

Importance of Effective Teaching methods in Demography: A Philosophical Review

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ABSTRACT

The paper discusses the teaching method of demography and critiques traditional teaching methods in Nepali formal institutions, arguing that they are no longer effective due to increased accessibility of knowledge. The paper is based on secondary data. It used meta-analysis of reports, historical documents, statistics, and theories. Teaching in demography involves a blend of theoretical understanding, practical application, and critical thinking. Key teaching methods include a theoretical foundation, practical application, problem-solving, active learning, data analysis, GIS application, integration of formal and substantive demography, critical thinking, inquiry-based learning, technology use, values clarification, experiential learning, cooperative learning, and project-based learning. These methods encourage active participation, critical thinking, and exploration of real-world issues using demographic data and models. Teachers can establish a dynamic learning environment that promotes a greater comprehension of demography and its global importance by implementing these strategies.

Keywords: Teaching-learning method, Demography, Classroom, Traditional and Techno-friendly

INTRODUCTION

Although the idea of demography has been around since antiquity, it is generally accepted that the field got its start in the middle of the 17th century with the English statistician John Graunt (1620–74) and his crude life tables, which were the first to attempt to analyze the statistical patterns found in the numbers of births and deaths. These diverse theorists, who are referred to as "the fathers of demographic thought," founded and developed the discipline of demography studies. The contributions of Edmund Halley (1656–1742), Richard Price (1723–91), Thomas Malthus (1766–1834), and Sir William Petty (1623–87) are included after Graunt.

Their underpinnings were essential to the growth of the connection between arithmetical records, numerical problems, and analytical reasoning (Sarah Harper, 2018).

The field of historical demography began in the 17th century when researchers like William Petty and John Graunt started examining demographic data to determine population trends. The study of historical demography did not, however, become a separate discipline until the middle of the 20th century. The advent of new approaches and strategies, like aggregate analysis and family reconstitution, has made it possible for historians to examine demographic data more thoroughly and accurately.

Historical demographers analyze demographic data using various methods and sources, including census records, parish registers, and administrative documents like wills and tax records. These provide snapshots of population at a specific time, revealing fertility and mortality trends. They use various types of data, such as fertility, mortality, migration, and population size and structure. Methods for analyzing demographic data include family reconstitution and aggregate analysis. However, working with historical data can be challenging due to issues like data quality, availability, and specialized methodology (Lee, 2025).

Historical demography is a crucial tool in historiography, allowing historians to understand population dynamics, social and economic factors influencing demographic trends, and contextualize historical narratives. It helps in analyzing the impact of events like the Industrial Revolution on Europe during the 18th and 19th centuries had significant social, economic, and cultural consequences that shaped the course of history. Examining factors like fertility and mortality rates, and challenging prevailing interpretations, such as the Black Death in Europe. For example, the decline in fertility rates in Europe during the 19th and 20th centuries was influenced by a range of factors, including urbanization, education, and family planning (Sarah Lee,2025).

Effective and innovative classroom learning requires the use of teaching approaches. They are essential in helping students acquire knowledge and skills. To guarantee effective teaching and learning, old approaches must be periodically reviewed and reassessed as they might not be appropriate for new learning.

Demography is being criticized for becoming more a technique than a science, with a focus on measures and sophisticated methodologies. The development and promotion of demography as a separate and independent science, emphasizing theory over methods and empirical data, is advocated for demographers. When properly taken into account, theory is essential to codifying knowledge about population dynamics and how they relate to the environment, economy, and society. This is especially important in teaching demography, where students and non-specialists are first exposed to the discipline (Thomas K. Burch,2018).

Demographers can either continue to work as technicians, concentrating on demographic accounting, or advance demography as a separate, independent field of study to do this. They must prioritize theory over techniques and empirical data, as theory provides a comprehensive understanding of population dynamics and their relationship to society, economy, and environment. This is particularly important in teaching demography to students and non-specialists.

