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Assignment No.1

Q.1 Discuss the linguistic issues of textbooks. Also give some recommendation for their improvement.

The textbook definition is "a book used as a standard work for the study of a particular subject". As such, textbooks come in a variety of guises and formats, depending on the subject and age range. Most textbooks are printed on paper, which remains an excellent medium, but an increasing number of publishing houses and, notably, self-publishing practitioners are using digital media to deliver content and contribute to effective instruction and successful learning.

Textbooks differ in quality and some are much better than others, so not all textbooks will fit this bill. But the likelihood is that you probably recognize most or all of these characteristics in the textbooks you use. Since some approaches work better than others, it is reasonable to consider what we know about effective instruction and about how students learn best in order to improve how textbooks support teaching and learning. Two experimental language learning textbooks were developed in collaboration with Apache speaking scholars from the San Carlos and White Mountain reservations. The other text was a guide to teaching Apache with the Total Physical Response (TPR) method, based on Asher's (1982) teacher's guidebook. Both approaches raised a variety of problems that can be partially solved by a judicious combination of the two approaches. For example, the classificatory handling verbs are best taught by a grammar-translation method, supplemented by TPR style exercises; straightforward syntactic structures (at least in Apache), such as negation, and yes-no questions, can be taught through TPR exercises and supplemented by grammatical explanations. Additionally, native experts should monitor any text to avoid culturally sensitive or politically inappropriate material. Finally, a dialogue between linguists and native experts needs to be established in order to decide how much linguistic terminology can be handled in each particular curriculum. While the main purpose of our text is to teach elementary conversational Western Apache with some emphasis on reading and writing, I also wanted it to be used to teach some of the linguistics of Western Apache to Apache students and speakers. In the next paragraphs, I explain the usefulness of linguistics to Apache speakers. He will also address some of these issues in her own presentation in this volume. Linguistics is the scientific study of human language. To the layperson, linguistics often seems boring because it bears some resemblance to grammar. Everyone remembers English grammar from their elementary school or high school years, and nobody liked it. The problem with traditional English grammar is that it did not seem to have a point, or maybe the only point was that it told you what was "good" English and what was "bad" English, without really explaining why. Linguistics tries to be a more responsible study of grammar, in three ways. First, it tries to explain why things are the way they are, by trying to discover general rules but recognizing that sometimes an explanation has not (yet) been found. Second, it tries to accurately describe the way people speak, without unduly worrying whether a particular utterance is "correct" or "incorrect." Third, linguistics is not committed to a particular language. Language is a universally human faculty, and linguistics is the study of what all languages have in common and in which direction and to what

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extent they vary. There are many educators who might be anxious to find out what they will learn from the linguistics in this text and how it will be useful for their students on the reservation. In my opinion, there are three basic ways in which linguistics can be useful to Native American educators. First, most educators interested in the contents of this text deal with bilingual situations, i.e. situations where both the Native language and English are used. In such situations, one obviously becomes aware of the differences between languages. Part of linguistics is a subfield called contrastive linguistics (sometimes erroneously called comparative linguistics, which should be reserved for the subfield that compares languages in order to determine their common historical origin). Contrastive linguistics compares one or more languages. Emphasizing the differences in linguistic structure. It allows us to explain more accurately why certain aspects of English, or of Western Apache, are hard to learn for speakers of other languages. The practical applications to the educator are obvious. Our discussions of Western Apache grammar will in effect be contrastive, since it will be assumed that English grammar is different from it in many ways. I do not know of any works on the contrastive linguistics of Western Apache and English. I had to work on what our understanding of contrastive linguistics was. This process of discovery by dialogue is, as Hale convincingly points out, similar to the teacherstudent dialogue occurring in a physics or chemistry class and just as scientific. The only difference is that no expensive supplies are needed, just a chalkboard and the children's native speaker intuitions. Thus, linguistics can be a tool for teaching the principles of scientific inquiry. In order to use linguistics this way, educators themselves need to know something about the linguistic structure of their languages. I was not convinced of this need, and I see her point, because it is precisely the children who are rapidly losing their native competence and acquire, at best, a passive knowledge of Apache. A passive knowledge is certainly not as good as an active knowledge for the purpose of discovering unconscious rules.

Q.2 discuss the three models of designing textbooks and also give their examples.

