

Definition for School Subject

A school subject can be defined as a branch of knowledge or a body of knowledge that is being provided to its learner. According to Zongyi Deng, a school subject refers to an area of learning within the school curriculum that constitutes an institutionally defined field of knowledge and practice for teaching and learning.

A school subject constitutes an organizing framework that gives meaning and shape to curriculum content, teaching, and learning activities (Karmon, 2007).

School Subjects is defined as an “area of knowledge that is studied in school”. - Britannica Encyclopedia.

“A school subject is an area of learning within the school curriculum that constitutes an institutionally defined field of knowledge and practice for teaching and learning.”- Deng, Z (2013).

School subjects are human constructions in response to social, economic, cultural, political, and educational realities and needs. They are “uniquely purpose-built educational enterprises, designed with and through educational imagination towards educative ends” (Deng & Luke, 2008, p. 83).

A school subject is an area of learning within the school curriculum that constitutes an institutionally defined field of knowledge and practice for teaching and learning.

School subjects can be traditional academic subjects, such as mathematics, history, geography, physics, chemistry and economics. Academic school subjects, such as

mathematics, chemistry, geography, history, and economics, are to be compulsorily taught to the students. The content of these academic subjects needs to be worked with and transformed by the teachers in such a way that it is appropriate for classroom teaching. Constructing a school subject involves the selection and arrangement of content of knowledge, skills and the transformation of that content for school and classroom use. This is in accordance with respect to both societal expectations and activities of teaching.

Nature of School Subjects

Grossman and Stodosky (1995) defined three features of school subjects. They are

1. School subjects differ in their status they have in school and larger community. Craft, physical education are considered less important than science and mathematics.
2. Sequentiality is perceived as important in school subjects where certain knowledge and skills have to be learnt before proceeding to new learning. For example, the basic calculations of addition, subtraction, multiplication and division are to be taught before teaching 'fractions'.
3. The scope of the subject refers to the different disciplinary areas included in the subjects which can be broad or restricted. An example of broad-based subject is physical science which includes physics and chemistry. Social science includes history, geography, economics, and civics.

Let us analyse the above definitions and understand the nature of school subjects.

A School subject

- is also called as a learning tool
- serves as criteria by which we learn
- is used synonymously with the term 'discipline'
- refers to a particular area of leaning
- has a specific code of conduct
- aims to give intrinsically rewarding experience to students
- contributes for self-actualization, personal growth and individual freedom
- needs to be formulated according to the needs of students
- derives content from a wide range of sources
- is constructed from the perspective of social efficiency
- aims to maintain and enhance social productivity.

- has close reference to the needs of occupation, profession, and vocation
- is an area of learning within the school curriculum
- involves the selection and arrangement of content of knowledge, skills and the transformation of that content

Thus, a school subject is the result of institutional selection, organization, and framing content for social, economic, cultural, curricular and pedagogic purposes. A school subject constitutes an organizing framework that gives meaning and shape to curriculum content, teaching, and learning activities. School subjects are distinctive, purpose-built enterprises, constructed in response to different social, cultural, and political demands and challenges, and towards educational aims. Thus a school subject contains content, and translating content for educational purposes.

According to Moti Nissani (1997), a discipline can be conveniently defined as the study of “any comparatively self contained isolated domain of human experience which possesses its own community of experts”.

In the words of P. Bourdieu, a discipline has an academic and socially acknowledged name (that for example can be found in a library classification system). A discipline is inscribed in, and upheld by, the national and international networks of research, university departments, research institutes and scientific journals that produces, certifies, rewards, and upholds that which he calls the ‘discipline capital’. And a discipline is characterized by a particular, unique academic and social style.

Disciplines are broken into sub disciplines and sub sub disciplines. This is a convenient way to organize a library, a school program, or a higher education institution.

John Walton states, “by discipline I mean a body of subject matter made up of concepts, facts, and theories, so ordered that it can be deliberately and systematically taught.” According to him, a discipline is a body of subject matter that is teachable. However, Walton’s definition does not define a discipline comprehensively as it considers any body of knowledge as a discipline which has quality of teachability. However, there are many subjects which are taught at different levels but are not considered as disciplines.

Janice Beyer and Thomas Lodahl (1976) describe disciplinary fields as providing the structure of knowledge in which faculty members are trained and socialized; carry out tasks of teaching, research, and administration; and produce research and educational output. Disciplinary worlds are considered separate and distinct cultures that exert varying influence on scholarly behaviors as well as on the structure of higher education. Disciplinary communities establish incentives and forms of cooperation around a subject matter and its problems. Disciplines have conscious goals, which are often synonymous with the goals of the departments and schools that comprise an institutional operating unit.

