Comparative study on Online class issues in class room with Learning Space

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ABSTRACT: *This paper presents issues of online learning process for various age students in schools, colleges and Universities. Learning space or learning setting refers to a physical setting for a learning environment, a place in which teaching and learning occur the term is commonly used as a more definitive alternative to "classroom," Education can be thought of as the program of the values and accumulated knowledge of a society. In this logic, it is equivalent to what social scientists term socialization or enculturation.*

I. INTRODUCTION

Learning space or learning setting refers to a physical setting for a learning environment, a place in which teaching and learning occur the term is commonly used as a more definitive alternative to "classroom," but it may also refer to an indoor or outdoor location, either actual or virtual. Learning spaces are highly diverse in use, learning styles, configuration, location, and educational institution. They support a variety of pedagogies, including quiet study, passive or active learning, kinesthetic or physical learning, vocational learning, experiential learning, and others. Education is designed to guide them in learning a civilization, molding their behavior in the ways of maturity, and directing them toward their eventual role in society. In the most primitive background, there is often little formal learning—little of what one would ordinarily call school or classes or tutor. Instead, the entire situation and all activities are frequently viewed as school and classes, and many or all adults act as teachers. As societies grow more complex, however, the quantity of knowledge to be passed on from one generation to the next becomes more than any one person can know, and, hence, there must evolve more selective and efficient means of cultural transmission [1].

II. CATEGORIZTION OF LEARNING SPACE

There are Institutions that provide learning spaces can be categorized in several ways, including:

•Student age: kindergarten, elementary or primary school, middle school, secondary or high school
•Academic level: school, college, university, graduate school
•Physical, mental, or social development: special education, school for the deaf, school for the blind, etc.
•Pedagogy: traditional education, progressive education, Montessori, Reggio Emilia approach, Waldorf schools, etc.
•Subject or focus: STEM magnet school, vocational or trades school, flight school, sailing school, dive shops, finishing school, etc.
•Organizational, institutional, or philosophical type: public or state school, private school, independent school, community school, military school, parochial school
•Location: neighborhood, distance learning, online or virtual school or classroom, outdoor school or classroom[2]

III. Related study

Education is the transmission of knowledge, skills, and character traits and manifests in various forms. Formal education occurs within a structured institutional framework, such as public schools, following a curriculum. Non-formal education also follows a structured approach but occurs outside the formal schooling system, while informal education entails unstructured learning through daily experiences. Formal and non-formal education is categorized into levels, including early childhood education, primary education, secondary