In a 1995 paper published in the <u>International Journal of Middle East Studies</u>, that focused on a newly invented subject of '<u>Pakistan Studies</u>', historian <u>Ayesha Jalal</u> notes large extents of creative imagining in the creation of the state historiography, to carve out a national-past based on hegemonic values. She remarked of Pakistan's history textbooks to be among the best available sources for assessing the nexus between power and bigotry, in the regard and noted of a rigid state state-controlled education system and curriculum, which imbibed this revisionist history among the masses, to satisfy its national ideology.

Authors vary widely, as to establishing a time-frame of the evolution of the nation-state; in what Jalal deems as priceless examples of narrative confusions flowing from tensions between the ideology of Muslim nationalism and the geographical limitations of the Pakistani nation-state. Whilst some pan-Islamic ideologists locate the time-frame to correspond with the birth of Islam on the Arabian Peninsula and choose to ignore the spatial and temporal distance between the two non-concerted happenings, others opt for a sub-sentimental approach. An Introduction to Pakistan Studies, (a popular text-book which is compulsory reading for first and second year college students studying for an F.A degree in history), claims of Pakistan being an Islamic State which is

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governed by Allah and is not a mere geographical entity but an ideology reflecting a unique civilization and culture, that was borne of an effort to resist the imposition of Hindu Nationalism on Muslim masses and ward the unethical practices of Hinduism. Another textbook - A Text Book of Pakistan Studies claims that Pakistan "came to be established for the first time when the Arabs under Mohammad bin Qasim occupied Sindh and Multan'" and thereafter equates the <u>Indian subcontinent</u> with Pakistan, whose greatest ruler is subsequently deemed to be Aurangzeb. Anti-Indian sentiments, coupled with anti-Hindu prejudices compounds these issues. K. Ali's two volume history designed for B.A. students, even whilst tracing the pre-history of the 'Indo-Pakistan' subcontinent to the Paleolithic Age and discussing the Dravidians and the Aryans, consistently refers to the post-1947 frontiers of Pakistan. At the end, he supports the existence of the nation-state, based on a religious ideology, in light of a need to immunize them from (alleged) Hindu hostility displayed to the Muslims during the Independence struggle and the fact that the subcontinent was ruled by Muslims for centuries. Scholars like Jamee Jalibi question the validity of any national history that mentions Pakistan's "pre-Islamic past". Jalal notes Ali's assertions to establish reactive religious bigotry, as a basis of Pakistan's statehood. Secularism, Communism et al are painted as evil threats to the state and Jalal notes a textbook wherein Zulifigar Ali Bhutto was described as a drunkard, characterless and an un-Islami-minded man, courtesy his sociopolitical leanings towards communism but Zia ul Hak and his dictatorial martial regime is extensively praised for his abidance by Islamic ideologies. In light of the Balochs, Sindhis et al being increasingly vocal about their regional culture, one textbook identifies regionalism as a "very dangerous episode". It goes on to mention that efforts to advance 'regional dialects and lore's was an attack on the very foundations of the state and that Punjabism shall never be allowed to replace the Islamic culture, because it's patron figures had waged wars against Islamic rulers. Textbooks frequently denote Urdu to be superior to regional dialects; a flag-bearer of collective Islamic identity.

All these narratives, though offering arguments of varying dimensions and scope, ultimately support the national policy for the <u>Islamization</u> of the state and the principle of the <u>two-nation theory</u>, wherein the trifecta of Muslims, Islam and Pakistan can't be challenged. Jalal accuses them of discarding <u>Jinnah</u>'s calls for secularism, the opposition of numerous Muslims to the partition and subjugation of regional communities per their own convenience. She notes a broader purpose in educating the future generations to reject anything in their regional cultures that fails to qualify as 'Islamic' and strive for a spiritual and cultural hegemony, in the name of Islam. Anti-Indian sentiments, coupled with <u>anti-Hindu</u> prejudices compounds these issues.