According to M. S. Yadav and T.K.S Lakshmi (1995), discipline refers to a specific area of study, a branch of knowledge recognized by a certain distinctness it reveals in its substance and methodology. A discipline is a deliberate differentiation of the knowledge base with a specific perspective in order to gain better understanding of the phenomenon under focus. According to them, the knowledge base represents the sum total of the human understanding of environment. Disciplines are derived from the knowledge base but get formulated in recognizable differentiated forms of both substance and methodology due to further specialization, diversification and differentiation.

Bryan Turner (2001) has pointed at the ecclesiastical meaning, which refers to the order maintained in the church, and at the medical meaning of discipline, as a medical regimen imposed by a doctor on a patient to the patient's benefit. It follows that the academic discipline can be seen as a form of specific and rigorous scientific training that will turn out practitioners who have been disciplined by their discipline for their own good.

The term 'discipline' is inherited from the vocabulary of nineteenth century and is understood as a branch of instruction for the transmission of knowledge and as a convenient mapping of academic administration.

Let us derive the nature of discipline from what we have presented so far and our experience with dealing with different disciplines:

- Discipline implies an order
- Discipline is related to learning
- Discipline is related to putting some order to learn
- Discipline is making some organization with the purpose of learning
- It involves some efforts made to organize teaching
- It involves some efforts made to organize learning
- It is related to teaching learning process
- It is related to knowledge organization process
- It is related to processing of knowledge
- It involves deduction of more knowledge through organization of the existing knowledge
- It is basically related to learning process and hence education
- It is related to the learner teacher, experts and specialists
- It is related to construction of new knowledge
- It implies that knowledge grows and expands
- It implies that knowledge is not final.
- It involves a process of classification.
- It is a body of specialised knowledge
- It has theories and concepts
- It has specific terminology
- Its specific object is research
- It has got definite methodology of research

1.1.3.3. Academic disciplines-Meaning and Nature

Let us understand the meaning of the word 'Academic discipline'

You have heard of different academic disciplines like science, humanities, arts etc. Recall your experiences with these disciplines and try to identify the meaning of academic disciplines.

The term 'academic discipline' certainly incorporates many elements of the meaning of 'discipline' discussed above, as school discipline. At the same time, it has also become a technical term for the organisation of learning and the systematic production of new knowledge. Often disciplines are identified with taught subjects, but clearly not every subject taught at university can be called a discipline. Discipline has many more attributes than the fact that something that is taught in an academic setting.

Characteristics of Academic Discipline

There is a list of criteria and characteristics, which indicate whether a subject is indeed a distinct discipline. They are as follows:

- disciplines have a particular object of research (e.g. law, society, politics), though the object of research may be shared with another discipline;
- disciplines have a body of accumulated specialist knowledge referring to their object of research, which is specific to them and not generally shared with another discipline;
- disciplines have theories and concepts that can organise the accumulated specialist knowledge effectively;
- disciplines use specific terminologies or a specific technical language adjusted to their research object;

- disciplines have developed specific research methods according to their specific research requirements; and may be most crucially
- disciplines must have some institutional manifestation in the form of subjects taught at universities or colleges, respective academic departments and professional associations connected to it.

Generally, it can be said that the more of these criteria discipline can tick, the more likely it becomes that a certain field of academic enquiry is a recognised discipline capable of reproducing itself and building upon a growing body of own scholarship. If a discipline is called 'studies', then it usually indicates that it is of newer origin (women studies) and that it may fall short of one or more of the above mentioned characteristics. This would be typically lack of theorisation or lack of specific methodologies, which usually diminishes the status of a field of research. These 'studies' can either aim at remaining 'undisciplined', as women's studies did in the 1970s, or they can engage in the process of their disciplinarisation and institutionalisation. Thus, we can conclude that

- Academic discipline is a branch of learning or scholarly investigation that provides a structure for the students' (program of study,) especially in the graduate and post-graduate levels.
- Academic discipline is a field or branch of learning affiliated with an academic department of a university, formulated for the advancement of research and scholarship.
- Academic discipline is formulated for the professional training of researchers, academics and specialists.
- It is a branch of knowledge that is taught and researched as part of higher education. Examples for Academic Disciplines are Anthropology, Space Science, psychology, sociology, archaeology, Education etc.
- An academic discipline is a subdivision of knowledge that is taught and researched at the college or university level.
- It incorporates expertise, people, projects, communities, challenges, studies, inquiry, research areas, and facilities that are strongly associated with a given scholastic subject area or college department. For example, the branches of science are commonly referred to as scientific disciplines, e.g. physics, chemistry and biology.

- While academic disciplines in and of themselves are more or less focused practices, scholarly approaches - multidisciplinary / interdisciplinary, transdisciplinary, and cross-disciplinary- integrate aspects from multiple academic disciplines. They address any problems that may arise from narrow concentration within specialized fields of study.
- Academic discipline is also known as field of study. Field of inquiry, research field and branch of knowledge are the different terms used in different countries and fields to denote a 'discipline'.