education, and tertiary education[3]. Other classifications focus on teaching methods, such as teacher-centered and student-centered education, and on subjects, such as science education, language education, and physical education.
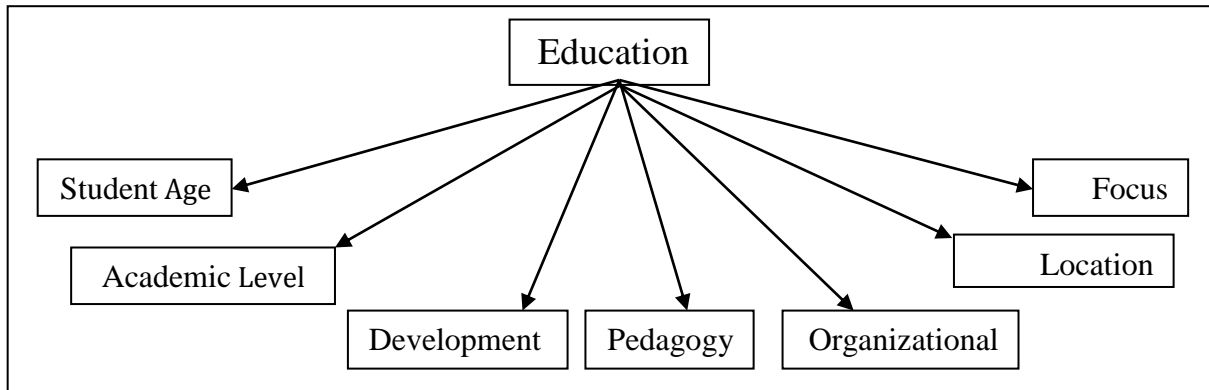
Education can be thought of as the transmission of the values and accumulated knowledge of a society. The quantity of knowledge to be passed on from one generation to the next becomes more than any one person can know and hence there must evolve more selective and efficient means of cultural transmission. The outcome is formal education school and the specialist called the teacher. Education can be applied to primitive culture onle in the sense of enculturation, which is the process of cultural transmission[4].
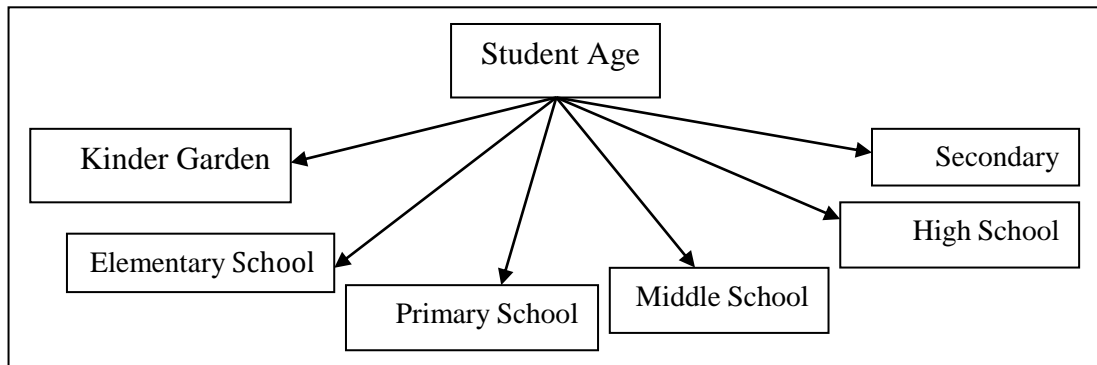

Figure 2. Taxonomy of School Period

Kindergarten is a preschool educational approach based on playing, singing, practical activities such as drawing, and social interaction as part of the transition from home to school. Such institutions were originally created in the late 18th century in Bavaria and Alsace to serve children whose parents both worked outside home. The term was coined by the German Friedrich Fröbel, whose approach globally influenced early-years education. Today, the term is used in many countries to describe a variety of educational institutions and learning spaces for children ranging from one to seven years of age, based on a variety of teaching methods[5].

A school is an educational institution designed to provide learning spaces and learning environments for the teaching of students under the direction of teachers. Most countries have systems of formal education, which is commonly compulsory. In these systems, students progress through a series of schools. The names for these schools vary by country but generally include primary school for young children and secondary school for teenagers who have completed primary education. An institution where higher education is taught is commonly called a university college or university, but these higher education institutions are usually not compulsory.
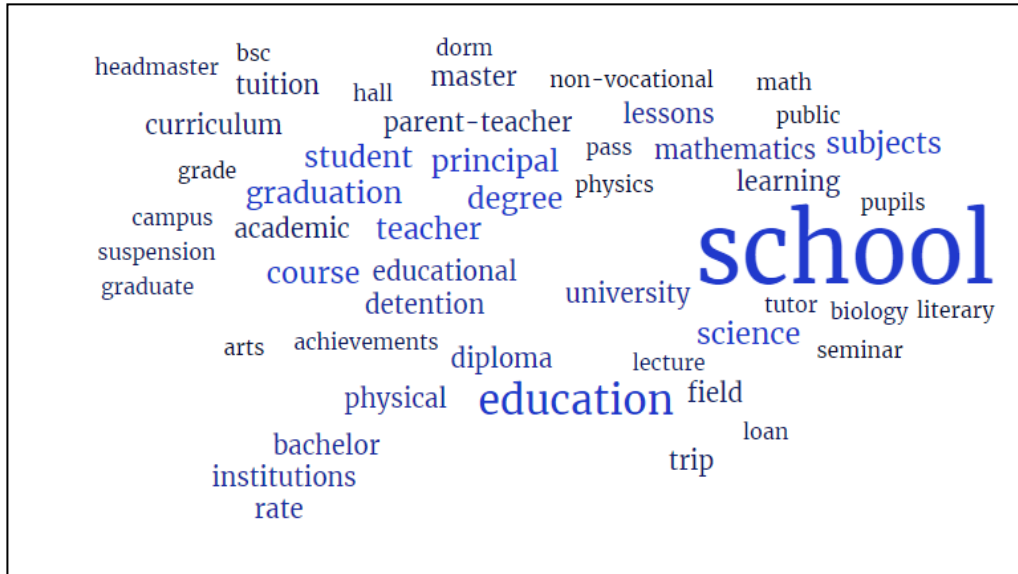
Figure 5. Word cloud for School Related words