According to <u>Tufts University</u> professor <u>Seyyed Vali Reza Nasr</u>, <u>Indophobia</u> in Pakistan increased with the ascendancy of the militant Islamist <u>Jamaat-e-Islami</u> under <u>Sayyid Abul Ala Maududi</u>. <u>Indophobia</u>, together with Anti-Hinduism and racist ideologies, such as the <u>martial race</u> theory, were the driving factors behind the re-writing of school textbooks in Pakistan (in both "secular" schools and Islamic <u>madrassahs</u>) in order to promote a biased and revisionist historiography of the Indian subcontinent that promulgated Indophobic and anti-Hindu prejudices. These narratives are combined with Islamist propaganda in the extensive revising of

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Pakistan's history. By propagating concepts such as <u>jihad</u>, the inferiority of non-Muslims, India's perceived ingrained enmity with Pakistan, etc., the textbook board publications used by all government schools promote an obscurantist mindset. According to the historian Professor Mubarak Ali, textbook "reform" in Pakistan began with the introduction of Pakistan Studies and Islamic studies by Zulfigar Ali Bhutto in 1971 into the national curriculum as a compulsory subject. Former military dictator Muhammad Zia-ul-Haq, under a general drive towards Islamization, started the process of historical revisionism in earnest and exploited this initiative. 'The Pakistani establishment taught their children right from the beginning that this state was built on the basis of religion – that's why they don't have tolerance for other religions and want to wipe-out all of them. According to Pakistani physicist, Pervez Hoodbhoy, the Islamist revisionism of Pakistan's schools began in 1976 when an act of parliament required all government and private schools (except those teaching the British O-levels from Grade 9) to follow a curriculum that includes learning outcomes for the federally approved Grade 5 social studies class such as: 'Acknowledge and identify forces that may be working against Pakistan,' 'Make speeches on Jihad,' 'Collect pictures of policemen, soldiers, and national guards,' and 'India's evil designs against Pakistan.'. Likewise, Yvette Rosser criticizes Pakistani textbooks for propagating jingoist and irredentist beliefs about Pakistan's history and culture, and being negationist in its depiction of political Islam and the treatment of minorities in Pakistan, such as Hindus and Christians. Irredentism is manifested through claims of "eternal Pakistan" (despite the country being created from British India only in 1947), narrow and sectarian interpretation of Islam, downplaying the tolerant aspects of the religion and focusing on Islamic Fundamentalist interpretations (such as all banking being un-Islamic), and making accusations of dual loyalty on minority Hindus and Christians in Pakistan. According to Pakistani professor Tariq Rahman, Pakistani textbooks cannot mention Hindus without calling them cunning, scheming, deceptive or something equally insulting. The textbooks ignore the pre-Islamic history of Pakistan except to put the Hindu predecessors in negative light. Another Pakistani historian Khursheed Kamal Aziz similarly has criticised Pakistani history textbooks. He stated that textbooks were full of historical errors and suggested that mandatory study amounted to teaching "prescribed myths". After examining 66 textbooks used at various levels of study Aziz argued that the textbooks supported military rule in Pakistan, promoted hatred for Hindus, glorified wars and distorted the pre 1947 history of Pakistan. A study by Iftikhar Ahmad of Long Island University published in Current Issues in Comparative Education in 2004 drew five conclusions from content analysis of the social studies textbooks in Pakistan.

- 1. First, the selection of material and their thematic sequence in the textbooks present Islam not simply as a belief system but a political ideology and a grand unifying worldview that must be accepted by all citizens.
- 2. Second, to sanctify Islamic ideology as an article of faith, the textbooks distort historical facts about the nation's cultural and political heritage.
- 3. Third, the textbooks offer a biased treatment of non-Muslim citizens in Pakistan.

- 4. Fourth, the main objective of the social studies textbooks on Pakistan studies, civics, and global studies, is to indoctrinate children for a romanticised Islamic state as conceptualised by Islamic theocrats.
- 5. Fifth, although the vocabulary in the textbooks underscores Islamic virtues, such as piety, obedience, and submission, little is mentioned about critical thinking, civic participation, or democratic values of freedom of speech, equality, and respect for cultural diversity.

A study by Nayyar & Salim of the Sustainable Development Policy Institute concluded in 2003 that there is an increasing trend where children are taught Pakistan Studies as a replacement for the teaching of history and geography as full-fledged disciplines. Previously, children were taught the very early pre-Islamic history of South Asia and its contribution to rich cultural diversity of modern-day Pakistan. This long historical perspective of Pakistan is absent in the Pakistan Studies textbooks. Instead, children are now taught that the history of Pakistan starts from the day the first Muslim set foot in India. The study reported that the textbooks also had a lot of gender-biased stereotypes and other perspectives that "encourage prejudice, bigotry and discrimination towards fellow Pakistanis and other nations, especially against religious minorities, as well as the omission of concepts ... that could encourage critical self awareness among students". Rubina Saigol, a US educated expert, said "I have been arguing for the longest time that, in fact, our state system is the biggest Madrassah, we keep blaming madrassahs for everything and, of course, they are doing a lot of things I would disagree with. But the state ideologies of hate and a violent, negative nationalism are getting out there where madrassahs cannot hope to reach."

