

VU LEARNING HUB

vulearninghub.xyz

HIGHLIGHTED HANDOUT

EDU604

Comparative Education

EDU604 by VU Learning HUB

Prepared for VU students • Free study resources

<https://vulearninghub.xyz>

MAS ALL ROUNDER

FOR MORE VU DATA VISIT MY website:

<https://masallrounder.blogspot.com/>

**EDU604 Midterm Preparation Handouts
BY PIN2 and MUHAMMAD
(MAS All Rounder)**

Comparative Education (EDU 604)

Lesson No. 1

Defining Education; Sociological approaches; Comparative Education, Its scope and purpose. Education is very difficult to pin to a particular definition as it may be perceived from different angles. However, we can define it as a process through which an individual becomes integrated into his society, becomes a promoter of his societal culture, contributor to the development of his society and becomes an adult who will be able to stand on his own. There are three major sociological perspectives on education: *Functionalism, Conflict theory, & Symbolic interactionism*.

Making comparisons is a human nature, probably due to desire of knowing the relationship existing between, or among the things being compared. The study of Comparative Education (CE) allows the person involved to have a better understanding of the system of education within, and outside his own country. CE is a study of two or more education systems; a study of how philosophy, objectives, policy and practice of education in other countries influence the general development of education in a particular country. It explores how the development of education in the past, across the ages and continents, has influenced the development of education in particular countries. CE's scope is extended to the purpose of education systems of the countries being studied, an investigation into the similarities as well as differences existing in the educational practices of the countries under investigation. Its purpose is to assist the learners to understand their education systems better; and to perfect national systems with modifications and change with the circumstances and local conditions would demand.

Lesson No. 2

Primary education planning; Quality of education; Equity.

Comparative education offers several lessons related to education planning at different levels:

Primary education

Countries which invest more in primary education develop at a faster pace but takes a long time to spread primary education and even more to increase literacy level in the country. The aims of primary education are not met if the curriculum is ruralized i.e related to agriculture in village settings.

School Quality: School does not contribute to learning unless education is of good quality. However, there are differences in how quality is defined. Quality needs to be measured both in terms of inputs –resources and outputs learning achievements

Secondary education

With increasing primary education, the pressure on secondary education has increased. The students should be allowed to move ahead with secondary education. However, vocationalizing secondary education is not always helpful.

University education

There is no way to contain the demand for university education. Although universities aim to forecast and teach the skills that would be needed in future, such estimations are not very successful

Educational Financing:

The public budget will never be able to bear the full cost of free public education. Hence different ways to fund public education need to be sought. Private education assists the government in achieving its educational target and it needs to be encouraged.

Equity:

Equality in education is an important goal but while provision of free primary education helps the poor, provision of free higher education most of the time benefit the wealthy. Public funds in education should be directed towards the needy population.

Lesson 3

Foundations of comparative and international education; Stages; Historical context; Rationale. Comparative and International education are two different disciplines but they are often taken as one because of their interlinks. While comparative education has its roots in travelers' tales yet its formal beginnings can be traced from 1817, following Marc-Antoine Julien's proposal, when an attempt was made for the first time to record educational statistics that later with the development of international organizations like UNESCO opened the avenues for cross country comparisons. The origins of International educational can be traced back to César Auguste Basset, another Frenchman, who in 1808 called for scholars to observe education outside France with the intention of making recommendations for the reform of the French education system. In both cases the aim was to bring home other systems of education, which was in most cases likely to fail because lesser attention was paid to sociocultural factors surrounding these schools.

Comparative education has gone through 5 stages of historical development: i) travelers sharing tales of education in other places, ii) educational borrowing, iii) interest in documenting and understanding education in international perspective, iv) forces and factors shaping different national systems, v) interest in understanding the relationship between education and society. However, these stages are not discrete cut off points. There is evidence of their overlapping as well as their co-existence in current literature. After World War II, the field of comparative began to merit attention with the establishment of international bodies and an interest in rebuilding educational infrastructure. This time witnesses a number of research journals dedicated to comparative education and establishment of societies for work in this discipline. In 1956, the Comparative Education Society was formed in the USA, which was later renamed as Comparative and International Education Society (CIES) was the first of its kind.