A primary school, junior school, elementary school or grade school is a school for children from about four to eleven years old, in which they receive primary or elementary education. It can refer to both the physical structure (buildings) and the organization. Typically it comes after preschool, and before secondary school. A middle school (also known as intermediate school, junior high school, or lower secondary school) is an educational stage which exists in some countries, providing education between primary school and secondary school. The concept, regulation and classification of middle schools, as well as the ages covered, vary between, and sometimes within, countries[6].

A secondary school is an organization that provides secondary education and the building where this takes place. Some secondary schools provide both lower secondary education and upper secondary education, but these can also be provided in separate schools, as in the American middle and high school system. A college is an educational institution or a constituent part of one. A college may be a degree-awarding tertiary educational institution, a part of a collegiate or federal university, an institution offering vocational education, or a secondary school. A university is an institution of higher education and research, which awards academic degrees in various academic disciplines. Universities typically provide undergraduate education and postgraduate education[7].

A graduate school is a school that awards advanced academic degrees with the general requirement that students must have earned a previous undergraduate (bachelor's) degree with a high grade point average. A distinction is typically made between graduate schools and professional schools, which offer specialized advanced degrees in professional fields such as medicine, nursing, business, engineering, speech-language pathology, or law. The distinction between graduate schools and professional schools is not absolute since various professional schools offer graduate degrees and vice versa[8].
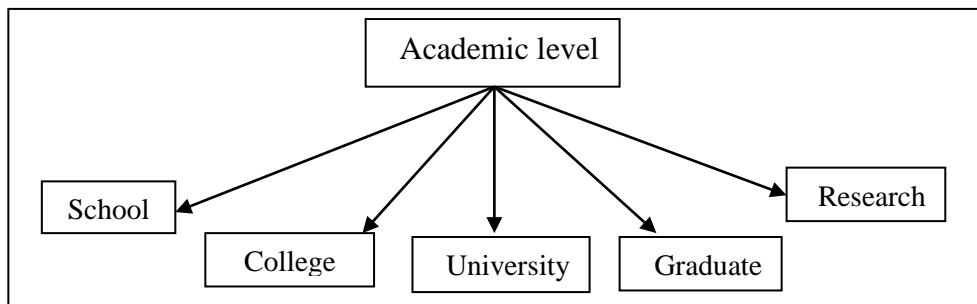