Traditional teaching methods have been challenged and redefined due to the latest technological advancements and access to resources. Due to factors including inadequate infrastructure, scarce resources, and a shortage of trained teachers, traditional approaches are deemed inappropriate in today's technologically advanced countries. The development of computer programs and technology has had a big impact on education. These programs have helped students learn new skills and improve their written and spoken communication skills. While old methods simply serve as topic matter, students can now examine subject matter in the classroom thanks to the modern, technologically savvy culture. Information and communication technology should be incorporated into modern teaching methods and tailored to the interests, skills, and goals of each individual student.

Encouraging individual differences and encouraging student-teacher interaction can make the learning process more effective and engaging, enabling students to develop key skills and competencies for competitiveness and industry demands (Belias, Dimitrios, et. al ,2013).

Demography is becoming more a technique than a science, with a focus on measures and sophisticated methodologies. A call for papers from another IUSSP (2000) working group highlights a preference for innovative work using new data sets and methods, without discussing new ideas or the development of older theoretical ideas. Theory is crucial in teaching demographics, as it provides a summary of known phenomena and codifies our understanding of population functioning, a skill that data, technique, and description cannot. To do this, we must prioritize theory over methods and empirical facts since, when properly analyzed, theory is nothing less than a synopsis of existing knowledge.

Data, technique, and description cannot capture our understanding of how populations function; it does. Where students and other non-specialists are first introduced to the field, teaching demography is the most crucial setting for this (Caselli, G. (2000).

Ten guidelines for teaching demographics and creating texts are suggested in the text. It offers two justifications for this strategy: the pedagogy used in the physical sciences today and a different strategy used by social scientists and philosophers of science. While the latter contends that the application of these concepts needs to be adjusted according on the nature of the course, the former contends that demography is burdened with a flawed conception of science. Philosophers like Reichenbach (1968), Nagel (1961), and Hempel (1965) popularized this perspective of logical empiricism in social science after World War II. In the works of various social scientists and modern philosophers of science, I outline a different and possibly more successful strategy (Hempel, 1965).

Because of its focus on mathematical theory and modeling, demographic technique is less applicable to economic demography than it is to mainstream and social demography. Regardless of the subject and students, the demographic technique principles should be used to all demography courses. Teaching methods vary across nations, but European and German schools are closer to the ten principles.

Teaching and learning have undergone a revolution thanks to the internet and technology, rendering conventional approaches obsolete and unnecessary in the modern world. Teaching

should emphasize interactive, conversational, and research-based techniques over subject matter. Students should be knowledgeable about the subjects they are studying, and both professors and students should establish the procedures used in the classroom. Students can be inspired to seek knowledge and engage in research-based learning through interactive and participatory teaching approaches. Since the globe is becoming a knowledge and information center, new techniques and methods are required, and traditional ways simply serve to validate deficiencies. Demography suffers from a flawed conception of the nature of science, just like a large portion of modern empirical social science. This is the perspective of logical empiricism, which was made popular in social science after World War II by philosophers like Reichenbach (1968), Nagel (1961), and Hempel (1965). outline a different, and possibly more successful, strategy that can be found in the works of a number of social scientists and modern philosophers of science (Thomas K. Burch, 2018).

OBJECTIVE

The article explores the teaching methods demography employed in Nepali colleges and universities.

METHODS

The article uses an exploratory research design, analyzing teaching-learning methods in classrooms, incorporating theoretical insights from various scholars, and utilizing both virtual and printed sources. "What is an effective teacher?" is a challenging and complex question that calls for exceptional skills. The purpose of this chapter is to present strategies employed by successful educators that are linked to favorable student outcomes. In order to establish a loving, caring relationship with students, these practices will be combined with lesson design, technological integration, problem-based learning techniques, classroom management, learner assessment, and attitudes in later chapters.