1.2.3.1. School Subjects and Academic Disciplines- Relationship

Let us begin with the word discipline. As mentioned above, discipline refers to a branch of academic study. For example, psychology, sociology, anthropology, mathematics and philosophy are all disciplines. These can mostly be seen in higher educational institutions such as universities. This, however, does not denote that disciplines cannot be seen in other educational settings such as schools. For example, mathematics is a school subject that is also a discipline that is found in higher educational institutions.

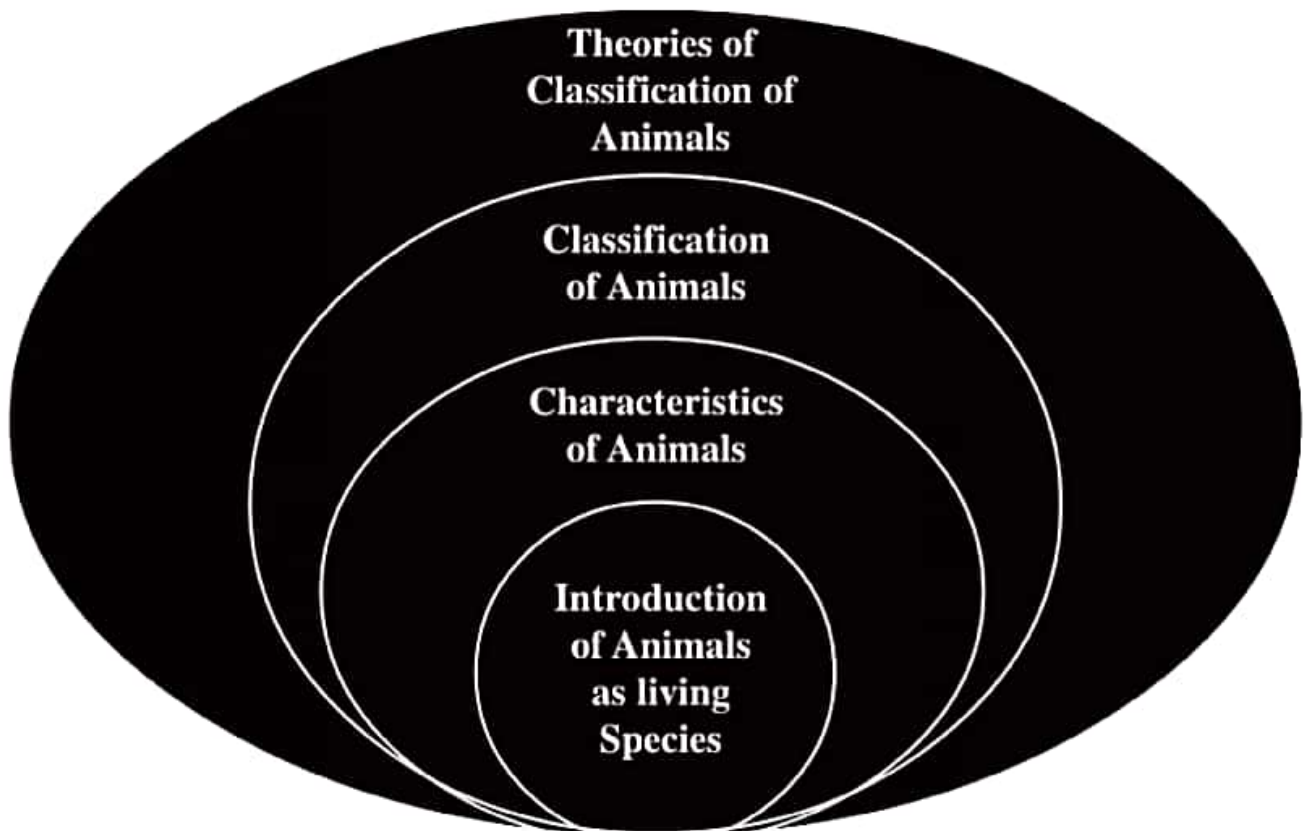
Disciplines usually consist of theoretical backgrounds, research and experiments, groups of experts in the discipline, etc. For example, a person who is pursuing his studies in a particular discipline not only gains an in-depth understanding of it but also conducts experiments or research as well. Such a person is considered as specializing in the chosen discipline.

School subjects are the basis for the development of basic information that will turn the learners into specialists in academic disciplines. A school subject results from the transformation of an academic discipline. School subjects come first and academic disciplines later in one's journey of learning from school to the university. An academic discipline provides an end point for the formation of a school subject and school subject furnishes the avenue for getting to know the academic discipline.