Figure 3. Level of Academics in education System

Research is an extreme education that is mature in education and mind. The systematic investigation into and study of materials and sources in order to establish facts and reach new conclusions, and also intervention of new outcome in the long time process taking various outputs and improvements in the research. There is a development in three ways in research, first Physically growth in age get a strength do to long time research take nearly decade, Second Mental health is improved by searching a various research journals and articles of existing system. Third, Social interaction have collaborative with different researchers and research to clear their doubts in pioneer of the portion of research[9].
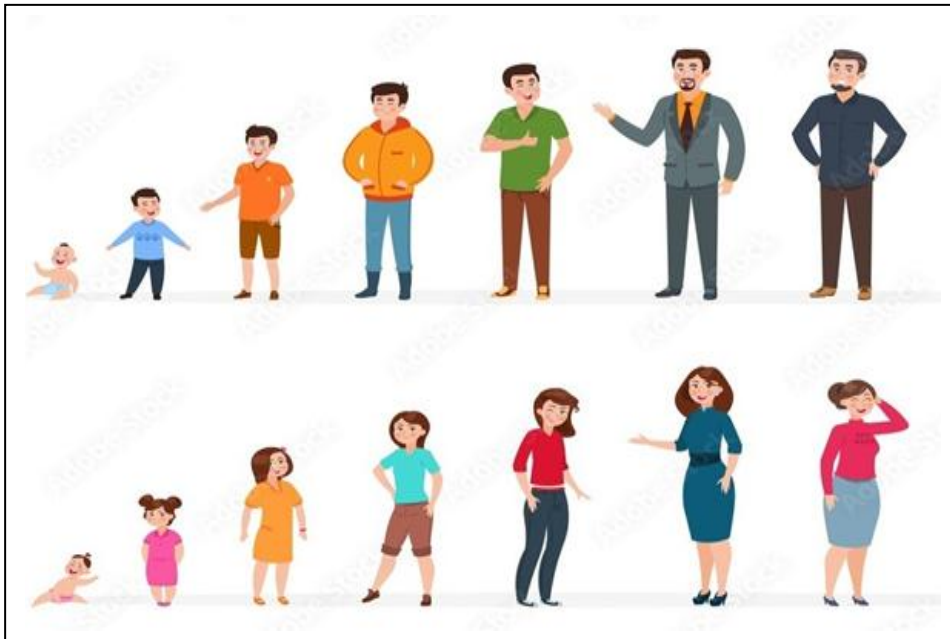

Figure 4. Age variation pictures of Montessori to Research

IV. Development of Human Growth

Human beings gradually grow in three levels. First, Physical level in school student behave very childish and always dependent their family members for eating and all things. After finishing their school period they got know the behavior in public. Second, Mentally growth level they know how to talk and how to treat others. Third, social world is fast growth the in the universe, social media like Instagram, whatsapp and telegram etc. All the school or college students are having their accounts and mostly spend their valuable time in the Social Media[10].
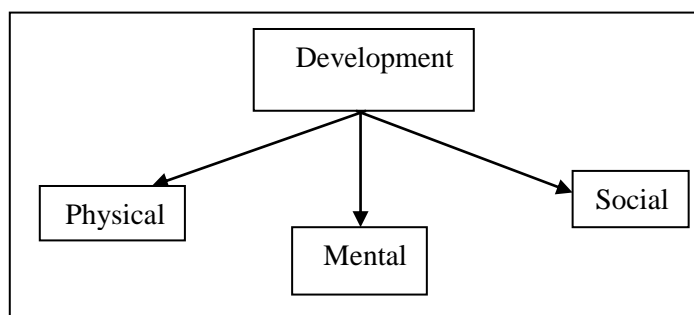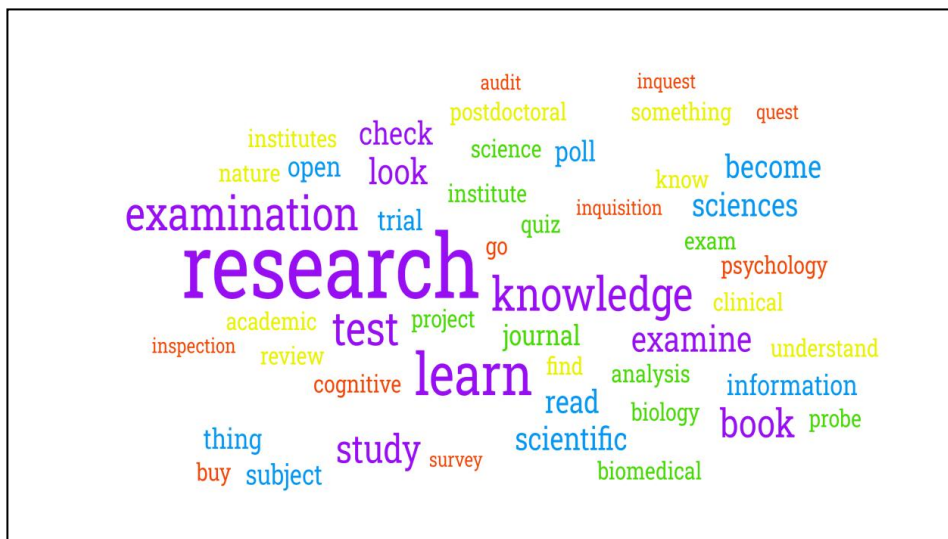