Ontology and Epistemology of teaching demography

Teaching demography involves understanding the core concepts, relationships, and methods in the field, emphasizing the interconnectedness of formal and substantive aspects. This holistic approach integrates technical and behavioral aspects, encourages active learning, and encourages critical thinking about demographic data and models. Ontology and epistemology focus on the fundamental nature of demographic phenomena and how knowledge is acquired and validated. Understanding these concepts helps educators design effective teaching strategies and encourages critical thinking, methodological awareness, contextual understanding, and reflexivity.

RESULTS AND DISCUSSION

Demography is the study and statistical analysis of human population data, used by governments, companies, and social scientists to understand past trends and prepare for future possibilities. It examines total counts, densities, and distributions through surveys, assessments, and interviews. Demography is crucial for understanding population numbers, characteristics, social structure, and preferences (Study.com, 2024).

The statistical analysis of human populations, including their number, composition, and trends across time, is known as demography. It uses methods from history, economics, anthropology, and sociology. Demographers like John Graunt, who came about in the 16th century, analyze social, cultural, and economic trends related to population. Demographers as we know them today, like John Graunt of the United Kingdom, emerged in the 16th century, although basic demographic studies, like censuses, were carried out as early as 6,000 years ago. The majority of the early statistical research focused on mortality, or the number of deaths and the ages at which they occurred. Graunt might employ baptism and burial records to estimate the number of males of military age and the number of women of childbearing age. One of the first statistical analyses of a region's population was his study. In order to establish life insurance rates, early insurance agents frequently conducted demographic studies.

Early studies focused on mortality, but in the 19th century, researchers began studying fertility and migration, leading to the concept of "differential fertility." Demographers gather data through government censuses, registries, and surveys, which are then analyzed using statistical models to draw conclusions about the entire population (National Geographic Society, 2024).

Teaching method aims to activate students' collective knowledge about population-related topics, focusing on demography research, its components, and its relation to other subjects like politics, health, economics, history, biology, and geography. The method encourages critical thinking, observation, analysis, interpretation, and developing one's own point of view. Activities include activating prior knowledge, introducing demography through a video, and working with the app A Life Journey.

As a science, demography gives students useful scientific information for a variety of applications. The distinctive core of demographic knowledge does not include the gathering of demographic data, which is viewed as an accessory activity. The subfield of formal demography, which is frequently referred to as methods, contains a large portion of our greatest understanding of how populations function. Formal models in behavioral demography have a structure with formal demographic models, according to a model-based perspective on research. Guidelines for demographic teaching are meant to apply to almost any context, with differences in depth and detail but not core knowledge (TK Burch, 2018).

This article addresses the prevalent teacher-centered teaching approaches used in Nepali colleges and universities, which are inadequate for contemporary learning and fail to foster critical and creative thinking. It emphasizes how crucial it is to use cutting-edge teaching strategies that motivate pupils to actively participate in their education. The idea of a comprehensive theory of education that integrates concepts from Rousseau and Locke, with an emphasis on experimental and holistic teaching methods, is also covered in the article. It emphasizes the importance of personal growth and life skills in education. The article emphasizes the need for teaching methods that are relevant and effective to achieve the objective of life skills education, allowing students to observe and practice the skills themselves (Shah, Rajendra Kumar, 2020).

Most schools and universities use teacher-centric methods, where teachers dominate and collect information and knowledge. These methods are relevant when students lack resources. However, the adoption of modern technologies is essential in teaching. Conventional methods can be rudimentary and undemocratic, as they prioritize the teacher over students. Methods that are both student-friendly and technologically advanced can meet the goals and substance of instruction. By ignoring students' interests and encouraging passive listening, teacher-centered instruction enables teachers to be undemocratic and repetitive. The new generation expects participatory and interactive learning, and current methods may not meet their educational objectives (Solaiman Jony (2016).