Referring to NCERT's extensive review of textbooks in India in 2004, Verghese considered the erosion of plural and democratic values in textbooks in India, and the distortion of history in Pakistan to imply the need for coordination between Bangladeshi, Indian, and Pakistani historians to produce a composite history of the <u>subcontinent</u> as a common South Asian reader. However, international scholars also warn that any attempt for <u>educational reforms</u> under international pressure or market demands should not overlook the specific expectations of the people at local levels.

Q.3 Discuss the main aspects related to religious rights and textbooks. Give examples from our local context.

Religion may be presented as part of a secular educational program. Programs that "teach about religion" are geared toward teaching students about the role of religion in the historical, cultural, literary and social development of the United States and other nations. These programs should instill understanding, tolerance and respect for a pluralistic society. When discussing religion in this context, religion must be discussed in a neutral, objective, balanced and factual manner. Such programs should educate students about the principle of religious liberty as one of the fundamental elements of freedom and democracy in the United States.

"Teaching religion" amounts to religious indoctrination or practice and is clearly prohibited in public schools. A public school curriculum may not be devotional or doctrinal. Nor may it have the effect of promoting or inhibiting religion. A teacher must not promote or denigrate any particular religion, religion in general, or lack

of religious belief. A teacher must not interject personal views or advocate those of certain students. Teachers must be extremely sensitive to respect, and not interfere with, a student's religious beliefs and practices. Students must not be encouraged to accept or conform to specific religious beliefs or practices. A program intended to teach religion, disguised as teaching about religion, will be found unconstitutional.

In sum, there is a critical difference between teaching religion and teaching about religion. While it is constitutionally permissible for public schools to teach about religion, it is unconstitutional for public schools and their employees to observe religious holidays, promote religious belief, or practice religion. School officials and parents must be extremely careful not to cross the line between "the laudable educational goal of promoting a student's knowledge of and appreciation for this nation's cultural and religious diversity, and the impermissible endorsement of religion forbidden by the Establishment Clause."

This is as much a free speech issue as it is a religious liberty issue. Where a student responds to an assignment (for example, a book report) with a religiously-themed project (for example, reporting on a religious tract), a school may not refuse to accept the assignment solely because it has a religious basis (students have a right to free expression). However, if in observing the presentation of the assignment -- especially expressive assignments like artwork, plays and reports that are presented publicly -- an observer might think that the project is endorsed by the school, it is a problem. Thus, a book report delivered to a teacher may not be rejected merely because it is religious, whereas a work of art that will be hung up or displayed by the school or a play intended for public performance is unacceptable. Indeed, educators are able to exercise considerable control over "student expression to assure that participants learn whatever lessons the activity is designed to teach, that readers or listeners are not exposed to material that may be inappropriate for their level of maturity, and that the views of the individual speaker are not erroneously attributed to the school."

The country's constitution prescribes a free and compulsory primary education for all children, but this remains a goal yet to be achieved. The various tiers of the education system have had

disproportionate growth, resulting in 'inverted pyramid' structure, whereby higher education is comparatively top-heavy while the primary education base is narrow. The rate of literacy is very low (47%), with poor participation rates in the school system. Compounding the bleak situation are issues of disparity in educational status, access, opportunity and participation by social class (rich versus the poor), area of residence (rural versus urban) and gender (male versus female). Beset by low government allocations for education (approximately 3% of the GNP) and a galloping birth rate, universal primary education remains an elusive goal for the near future. Distinct streams exist in the quality of educational institutions. One visible division is between the private and public education system. The list of factors behind social development is a long one and includes religious behaviors and attitudes. In this paper, only religious behavior as a factor in social development is analyzed. However, keeping in mind the prevailing situation of Pakistani society, underdevelopment and non-development of society would also be touched upon. The importance of religious behaviors and attitudes is substantially acknowledged by the theorists in the field of