Figure 5.Development in Graduation

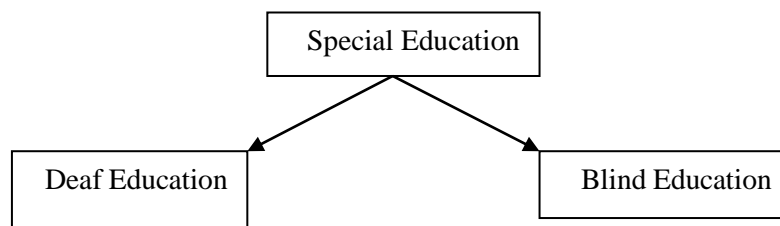Figure 6. Word cloud for Research related words

V. Special Education

Figure 7. Types of special Education

Special education is the practice of educating students in a way that addresses their individual differences and needs. Ideally, this process involves the individually planned and systematically monitored arrangement of teaching procedures, adapted equipment and materials, and accessible settings. These interventions are designed to help individuals with special needs achieve a higher level of personal self-sufficiency and success in school and in their community which may not be available if the student were only given access to a typical classroom education[11].

Deaf education is the education of students with any degree of hearing loss or deafness which addresses their differences and individual needs. This process involves individually-planned, systematically-monitored teaching methods, adaptive materials, accessible settings and other interventions designed to help students achieve a higher level of self-sufficiency and success in the school and community than they would achieve with a typical classroom education. A number of countries focus on training teachers to teach deaf students with a variety of approaches and have organizations to aid deaf students.
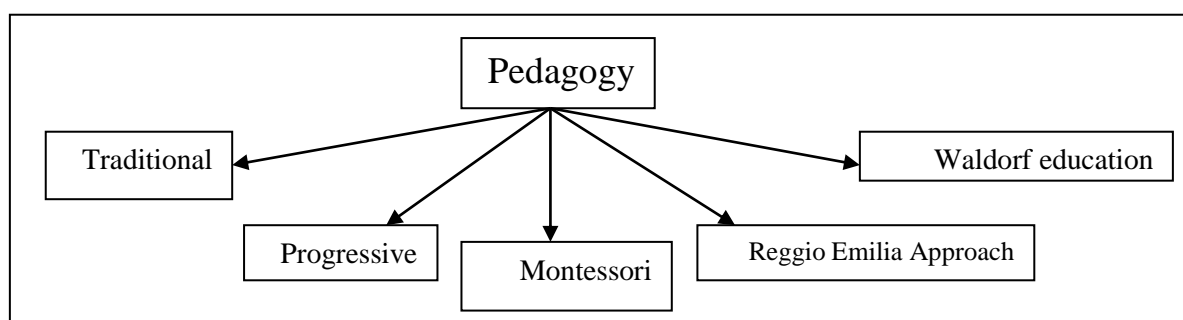
The subject of blindness and education has included evolving approaches and public perceptions of how best to address the special needs of blind students. The practice of institutionalizing the blind in asylums has a history extending back over a thousand years, but it was not until the 18th century that authorities created schools for them where blind children, particularly those more privileged, were usually educated in such specialized settings. These institutions provided simple vocational and adaptive training, as well as grounding in academic subjects offered through alternative formats. Literature, for example, was being made available to blind students by way of embossed Roman letters[12].

Nowadays there are lot equipment are available in market for Deaf people. They can learn easy the various courses in university. They can do their work without others help.

VI. Pedagogy

Traditional education, also known as back-to-basics, conventional education or customary education, refers to long-established customs that society traditionally used in schools. Some forms of education reform promote the adoption of progressive education practices, a more holistic approach which focuses on individual students' needs and self-control. In the eyes of reformers, traditional teacher-centered methods focused on rote learning and memorization must be abandoned in favor of student-centered and task-based approaches to learning.

