnel</b> This has a cross-reference to 371.712 From Relative Index under Nursing		
H Blind studen	ts		
Class number and	full caption:		
Special	371.911 Social sciences > Education > Schools and their activities; special education > Special education > Students with physical disabilities > Students with blindness and visual impairment		
number the case	e: Blind students at the elementary level can be expressed as the built 371.911 72, but this class still falls under 371.911, not under 372, as was e with nursing. This built class does not need to be listed as NT because it is ed under 371.911.		
Cross-references	s (class number and full caption)		
1 BT <b>362.41</b>	Social sciences > Social problems and services; associations > Social welfare problems and services > Problems of and services to people with physical disabilities > <b>Persons with impaired vision</b> [Relative Index]		
2 RT <b>305.908 1</b>	Social sciences > Social groups > Occupational and miscellaneous groups > Persons by physical and mental characteristics > <b>Persons with blindness and visual impairments</b> [Relative Index]		
3 RT <b>T1-0871</b>	Table 1 > History and description with respect to kinds of persons > Persons with disabilities and illnesses, gifted persons > <b>Persons with</b> <b>blindness and visual impairments</b> [Relative Index] Any class formed by appending 0871 would be an RT, for example [Relative Index]		

	Arts and recreation > Recreational and performing arts > Indoor games of skill > Electronic games > <b>Persons with blindness and visual</b> <b>impairments</b> [built class] Note: While such classes can be built, I had no luck to find any book with various such built classes I tried
5 RT 617.712	Technology > Medicine and health > Surgery and related medical specialties > Ophthalmology > Pathology and surgery of eyes > <b>Blindness</b> <b>and partial blindness</b> [Relative Index] ducation in music composition
	ducation in music composition
Class number and	I full caption:
372.874 Social s Compo	sciences > Education > Elementary education > Other studies > Music > osition
Cross-references	s (class number and full caption)
1 BT <b>781.3 071</b>	Arts and recreation > Music > General principles and musical forms > <b>Composition</b> ] > <b>Education</b> , <b>research</b> , <b>related topics &gt; education</b> [The first part in the Relative Index under Composition (Music), then append from Table 1]
	[This built class is explicitly listed in WebDewey.] There are 23 books under this in WorldCat I give some classes that fall below this one (and are RTs to 372.874) just to illustrate how Dewey works
2 RT <b>781.3 071 2</b>	Arts and recreation > Music > General principles and musical forms > Composition  > Education, research, related topics > education > Secondary education [The first part in the Relative Index under Composition (Music), then append from Table 1] [This built class is not explicitly listed in WebDewey.] There are 7 books under this in WorldCat
3 RT <b>781.37 076</b>	Arts and recreation > Music > General principles and musical forms > Composition > Arrangement  > Education, research, related topics > Review and exercise
	[The first part in the Relative Index under Composition (Music), then append from Table 1] [This built class is not explicitly listed in WebDewey.] There are 4 books under this in WorldCat

#### 4. Comparison of exhaustivity and specificity of indexing in two schemes Introduction and definition of task

Exhaustivity and specificity of indexing are important parameters that affect retrieval performance. (See Organizing Information, Chapter 16, for definitions.) This part of the assignment will help you gain a better understanding of these parameters. For three documents, you will compare DDC with the faceted London Education Classification (LEC). Examine the entries for the three documents below (each has a grid to be completed by you). Your task is to compare the exhaustivity and specificity achieved with the LEC with that achieved with DDC (the one Dewey class used for the call number) as shown in the example. The descriptors from LEC and; the Dewey class are given. As discussed in Chapter 16, in order to compare exhaustivity and specificity of two sets of descriptors assigned to the same document, one must first semantic factor the descriptors to arrive at two lists of elemental concepts, which can then be compared. The LEC concepts are already elemental. Determine the semantic factors of the Dewey class; all you need for this is the class caption, such as Organization and activities in secondary education > curricula. Enter the resulting elemental concepts in column 2, matching them up with the LEC concepts where possible. Use the blank row if there is a concept from DDC without a corresponding concept from LEC. The elemental concept from the Dewey class may be broader or narrower than the LEC concept. For some LEC concepts there may be no elemental concept from the Dewey class; conversely, an elemental concept from the DDC class may have no corresponding LEC concept. In column 3 circle or underline the scheme that has the more specific concept. Can you detect a pattern? Discuss below at **J**.