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development studies and research. Development models based on European and Japanese experiences in the field of social development also take religious attitudes and behaviors as a factor of development and change. Social conditions in Pakistan, religious influence on people's lives, religio-behavioral change, deterioration of social institutions, exploitation in the name of religion, religio-political behavior, religious behavior of the ruling elite, social divide, sectarianism, militancy and terrorism have also been analyzed. Irrational, conservative and dogmatic aspects of religious behavior have been discussed. Towards the end of this paper, the aspects of religious behavior that support and contribute to the process of social development are also discussed. Since Islam draws certain parameters for not only one's personal life, but also social, political and economic dimensions of life, a religious follower's behavior in all spheres of life needs to be studied as religious behavior. So, we need to look into the personal, social, political and economic aspects of people's behavior in order to understand the relationship between religious behavior and social development. Social behavior can be defined as a "behavior that takes place in a social context and results from the interaction between and among individuals." Antisocial behavior is one that "violates the rights of others; usually associated with antisocial personality. Religion is one of the most, if not the most, fundamental characteristics of Pakistani society. Few people dare to call themselves secular publicly. Seculars also pretend to be religious in order to avoid the wrath of society and attacks by extremists. In Pakistani society, individuals start learning about religion literally as soon as they are born. In the laps of their mothers, children listen to parents and other family members reciting the Quran. In schools, Islamic Studies is a compulsory subject from the beginning to the graduation level. Most children receive daily lessons from religious teachers visiting their houses, or attend classes at mosques and madrassas, on how to recite the Quran and read other Arabic texts. Mosques are spread across the country, almost all of them equipped with loudspeakers. A'azan (call to prayer), Friday sermons and prayers, and sermons on other religious occasions are delivered using the loudspeaker. Clerics and students at madrassa established in mosques use loudspeakers whenever they want to recite Ouranic verses, or sing praise of God and Prophet Muhammad or to deliver a speech to convey or remind people of the religious commandments. In everyday social interaction, individuals are keen to lecture others on how to follow the religion and conform to the injunctions ordained by God, His prophets and religious authorities and leaders. Against this backdrop, one can imagine the extent of influence religion has on people's lives and behaviors. Answers by the survey respondents in the following tables provide evidence of the reach of and access to religious education in Pakistani society.

Q.4 Highlight the presentation issues in the biology textbook at secondary level and analyze the appropriate theory to design biology textbooks in our local context.

A biology textbook is an organized body of material useful for the formal study of a subject area. A good biology textbook is distinguished by the following pedagogical features:

• A discrete, well-bounded scope: all the material should relate to a solid understanding of the subject, usually mixing theory and practice for each topic as it covers the subject domain.

• Use of examples and problems: the student should be able to better grasp each presented concept by following examples, and then applying the concept in structured exercises or problems.

- An internally consistent style: after the first few sections, there should be little or no surprises for the student in terms of layout and presentation of material. The texts user can get comfortable with the layout, the tempo of presentation, and the pattern of figures, illustrations, examples and exercises.
- Utility for future reference: once reviewed, the biology textbook should isolate material that is useful to the future application of subject knowledge in well-organized appendices and tables.
- A structure that makes sense: the biology textbook is not just a collection of useful material; it is a guide to the student for an order of review which will aid in mastering the subject area.

Topics are presented in major parts, chapters, sections and subsections that are organized in a way that facilitates understanding. This means that the text's organization is based on the intersection of two requirements. The first of these are the requirements of the subject domain. Since most biology textbooks are developed by, or based on the contributions of subject matter experts, this requirement is usually well attended to. The second requirement is defined by the limits of the student's mind. Cognition is a common human ability, but its needs and limits are frequently ignored by those who have already mastered a subject area. To make the best use of the student's abilities, some rules can be spelled out for the structuring and presentation of ideas, concepts, and material. These rules should include:

- 1. Rule of Frameworks: Maintalin a consistent structure. The structure acts as a mental roadmap that allows learners to navigate within and through the subject domain. To best aid in understanding, the structure should be visible early on.
- 2. Rule of Meaningful Names: Create and use consistent titles and terminologies. Use terminology that is common in your discipline. These names are critical to the ability to recall or retrieve the things we know and remember.
- 3. Rule of Manageable Numbers. Limit the amount of information introduced at one time. For new material, four to six new elements are a reasonable limit. Most of us are limited in our ability to absorb new material. As we become familiar with part of a subject domain, this number expands.
- 4. Rule of Hierarchy. New knowledge builds on learned knowledge. When introducing new material, only refer to foundational material if it is relevant to the new material. The student needs to understand the foundational knowledge before being introduced to a new concept. When new concepts are introduced they should be explicitly connected to the foundational material.
- 5. Rule of Repetition. Repeat important concepts. For example, frameworks and important hierarchies are repeated as many as five or six times; frequently used elements are repeated three or four times; and elements of lesser utility may not be repeated at all. There is a pattern of repetition that aids in promoting the elements of a subject from short-term to long-term memory.