Progressive education is a pedagogical movement that began in the late nineteenth century; it has persisted in various forms to the present. The term progressive was engaged to distinguish this education from the traditional Euro-American curricula of the 19th century, which was rooted in classical preparation for the university and strongly differentiated by social class. By contrast, progressive education finds its roots in present experience. Most progressive education programs have these qualities in common[13].

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                        Pedagogy

  Traditional                              Waldorf education

           Progressive    Montessori    Reggio Emilia Approach
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Montessori Method of Education, developed by Maria Montessori, is a child-centered educational approach based on scientific observations of children. Montessori's method has been used for over 100 years in many parts of the world. The Reggio Emilia approach is an educational philosophy focused on preschool and primary education. It is a pedagogy described as student-centered and constructivist that uses self-directed, experiential learning in relationship-driven environments. The program is based on the principles of respect, responsibility, and community through exploration and discovery through a self-guided curriculum. At its core is an assumption that children form their own personality during early years of development and are endowed with "a hundred languages", through which they can express their ideas. The aim of the Reggio approach is to teach how to use these symbolic languages in everyday life. It was developed after World War II by pedagogist Loris Malaguzzi and parents in the villages around Reggio Emilia, Italy, and derives its name from the city.Waldorf education, also known as Steiner education, is based on the educational philosophy of Rudolf Steiner, the founder of Anthroposophy. Its pedagogy strives to develop pupils' intellectual, artistic, and practical skills in an integrated and holistic manner. The cultivation of pupils' imagination and creativity is a central focus[14].

VII.Description about STEM and SMET

Science, Technology, Engineering and Mathematics (STEM), previously Science, Math, Engineering and Technology (SMET), is a term used to group together these academic disciplines. This term is typically used when addressing education policy and curriculum choices in schools to improve competitiveness in science and technology development. It has implications for workforce development, national security concerns and immigration policy. The science in STEM typically refers to two out of the three major branches of science: natural sciences, including biology, physics, and chemistry, and formal sciences, of which mathematics is an example, along with logic and statistics; the third major branch of science, social sciences, including psychology, sociology, and political science, are categorized separately from the other two branches of science, and are instead grouped together with humanities and arts to form another counterpart acronym named HASS - Humanities, Arts, and Social Sciences. In the United States education system, in elementary, middle, and high schools, the term science refers primarily to the natural sciences, with mathematics being a standalone subject, and the social sciences are combined with the humanities under the umbrella term social studies.
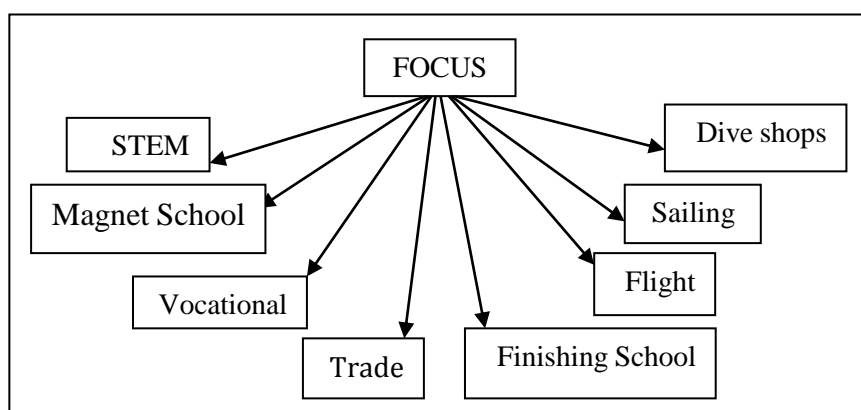
A vocational school is a type of educational institution, which, depending on the country, may refer to either secondary or post-secondary education designed to provide vocational education, or technical skills required to perform the tasks of a particular and specific job. In the case of secondary education, these schools differ from academic high schools which usually prepare students who aim to pursue tertiary education, rather than enter directly into the workforce. With regard to post-secondary education, vocational schools are traditionally distinguished from four-year colleges by their focus on job-specific training to students who are typically bound for one of the skilled trades, rather than providing academic training for students pursuing careers in a professional discipline. While many schools have largely adhered to this convention, the purely vocational focus of other trade schools began to shift in the 1990s "toward a broader preparation that develops the academic" as well as technical skills of their students[15].