	LEC outline	Some LEC examples
В	Education: foundations, principles, policy, etc	Bap Educational opportunities; Bept Statistics of educ.
		Betm Financial resources; Bid Government Center
D	School buildings, bldg. services, equipment	Def Music Room; Dvo Computer
F	The teaching profession, personnel management	Fal Responsibility; Fas Recruitment
G	Type of personnel in education	Gan Dean; Get Librarian; Gon Nurse
Η	Management of educational institutions	Hab Management of education; Heb Admission
Hs-	z Human biology. Health and hygiene	Htw Motor ability; Huv Neurosis
J	Psychology of education. Educ. measurement	Jze Emotion; Jed Student discipline; Jud Counseling
Κ	Educand's work (study method, interests, voluntary	Kad Study methods; Kib Children as writers
	vs. compulsory work)	
L	Teaching method	Lah Team teaching; Lep Group work; Lus Library
M-I	P Subject taught (Curriculum)	Mab Curriculum, syllabus, in general; Mok Biology
Rab	-Sus Grade level and type of institution	Rib Comprehensive school; Rek Secondary school - upper
Svb	-Tvp Educands (by age, by exceptional	Svg School child, pupil; Teb Blind and partially sighted
	requirements, and other characteristics)	

#### Example

#### 373.19 Organization and activities in secondary education > curricula

Note: This class caption is all you need to semantic factor the DDC class to arrive at the elemental concepts to put in column 2.

#### Conant, James Bryant, 1893-1978

The comprehensive high school; a second report to interested citizens

LEC concepts	Elemental concepts from DDC class	Which scheme is more specific?		
Rib Comprehensive (type of school)		SAME	LEC	DDC
Rek Secondary school-upper	Secondary education	SAME	<u>LEC</u>	DDC
Mab Curriculum, syllabus, in general	Curricula	<u>SAME</u>	LEC	DDC
Bept Statistics of education		SAME	LEC	DDC
Bap Educational opportunities, access to education		SAME	LEC	DDC
	No. of concepts	1	1	0

Exhaustivity		Specificity	
LEC elemental concepts	5	LEC same as DDC	1
DDC elemental concepts	2	LEC more specific	1
		DDC more specific	0
More exhaustive: LEC		<b>Overall more specific:</b> LEC	

In this example: LEC indexing has 5 concepts, DDC indexing 2, thus LEC is more exhaustive Of the two common concepts, one is more specific in LEC and one is the same specificity, thus, for this document, indexing with LEC is more specific overall.

# Example, repeated

#### 373.19 Organization and activities in secondary education > curricula

Conant, James Bryant, 1893-1978

The comprehensive high school; a second report to interested citizens

LEC concepts	Elemental concepts from DDC class	Which scheme is more specific?		
Rib Comprehensive (type of school)		SAME	LEC	DDC
Rek Secondary school-upper	Secondary education	SAME	<u>LEC</u>	DDC
Mab Curriculum, syllabus, in general	Curricula	<u>SAME</u>	LEC	DDC
Bept Statistics of education		same	LEC	DDC
Bap Educational opportunities, access to education		SAME	LEC	DDC
	No. of concepts	1	1	0

Exhaustivity		Specificity	
LEC elemental concepts	5	LEC same as DDC	1
DDC elemental concepts	2	LEC more specific	1
		DDC more specific	0
More exhaustive: LEC		<b>Overall more specific:</b> LEC	

In this example: LEC indexing has 5 concepts, DDC indexing 2, thus LEC is more exhaustive Of the two common concepts, one is more specific in LEC and one is the same specificity, thus, for this document, indexing with LEC is more specific overall.