A research-based practice book that presents instructional strategies based on the most recent classroom research, emphasizing contemporary evidence-based strategies that have been shown to improve student results. The book is meant to be easy to use; it steers clear of convoluted recommendations and digressions. In order to assist teachers in managing the classroom, including students in the learning process, and raising student accomplishment in diverse classrooms, it also attempts to be practical by providing examples from case studies, written dialogues, and classroom footage. The book is realistic, presenting research-based teaching practices directly from years of research and observation in actual classrooms. The book's four goals are to illustrate how to apply effective, research-based teaching practices in today's diverse classrooms (Gary D. Borich, 2017).

A good teacher is an ideal member of the community, a role model, and a nice person. Teachers used to be evaluated on their moral character and classroom conduct. They were supposed to be sincere, diligent, giving, and dedicated. However, this definition lacks clear, objective standards for performance and training future teachers.

A century ago, an effective teacher was a role model who met community ideals for good citizenship, parenthood, and employee behavior. However, this definition lacked objective standards for performance and was unrealistic. The concept of successful teaching has undergone a revolution in the last few decades, moving away from community ideals and toward the impact that teachers have on their students. This has led to the focus on the teacher-student relationship in the classroom, with researchers developing new methods to study classroom interaction patterns and discover which patterns promote desirable student performance. This shift has led to a more comprehensive understanding of effective teaching.

Researchers use instruments like Good and Brophy (2007) to study classroom interaction patterns. These instruments record student-teacher interactions, coding responses and feedback. The coding guide and response form assign numbers for interchanges, allowing for a comprehensive record of question-answer-feedback patterns across classrooms. The Coding Form for Measuring Individual Praise codes positive behavior praised by the teacher, recording the overall pattern of action. These resources give a complete picture of classroom activity and academic success. A single class observation, however, might not show a recurring pattern.

When implementing instructional strategies and approaches, new teachers are guided by the standards set forth by the Interstate Teacher Assessment and Support Consortium (InTASC) and the Learning Outcomes. Differentiated instruction, integrating technology into lesson plans, and applying constructivist ideas are just a few of the useful teaching strategies and tactics offered by the In Practice features. A self-report survey tool for gauging concerns about instruction and its effect on students is also included in the book. Chapters 5, 11, and 12 introduce a Higher Order Thinking and Problem-Solving Checklist and offer a useful visual approach for structuring unit and lesson plans. Practice and application parts at the end of each chapter offer practical chances to make decisions and solve problems in actual classroom settings. Students are encouraged to handle real-world classroom issues pertaining to project-based learning, cultural diversity, lesson design, and classroom management through field experience and practice exercises. In addition to offering a glossary of important terminology and concepts for aspiring educators and employers, digital portfolio activities assist students in developing a professional portfolio.

Instructors can download textbook supplements from the Pearson website by entering the book's author or title, selecting the edition, and clicking on the "Resources" tab. An outline of the chapter material, learning exercises, and chapter-by-chapter test items can be found in the Instructor's Resource Manual and Test Bank. PowerPoint™ Slides offer graphic aids to enhance learning. TestGen, a test generator, is available for personal computers and can be used for classroom testing and specialized delivery options. Test banks, also known as Test Item Files, organize test items based on textbook material (Gary D. Borich, 2017).

Lesson plans that give them real-world examples of how to apply theory and provide helpful hints, methods, and ideas.

In Practice: Constructivist principles, differentiated instruction, teaching special needs, integrating technology, multiple intelligences, interdisciplinary unit plans, mastery learning, project- and problem-based learning, portfolios, and performance evaluations are just a few of the useful teaching strategies and tactics that in practice features offer new teachers. The edition also includes features on online learning, digital gaming, and cooperative learning.

A self-report survey instrument: measuring teacher concerns, teaching tasks, and impact on students, allowing for tracking growth and development over time.

A practical visual format for organizing unit and lesson plans, enabling better preparation for meeting state standards and preparing learners for standardized assessment unit and lesson plans that makes it easier to meet state requirements and get students ready for standardized tests.

A Higher Order Thinking and Problem-Solving Checklist, aimed at fostering a classroom curriculum that promotes problem-solving, decision-making, and critical thinking.