Flight training is a course of study used when learning to pilot an aircraft. The overall purpose of primary and intermediate flight training is the acquisition and honing of basic airmanship skills. Sailing school, Sailing is a fun, safe and unique sport that people of all backgrounds, ages, and abilities can enjoy. We started our sailing school with the aim of advancing the sport of sailing in India and getting as many people as possible to share our passion for this incredible sport. We make learning to sail fun, exciting and rewarding. Whether you're a beginner or you're looking to advance your sailing skills, we will help you achieve your sailing goals in a structured, holistic manner. Enroll in our sailing classes and we will make sure that you develop the right sailing skills. At the end, you learn a new skill and have a certification from the Yachting Association of India (YAI). All sailing instructions are given on our Jboats. Read more about our course offerings below. A dive center is the base location where recreational divers usually learn scuba diving or make guided dive trips at new locations. Many dive centers operate under the guidelines of ISO 24803, in which case the facilities must meet the ISO minimum standard for a service provider for recreational diving. A finishing school is a school for young a woman that focuses on teaching social graces and upper-class cultural rights as a preparation for entry into society. The name reflects that it follows on from ordinary school and is intended to complete the education, with classes primarily on deportment and etiquette, with academic subjects secondary. It may consist of an intensive course, or a one-year programme. In the United States it is sometimes called a charm school.

State schools, called public schools in North America and many other countries, are generally primary or secondary schools mandated for or offered to all children without charge, funded in whole or in part by taxation. Private schools, also known to many as independent schools, non-governmental, privately funded, or non-state schools, are not administered by local, state or national governments. Children who attend private schools may be there because they are dissatisfied with public schools in their area. They may be selected for their academic prowess, or prowess in other fields, or sometimes their religious background. Private schools retain the right to select their students and are funded in whole or in part by charging their students for tuition, rather than relying on taxation through public (government) funding; at some private schools students may be able to get a scholarship, lowering this tuition fee, dependent on a student's talents or abilities, need for financial aid, or tax credit scholarships that might be available. Some private schools are associated with a particular religion, such as Judaism, Roman Catholicism, or Lutheranism. For the past century, roughly one in 10 U.S families has chosen to enroll their children in private school[16].
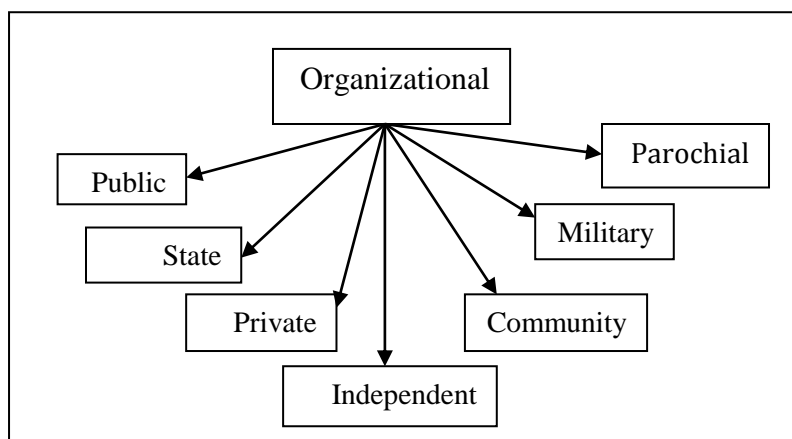
An independent school is independent in its finances and governance. It is usually not dependent upon national or local government to finance its financial endowment. It is typically governed by a board of governors which is elected independently of government, and has a system of governance that ensures its independent operation. The term 'community school' refers to a type of publicly funded school in the United States that serves as both an educational institution and a centre of community life. A community school is both a place and a set of partnerships between the school and other community resources. Its integrated focus on academics, youth development, family support, health and social services and community development leads to improved student learning, stronger families and healthier communities. Using public schools as hubs, community schools bring together many partners to offer a range of support and opportunities to children, youth, families and communities before, during and after school, and on weekends. A military academy or service academy is an educational institution which prepares candidates for service in the officer corps. It normally provides education in a military environment, the exact definition depending on the country concerned.