# **Document 1**

# 378.111Higher Education > Organization and management; curriculums ><br/>(administrative) Academic staff

Dibden, Arthur James, 1919-. The academic deanship in American colleges and universities

LEC concepts	Elemental concepts from DDC class	Which scheme is more specific?		
Sab Institutions of higher education	Higher education	<u>SAME</u>	LEC	DDC
Hab Management of education	Organization and management	<u>SAME</u>	LEC	DDC
Gan Dean	(Administration) Academic staff	SAME	<u>LEC</u>	DDC
Ban Sociology of education		SAME	LEC	DDC
	No. of concepts	2	1	0

Exhaustivity		Specificity	
LEC elemental concepts	4	LEC same as DDC	2
DDC elemental concepts	3	LEC more specific	1
		DDC more specific	0
More exhaustive: LEC		Overall more specific: LEC	

## **Document 2**

# 379.1214Finance, supervision, control of public education > Assistance by central<br/>governments > By national governments > For higher education

Wakefield, Rowan Albert, 1919-

Sources of Federal support for higher education. Experimental systems for a national information network.

LEC concepts	Elemental concepts from DDC class	Which scheme is more specific?		
Sab Higher education	Higher education	<u>SAME</u>	LEC	DDC
Dvo Computer		SAME	LEC	DDC
Buxt Information services		SAME	LEC	DDC
Bid Government: central	Central governments	<u>SAME</u>	LEC	DDC
Betm Financial resources	Financial assistance	SAME	LEC	<u>DDC</u>
Bepd Economics and education		SAME	LEC	DDC
	No. of concepts	2	0	1

Exhaustivity		Specificity	
LEC elemental concepts	6	LEC same as DDC	2
DDC elemental concepts	3	LEC more specific	0
		DDC more specific	1
More exhaustive: LEC		<b>Overall more specific: DDC</b>	

# **Document 3**

#### 027.8 School libraries

Delaney, Jack J. The school librarian. Human relations problems.

LEC concepts	Elemental concepts from DDC class	Which scheme more specifie		
Svg School child, pupil		SAME	LEC	DDC
Rag School education and systems	School- (elementary/secondary)	<u>SAME</u>	LEC	DDC
Lus Library	Libraries	<u>SAME</u>	LEC	DDC
Jed Discipline (psychological aspects of relationship)		SAME	LEC	DDC
Hab Management of education		SAME	LEC	DDC
Get Librarian, teacher librarian		SAME	LEC	DDC
Fal Role, responsibility		SAME	LEC	DDC
	No. of concepts	2	0	0

Exhaustivity		Specificity	
LEC elemental concepts	7	LEC same as DDC	2
DDC elemental concepts	2	LEC more specific	0
		DDC more specific	0
More exhaustive: LEC		<b>Overall more specific:</b> Both the	e same

## Briefly discuss what you saw about exhaustivity and specificity from these examples:

J Overall, in these examples, indexing with LEC is more exhaustive, specificity varies, with LEC indexing being more specific than DDC in 2 out of three examples. Note: Which scheme is more specific could vary within one and the same document.

30 min.	5. Further probe into the structure of DDC
More DDC structure	<ul> <li>Analyze instructions in the DDC schedules. Discuss each instruction briefly.</li> <li>(1) with respect to combination order (in Case 1, is the order Level of education – Subject or the other way around?)</li> </ul>
	<ul> <li>(2) with respect to the effect on the (2.1) exhaustivity and (2.2) specificity of indexing (how many of the aspects for which a document is relevant are represented in the Dewey class (precombined concept) to be used; at what level of specificity); and</li> <li>(3) with respect to the effect on retrieval.</li> </ul>

**Do not do Task 5. It will be done in class** / included in the discussion of Assignment 13.1

More examples are in the supplement

In Case K and Case L you will analyze these problems in the area of education, exploring the effects of the following instruction with 370 Education (slightly edited):

#### **Case K: Level of education versus subject**

(a)	<b>Class special education in a specific subject in 371.9</b> This takes precedence, (b) and (c) apply only if not special education	
(b)	Class elementary education in a specific subject in 372.3-372.8.	
	Example: a book on <i>Physics experiments for third grade</i> would be classed under 372.35 Elementary education in specific subjects > Science and technology	
(c)	Class works on secondary, higher, and adult education in a specific subject with the subject plus the appropriate number under 071 from Table 1 Standard subdivisions	
	Example: The book 12th grade physics would be classed under	
	530 .0712 (530 Physics; 0712 Secondary education, from Table 1)	
	Freshmen physics under 530 .0711 (0711 Higher education, from Table 1)	