In most of the countries biology textbooks are written by experts with the assistance of publishers and these

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biology textbooks are evaluated by a government agency. In Pakistan, role of biology textbook development rests with the provincial or regional Biology textbook Boards, and Private Publishers. These boards and private publishers try to publish the biology textbooks according to the guidelines provided in the national curriculum, given by the Curriculum Wing of Ministry of Education. The role of biology textbook evaluation performed by the Curriculum Wing is to ensure that biology textbooks are according to the curriculum guidelines provide to the boards and publishers. To facilitate evaluation processes rubric are considered as a vehicle to ensure quality of and objectivity in the process. The more specific a rubric is to an indicator, of a quality biology textbook the more useful it is the evaluators and the publishers and/or writer. The descriptors associated with the criteria should reference specific requirements of the quality biology textbook and clearly describe the quality of work at each level on the rubric. The criteria used to evaluate the biology textbook should be shared as the guidelines are introduced to help publishers begin with the end in mind. Rubrics and models should also be referenced while the biology textbook are being completed to help publishers/authors revise their work. They should also be used after the biology textbook is complete, not only to evaluate the product, but also to engage publishers authors in reflection on the work they have produced. The Biology textbook Policy also focused on the following four major areas during content evaluation • Coverage of Learning Competencies • Accuracy of content (i.e., conceptual, factual, pedagogical, grammatical, etc.) • Appropriateness of presentation, language, and visuals to target users, to society, and to culture Language used is grammatically correct and can be easily understood by target users The DepED developed also manual of biology textbook style and standards to ensure quality of biology textbook in Philippines. The manual layout includes the following: • "General and technical standards (size, paper stock, cover stock, preferred biding) • Cover specifications (use of logos, font, font size, general layout, qualifiers) • Printing specifications (font types and size, suitable per grade level)" (DepED, Biology textbook Policy, 2004, p.6) Major test of the biology textbooks in this evaluation is that biology textbooks are research-based and are aligned with the set Philippine Elementary learning Competencies (PELC) and Philippine Secondary School Competencies (PSSLC), i.e. the biology textbooks should conform to preset standards.

Q.5 Explain the elements of textbook accuracy? Also highlight exemplary lessons of GTZ-Peshawar for science book.

A biology textbook is an organized body of material useful for the formal study of a subject area. A good biology textbook is distinguished by the following pedagogical features GTZ-Peshawar:

- A discrete, well-bounded scope: all the material should relate to a solid understanding of the subject, usually mixing theory and practice for each topic as it covers the subject domain.
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publishers try to publish the biology textbooks according to the guidelines provided in the national curriculum, given by the Curriculum Wing of Ministry of Education. The role of biology textbook evaluation performed by the Curriculum Wing GTZ-Peshawar is to ensure that biology textbooks are according to the curriculum guidelines provide to the boards and publishers. To facilitate evaluation processes rubric are considered as a vehicle to ensure quality of and objectivity in the process. The more specific a rubric is to an indicator, of a quality biology textbook the more useful it is the evaluators and the publishers and/or writer. The descriptors associated with the criteria should reference specific requirements of the quality biology textbook and clearly describe the quality of work at each level on the rubric. The criteria used to evaluate the biology textbook should be shared as the guidelines are introduced to help publishers begin with the end in mind. Rubrics and models should also be referenced while the biology textbook are being completed to help publishers/authors revise their work. They should also be used after the biology textbook is complete, not only to evaluate the product, but also to engage publishers /authors in reflection on the work they have produced. The Biology textbook Policy also focused on the following four major areas during content evaluation • Coverage of Learning Competencies • Accuracy of content (i.e., conceptual, factual, pedagogical, grammatical, etc.) • Appropriateness of presentation, language, and visuals to target users, to society, and to culture • Language used is grammatically correct and can be easily understood by target users The Dep. ED developed also manual of biology textbook style and standards to ensure quality of biology textbook in Philippines. The manual layout includes the following: • "General and technical standards (size, paper stock, cover stock, preferred biding) • Cover specifications (use of logos, font, font size, general layout, qualifiers) • Printing specifications (font types and size, suitable per grade level)" Major test of the biology textbooks in this evaluation is that biology textbooks are research-based and are aligned with the set Philippine Elementary learning Competencies (PELC) n.
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