School subjects can have different and variable relationships to academic disciplines, depending on their aims, contents, and developmental phases. School subjects are derived from academic disciplines. They are also organized according to the 'structure' of academic disciplines. For example, History as a school subject is derived from 'humanities' and both history (a school subject) and humanities(a discipline) are narrative structurally. That is the nature in both the contexts. Science as a discipline deducts truth through inductive approach and this holds good for physics also, which is a school subject.

School subjects constitute a faithful and valid introduction to the academic disciplines. While students are dealing with relatively simple ideas and methods in school subjects,

they study the same ideas and method known by experts in the academic discipline. Remember, we use concentric approach in the organization of curriculum. There, one can see how a school subject gets enhanced as a discipline.



Observe how the status of school subject develops as academic discipline as students go to higher classes.

The relationship between school subjects and academic disciplines can be understood from three key positions.

It is important to transmit disciplinary knowledge for the development of the intellectual capacity of students and for the maintenance or reproduction of academic culture/knowledge. This is called the doctrine of disciplinarity, according to which school subjects are derived from and organised according to the structure of academic disciplines.

- The central purpose of a school subject, like that of a discipline, is to initiate the young into the academic community of scholars. School subjects, therefore, are supposed to derive their life, from their related intellectual disciplines.
- School subjects constitute a faithful and valid introduction to the academic disciplines whose names they bear.
- Students are dealing with relatively simple ideas and methods; they study the same ideas and methods known by experts in the academic disciplines.

1.2.3.2. School Subjects and Academic Disciplines- Differences

Discipline and Subject are two words that relate to fields of knowledge between which a key difference can be seen. Discipline refers to a branch of academic study. On the other hand, subject refers to a branch of knowledge studied or taught.

School subjects and academic disciplines are essentially different in purpose and substance. Hence, school subjects are allowed for construction, which could get beyond the narrow academic or disciplinary concern. The discontinuous position finds support in humanism, social efficiency, and social reconstructions.

Humanist educators argue that school subjects are created to provide students with rewarding experiences that contribute to personal growth and individual freedom. School subjects, therefore, need to be formulated according to the interest, attitudes, and developmental stages of individual students. They need to derive content from a wide range of sources – such as personal experiences, human activities and community cultures and wisdoms. Disciplinary knowledge may or may not be useful for the formation of school subjects.

From the perspective of social efficiency, school subjects are constructed for the primary purpose of maintaining and enhancing economic and social productivity by equipping future citizens with the requisite knowledge, skills, and capital. The formation of school subjects, therefore, is justified with close reference to the needs of occupation, profession, and vocation. Academic disciplines are drawn upon only when they demonstrate their efficacy in promoting those skills and knowledge actually needed in occupations.

School subjects are created to provide students with meaningful learning experiences that might lead to liberation and cause social activity.

The formation of school subjects is based upon an examination of social contexts, social issues, and futures, with the intention of helping individuals reconstruct their own, standpoints, and actions.

The curricular discourses call for a learner-oriented approach to the construction of a school subject that allows learners to construct their own knowledge according to their individual needs and interests.

The curricular discourses require the school subject to be formulated in ways that help students cultivate certain kinds of sensitivity, disposition and awareness needed for responsible participation in society.

The school subjects equip students with general skills and lifelong learning abilities, essential for facing the challenges of globalisation and the knowledge-based economy.

Discipline refers to a branch of academic study. On the other hand, the subject refers to a branch of knowledge studied or taught.

Try to understand the difference between school subjects and academic disciplines from the following table

Areas	School Subjects	Academic Disciplines
Aim	Aims at social reform and reconstruction	development of the intellectual capacity of students and for the maintenance or reproduction of academic culture/knowledge.
Content	Formed by simple ideas and information. Includes practical knowledge, local community knowledge and technical knowledge	Complex theories and their implication, content related to the discipline and inter disciplines.
Focus	More concerned about meeting social, economic and political needs, takes care of the demands of the society and the individual.	More concerned about learning the content of the discipline, compared to school subjects focus is narrow, but focused on in-depth knowledge of the discipline. Works within the discipline.
Competencies, skills	Skills required by the individual to live in the society like communication, comprehension etc	Competencies related to understanding and application of the discipline like experimentation, observation etc.
Outcome	The result will be the formation of a better citizen involves basic skills such as reading, writing and arithmetic. Scope is vast since the aims is broad based	Gives importance for the development of special skills, many professional and vocational skills. Related to enhancing the disciplinary knowledge through one's own thinking.
Scope	Flexible: changes as the aims of society change	Scope within the subject, narrowed point of view compared to school subjects

Nature	constructed based on the interests, attitudes and feelings of learners	Less scope for flexibility, working within the discipline, less scope for change of knowledge.
Curriculum construction	Learner centred constructivist approach	Constructed according to the nature of discipline and advances according to the nature of disciplines only when new innovations take place.
Curricular discourses Area of operation	Limited to schools	Not learner centred For universities and other higher educational institutions.