End-of-chapter Summing Up: End-of-chapter summaries align with learning outcomes, restate key concepts, and review important content. Discussion and practice questions review chapters, with keyed answers in Appendix B.

Professional Practice ending parts give students practical chances to exercise and improve their decision-making and problem-solving skills in an authentic classroom setting.

Field Experience and Practice Activities at the end of each chapter encourage decision-making and problem-solving in lesson planning, classroom management, cultural diversity, and project-based learning.

Digital Portfolio Activities guide creating a professional portfolio of accomplishments, showcasing your best work in each chapter, for future teachers, supervisors, colleagues, and employers, showcasing your best achievements in the course.

This glossary provides a comprehensive overview of key terms, definitions, concepts, and teaching practices required for the Praxis exams and state certification requirements (Gary D. Borich (2017)).

Thousands of students around the world take introductory physics, biology, and chemistry courses, making publishing them affordable. However, first-year university students are frequently taught to demographics that are text-poor. These courses embody a view of science where theory, as overarching systems and models, takes central place. Theory codifies knowledge and provides tools for scientists to explain and predict ultimate aims.

Demography is a field that prioritizes theory and theoretical models over data, technique, and descriptive findings. It is possible to think of both simple equations and intricate algorithms as theoretical models that illustrate how populations function. Instead of being thrown away, older models ought to be improved and added to the collection of potentially helpful models. A wealth of significant concepts on population work would result from a focus on the use of models to evaluate and explain demographic events and forecast futures. Although students may find this method more challenging, it may ultimately draw in more and better students and better prepare them for work involving demographic research in the future. Learning a discipline that integrates theoretical thinking and empirical observation, as well as the fact that theoretical design and model building are creative endeavors, is more fulfilling for students.

Philosophical Foundation

The logical empiricism view in empirical social science aims to discover scientific laws through empirical research. With additional generalization, these laws provide a basis for theory. A theoretical proposition's logical coherence with empirical facts determines its validity. A phenomenon must be explained by demonstrating that it makes sense in light of pertinent specific evidence and a theoretical generalization.

Contemporary philosophers of science are questioning the logical-empiricist approach to physics and other fields. Nancy Cartwright and Ronald Giere argue that many laws are abstract and oversimplified representations of reality, while most scientific laws are not universal or true. Cartwright and Giere argue that natural laws are false, as they contain only a few physical quantities and are not isolated systems (Cartwright, N. D. ,1983).

Giere argues that models, including theoretical, visual, and physical models, are the main representational tool in science. The logical inference of the phenomenon determines whether

a model is true or not. Models are abstract structures that try to depict specific aspects of the real world. A list of real-world systems that a model applies to is the prototype of scientific knowledge. In social science, including demography, loose inference is common, making explicit statements necessary.

The empirical inquiry in this view of research is whether a valid model applies to a specific empirical circumstance, and all models are formally true. Without eliminating other models, science concentrates on those with the broadest applicability. For instance, the exponential growth formula and the basic demographic equation are both valid by definition and may be applied to any well-defined population in the real world. However, the applicability of behavioral models like the theory of demographic transition has been debated for over 50 years. Giere's and Cartwright's accounts of science align with the standard approach in mathematical modeling and computer modeling.

Instead of differentiating between a model and a theory, the model-based approach to science emphasizes the degree rather than the kind. Post-modernists believe that science is a social construct, which contrasts with Giere's conception of "theoretical models" and "theory." "There is realism without truth," and "a good model captures important aspects of the real world." Eugene Meehan proposed a 'system paradigm' for explanation in social science, which involves applying a formal calculus to empirical phenomena, ensuring logical fit and relevance (Meehan, E. J., 1968).

Nathan Keyfitz introduced a new approach to demography in 1975, arguing that direct observation is insufficient for establishing important relationships. He compared demography to formal demography and behavioral demography but did not distinguish between the two. Keyfitz concluded that a model is more than a mnemonic device; it is a machine with causal links, suggesting how levers can be moved to alter direction according to policy requirements (Keyfitz, N., 1975).