Case K deals with (b) and (c), Case L (supplement) takes up (a), special education

1)	Combination order (Level – Subject or Subject Level)	
	Combination order is different depending on the level of education:	
	(a) books on the elementary level: Level – <i>Subject</i>	
	(b) secondary or higher level: Subject Level	
(2.1)	<ul> <li>Exhaustivity of indexing — 3 facets possible</li> <li>For all levels, both subject and level of education are covered.</li> <li>(a) elementary level: 3 facets possible. Both Level and <i>Subject</i> are represented in the enumerated class given in the schedules in 372.3-372.8, such as 372.35</li> <li>One additional facet/aspect can be represented in a built number by appending from the local table given with 372.3-372.8 (such as 043 <i>Curriculums</i>) or from the standard subdivisions in Table 1. Examples:</li> <li>372.35 043 Elementary ed. in spec. subjects &gt; Science and technology  &gt; Curriculum 372.35 0 9 52 Elementary ed. in specific subjects &gt; Science and technology  &gt; Japan</li> </ul>	
	(b) secondary or higher level: 2 facets possible, in some cases 3. Mostly, <i>Subject</i> and Level are the only facets that can be represented. However, in some cases a third facet, Geographic area, can also be represented. <i>Subject</i> is represented through a class from the schedules and Level by a concept from Table 1, such as 0712 Secondary education, such as $530 .071 \ 2 \ Science > Physics  > Secondary education$ $530 .071 \ 2 \ Science > Physics  > Secondary education$	
	·	
(2.2)	<b>Specificity of indexing</b> — how specific is the concept from each facet?	
	(a) elementary level: Subject: Broad Level: Broad The Subject is only as specific as the subdivision of 372.3 - 372.8 allows The Level is just Elementary level as implied by 372.	
	(b) secondary or higher level: <i>Subject</i> : Specific Level: Broad The <i>Subject</i> can be specified as specifically as the entire classification allows.	

(3) Effect on retrieval (recall and discrimination)					
Consider the query top	Consider the query topics				
Physics AND	Physics AND Elementary school versus				
Physics AND Secondary education					
Write a very brief analysis					
subjects, can all be for Contrariwise, if somet must be aware that, fo 530.07, <i>Agriculture</i> - if someone needs all n	Documents on <i>elementary education</i> , including those dealing with specific curriculum subjects, can all be found in 372 (with exceptions, such as 371.9 <i>Special education</i> ). Contrariwise, if somebody looks for all material on <i>secondary education</i> , he or she must be aware that, for example, <i>high school textbooks on physics</i> are found under 530.07, <i>Agriculture - study and teaching</i> is found under 630.7. Thus difficulties arise if someone needs all material on, say, <i>Science education</i> . For this broad topic, one needs to look in many places, e.g.				
372.35	Science as elementary school subject				
507	Pure sciences - study and teaching				
530.07	Physics - study and teaching				
When looking for a specific combination, no difficulties arise, e.g.					
530.0712	Physics as subject in secondary school				

<ul> <li>L Special education (type of student), level of education, and subject</li> <li>(1) Combination order: Type of student - subject OR Type of student - level (cannot specify both)</li> </ul>				
(2.1) Exhaustivity of indexing:	Example 1: Level of education is not indexed Example 2: <i>Accommodations</i> is not indexed			
(2.2) <b>Specificity of indexing</b> :	Example 1: Subject: Specificity is low (subjects from 372.3-372.8) Example 2: As specific as the book in both components			

# (3) Effect on retrieval

A search for *Physics AND* Elementary school, looking under 372.35, will miss documents on teaching physics to blind elementary school students, so recall suffers. Same for *Physics AND* Secondary education. When searching for *Teaching science to blind students at all levels*, recall and discrimination should both be good, because this topic corresponds exactly to 371.911|4|35. But if we want to restrict the search to *Physics*, discrimination suffers due to lack of specificity; we still need to look under 371.911|4|35, since the subject hierarchy in 372.3-.8 does not go down to *Physics*. If we want to restrict the search to Secondary education, discrimination suffers due to lack of exhaustivity: We cannot build a more restrictive class by adding the component *Secondary education*.