A parochial school is a private primary or secondary school affiliated with a religious organization, and whose curriculum includes general religious education in addition to secular subjects, such as science, mathematics and language arts. The word "parochial" comes from the same root as "parish", and parochial schools were originally the educational wing of the local parish church. Christian parochial schools are often called "church schools" or "Christian schools". In Ontario, parochial schools are called "separate schools". Distance education or long-distance learning is the education of students who may not always be physically present at a school[17]. Traditionally, this usually involved correspondence courses wherein the student corresponded with the school via post. Today it involves online education. A distance learning program can be completely distance learning, or a combination of distance learning and traditional classroom instruction. Massive open online courses (MOOCs), offering large-scale interactive participation and open access through the World Wide Web or other network technologies, are recent developments in distance education. A number of other terms are used roughly synonymously with distance education.

Outdoor education is organized learning that takes place in the outdoors. Outdoor education programs sometimes involve residential or journey wilderness-based experiences in which students participate in a variety of adventurous challenges and outdoor activities such as hiking, climbing, canoeing, ropes courses and group games. Outdoor education draws upon the philosophy, theory, and practices of experiential education and environmental education. Contemporary students expect that institutions of higher education offer flexibility to access learning.

Research suggests that students believe flexibility can be achieved through the provision of lecture recordings, however, lecturers continue to resist the provision of these materials because such provision would have detrimental consequences in lecture attendance. Although, research has indicated students prefer to access recorded lectures after scheduled live lectures, underscoring the supplementary usage of lecture recordings. Although there is an ongoing debate against providing students with lecture recordings, students have maintained that lecture recordings are valuable learning resource and should be provided as an option for learning . Our findings suggest that students use lecture recordings as supplementary learning materials and not a replacement for scheduled lectures. Students emphasized that lecture recordings helped them to compensate for missed lectures. However, others used lecture recordings to replace live lectures due to circumstances such

as illness or work commitments. These findings suggest that the value in the lecture recordings, whether as supplementary or replacing live lectures is dependent on individuals' circumstances. Although lecturers also contest the provision of lecture recordings as there is a concern, they can be easily distributed online[18].

Students in our study indicated the system does not allow them to download videos on their devices, and cannot, therefore, share and distribute. We also noted a variation in the provision of lecture recordings across departments, suggesting a need for the development institutional policy to promote an equitable provision of lecture recordings to all students. Some students indicated that with the current shift to flexible learning, it is a matter of time until this would be the standard norm in institutions. While the social network analysis provided an overall structural view of the students' value of lecture recordings, the sentiment analysis gave further insights into what students thought about the recording of lectures. The positive sentiments support the value of using lecture recordings. The Negative sentiments suggest concerns about not having access to recorded lectures.

VIII.   CONCLUSION

Overall, the findings of the study suggest that students generally view lecture recordings as resources for supplementing live lectures. Lecture recordings provide students with flexible and equitable learning they can facilitate the creation of an inclusive learning environment, especially for students with special needs. Some of the concerns academics raise against the provision of lecture recordings can be mitigated through the development and implementation of an institutional policy outlining best practice in the use of these resources.

This article contributes to the growing debate on whether or not instructors need to record their lectures and make them available to students at any time. We also showed that rather than relying on structured data obtained through questionnaires, educational researchers could employ social network and sentiment analysis to leverage the potentials afforded by social media data that are often semi-structured or unstructured to answer important educational research questions. The combination of social network and sentiment analysis used in this research provided an alternative way of understanding different forms of data students generate on social media[19].

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