As a science, demography gives students useful scientific information for a variety of applications. The distinctive core of demographic knowledge does not include the gathering of demographic data, which is viewed as an accessory activity. The subfield of formal demography, which is frequently referred to as methods, contains a large portion of our greatest understanding of how populations function. Formal models in behavioral demography have a structure with formal demographic models, according to a model-based perspective on research. With variations in specifics and level of information but not fundamental knowledge, demographic teaching guidelines are designed to be applicable in nearly any setting. In the classroom, cloud-based geographic information systems (GIS) technology provides resources for geographical analysis, critical thinking, and problem-solving. It provides data on population patterns, enables collaborative learning, and is accessible on any device. GIS also offers rich demographic data sets from national statistics agencies, making it suitable for multidisciplinary, real-world issues investigation. The open data movement provides diverse demographic data sets for educators and students.

Population change, demographics, and lifestyles: These resources, made possible by the development of cloud-based geographic information systems (GIS) technology, offer critical thinking, problem-solving and geographic analysis to all teachers and students in the classroom (Kerski, 2003; Jo, Hong, and Verma 2016). Due to a few developments, now is the ideal time for teachers to use these tools and data sets to teach these courses. First, population trends are perfect subjects and data for research using 2D and 3D maps in a GIS framework since they are subject to change across time and space. Second, modern GIS provides a platform that makes it easier to share, save, and incorporate maps and applications into presentations and multimedia, fostering a collaborative learning environment. Tools for analysis and mapping have been moved online and are now accessible from any device at any time.

Due to its dynamic character and impacts on culture, land use, and the environment, population dynamics is a consistently interesting and important area of study from a scientific standpoint. From a college administrative standpoint, demographics affect financing sources, alumni networks, future online and on-campus student numbers and backgrounds, and much more. Spatial data, maps, tools for analysis, categorization, symbolism, and measurement, field applications, web mapping applications, and a user community are some of the advantages of the ArcGIS platform. On this platform, over 1 billion maps are viewed daily by millions of data consumers.

- (1) **Examining global patterns using ArcGIS Online:** The Living Atlas of the World is a comprehensive resource for examining global patterns, including population growth, ethnicity, density, cities, and other themes. It allows users to access, combine, and use data from various layers, including historical and forecasted data. This web map can be used to investigate population growth rate, life expectancy, birth rate, mobile phones, and land lines for world countries. Additional analysis can be done by adjusting symbology, variables, and layers from tables, the Living Atlas, or ArcGIS Online.
- (2) **Sub-country investigations:** Sub-country investigations can explore provinces, neighborhoods, and administrative areas in various countries. Start by browsing the Living Atlas or open data hub sites. For example, Nepalese's interactive map and data can be accessed through ArcGIS Online.
- (3) **Census demographics investigations:** The Living Atlas content by the Esri demographics team provides layers covering So many Nepalese Community Survey tables, covering various fields like age, employment, income, housing, insurance, education, veterans status, and internet connectivity. The data is accessible through the Living Atlas website or within maps and can be categorized by topic. The ACS data supports field descriptions, has improved boundaries, and is accessible throughout the ArcGIS platform.
- (4) **Mapping and filtering census data at different scales:** The ArcGIS Online map viewer allows for the analysis of census data at various scales, revealing relationships between variables like median age and income, consumer behaviors, and diversity

patterns. By filtering specific variables, users can examine trends and compare communities to others of the same population. The map can be used to explore factors such as employment types, military bases, universities, and prisons that influence median age.

- (5) **Mapping past change and future projections:** This map examines population changes in 2018 and future projections using 2018 data and 2018 median household income. Scale and style are adjusted to reflect changes in 2025.
- (6) **Deeper analysis in ArcGIS Pro and ArcGIS Insights:** ArcGIS Pro and ArcGIS Insights offer deeper analysis for census data, teaching additional GIS skills and utilizing various analytical tools. ArcGIS Pro has the most tools, including R statistical package and spatial statistics functions. Insights offer unique visualizations for data, such as chord diagrams. For example, integrating popular demographics layer into ArcGIS Pro projects and using the Enrich tool for behavioral data.
- (7) **Demographic and lifestyle investigation using Business Analyst Web:** Business Analyst Web is a Software-as-a-Service (SaaS) tool that provides demographic, lifestyle, and consumer behavior data, business location data, mapping tools, and customizable reports. It covers multiple countries and geographies, covering variables like pet ownership, health insurance coverage, and work and leisure activities. It also includes millions of business locations and sales volume. Business Analyst Web is part of the ArcGIS platform.
- (8) **Visualizing and understanding migration over space and time in 3D, Web mapping:** Web mapping applications like Age of the Anthropocene and "cool maps" gallery provide 3D visualizations of incoming and outgoing migration for every country over 4 dimensions. These visualizations can be used to analyze global population, urbanization, agriculture, and other aspects of the world. For example, Australia's immigration from South Asia and East Asia can be compared to its traditional immigration from western Europe. Students can also investigate immigration to the UAE and challenges faced by Somalia.
- (9) **Comparing demographic patterns across 100 global cities:** The Urban Observatory is a mapping and visualization tool that compares over 100 global cities across over 50 themes, including work, movement, people, public, and systems. Created by Richard Saul Wurman, Radical Media, and Esri, it allows users to compare cities and themes in interactive, side-by-side maps. The tool can teach commuting, time zones, and seasons, and can be used to compare cities based on their physical geography and senior population.
- (10) **Additional web mapping applications:** The author frequently uses population web mapping applications while teaching to examine population trends and migration patterns. These tools include the NASA SEDAC CIESIN Global Population Estimation Web Mapping Application, which allows for the comparison of population pyramids and other demographic information. The distributed flow lines tool in ArcGIS Pro allows for state-to-state inflow and outflow migration mapping. The US Census Bureau Community flow mapper and charts from the New York Times also provide county-by-state migration maps. The author also uses the Esri Way back imagery and the Esri USGS historical topographic map viewer to examine changes in

urban and rural areas over time. The Land sat Lens web mapping application examines human impact changes around the world (Manson, S., J. et.al, 2013).

CONCLUSION

Demography is a vital field of study that provides insights into past populations' demographic characteristics, influencing societal trends and influencing population dynamics across various applications. The research paper examines teaching methods in Nepali formal institutions and their shift from traditional to modern methods. It critiques instructor-centered approaches, which are mainly employed to impart knowledge to students who are not familiar with the subject. Since everyone, including students, now has better access to knowledge thanks to current technologies, the study examines the applicability of these approaches in today's technologically advanced society. According to the article, because students' information is now readily available in today's technologically advanced learning environment, old approaches are no longer effective. Higher education's present teaching strategies are antiquated and inadequate for today's technologically advanced classrooms. Institutions should use communicative, interactive, or learner-centric teaching strategies to adjust to the times and circumstances that are changing.

As technology advances, students' access to the internet and other devices also affects teaching methods. While democratic notions can be an alternative, imposing the same convention is not feasible. Methodological shifts in teaching and learning are inevitable, and learners'-centric methods are preferable.

Demography is a field that prioritizes theory and theoretical models over data, technique, and descriptive findings. It is possible to think of both simple equations and intricate algorithms as theoretical models that illustrate how populations function. Instead of being thrown away, older models ought to be improved and added to the collection of potentially helpful models. A wealth of significant concepts on population work would result from a focus on the use of models to evaluate and explain demographic events and forecast futures. Although students may find this method more challenging, it may ultimately draw in more and better students and better prepare them for work involving demographic research in the future. Learning a discipline that integrates theoretical thinking and empirical observation, as well as the fact that theoretical design and model building are creative endeavors, is more fulfilling for students.

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