The establishment of numerous journals and societies in the discipline of CE led to debates, around methodology and focus. The initial historical, descriptive and explanatory methodology was criticized for not being much use to policy makers. There was focus on scientific rigour and on exploring the connections between education and society, and to identify 'laws' governing this relationship. International bodies like UNESCO and World Bank were now becoming more interested in the outcomes of education rather the internal working of schools. An attempt was made to refine the scientific approach by bringing in 'problem' approach to comparative education, though it also had its criticisms. Later, Anderson (1961) highlighted the importance of in-depth studies in relation to any aspect of education across countries to develop theories of school-society relationships that could be tested in different contexts. Political science perspective, argued that a country's education was best understood if the underlying political philosophy of the context was taken into account. The Structural-functionalism, from which emerged modernization theory also had their play in the field of CE. The assumption about education systems being part of social, economic and political structures, and their contribution to economic growth led towards its recognition as a means of socializing younger generation into their norms and values, preparing them for the labour force and for their position in society. The critical approach of Marx highlighted educational inequities and it was also realized that despite investments in developing countries in the field of education, the gap between rich and poor countries was increasing. Now the attention came to be focused on the educational issues of low income countries. It is time to re-think the field of comparative and international education and our areas of priority and the use of methodology to rejuvenate it because: a) we are now almost 100 years since the beginning of the field, b) the influence of intensified globalization and changing geopolitical relations, and migrations call for new approaches to understand the ongoing educational phenomena. It calls for questioning the utility of the old constructs, c) education now is posited within a

politically charged debates and there is a need now for educational research to be more cumulative and authoritative – to be more directly relevant, useful and accessible to both policy-makers and practitioners– and to be more cost effective as budgets tighten and accountability is ever more emphasized.

Comparative Education and Policy makers.

Traditionally policy makers have indulged in borrowing and copying of educational models, though they are bound to fail if they are copied without being adapted to the specific context of home country. When policy makers look for models to copy they are influenced by three biases: a) language, policy makers turn to countries where there is no language barrier; b) political linkages, educational models are chosen from countries with which the home country has strong political ties, c) hierarchy, policy makers from less developed countries try to emulate the model of more developed countries. These are evident from several examples.

Lesson 4

Geomorphic shifts in CE; Intrusive role of state; Demands on Performance; pressure for funding; Technology.

The domain of higher education has undergone major changes which have been identified by Becher and Trowler (2001) as 'geomorphic shifts' in the academic landscape. The elements and causes of these shifts were a) the increasingly intrusive role of state, b) demands for performance and c) an increasing need for academics to generate income for the universities in terms of obtaining grants and d) technology. However, these shifts have been at different levels in different countries but these have affected the field of comparative education also. It was noticed that most of the work published in comparative journals was funded projects. Funding by developed countries set the agendas for educational research as they determine both the context and content of the research by limiting their funding to it. The changing geopolitical situations also lead to geomorphic shifts in comparative education, for example the breaking up of USSR. These changes have been more or less global yet the field of CE also retains its certain characteristics.

Lesson 5

Conceptualizing education – Three Approaches; Different roles of education; Human Capital theory; Rights-based approach; Education as Capability.

Three different approaches can be taken to understand the role of education in society as each approach views education differently and has different conceptions of its role in society. These are:

a) human capital approach, b) human rights approach and c) human capability approach. The roles of education in society can be limited to instrumental and intrinsic i.e education as a tool to achieve some goal or education for its own sake. The instrumental goals of education can be viewed as personal and collective and also as economic and non-economic. Hence education has multiple roles in the society. Human capital approach though not without its advantages, only views the economically instrumental goals of education as important. It focuses on education of individuals on the basis of cost benefit analysis so that investments in education can lead to economic gains of national prosperity. It is not interested in the education of those who may not be able to contribute to the national income, for example females in contexts where they are not allowed to work. The human rights approach, believes in the intrinsic and instrumental role of education and also in the basic right of all to education. The contribution of rights approach to education is evident in the discourse of international agencies and in the development of millennium Development goals, whereby countries were held accountable for focusing on education in their countries. However, the problem with rights based approach is that at times it may just be rhetorical. After the governments have stated the right to education they may not move beyond it, while people may shift

the responsibility to the government seeing rights as legal rights rather than recognizing their own moral right to take charge of the education of their children.

Lesson 6

Education as Capability; Limitations of Capability Approach; Three models compared

According to Robeyns (2006) the ultimate goal of development is expanding people's capabilities, including the capabilities of education. Rights are an instrument reaching that goal. Having access to education and being knowledgeable allows a person to prosper. It enables people to help others as well as themselves, and contribute to democratic freedom and the overall good of society as a whole.

Education as capabilities demands for equity, not just equality.

Capability approach has its limitations. It has a loose framework therefore is difficult to apply. It needs more experimentation in actual context. It is economic, fragmented and exclusively instrumentalistic. This approach is less known and less appealing as compared to Human Capital approach. While *Human Capital approach* narrows the instrumental roles of education, and *Rights based approach* focuses on intrinsic role of education, the *Capability approach* emphasizes both. Rights and capabilities are in principle multi-dimensional and comprehensive models, and can therefore account for the intrinsic and non-economic roles that education plays.

Quantitative and Qualitative Approaches in CE; Commitment to nomothetic reasoning. *Qualitative and Quantitative approaches* are different approaches for gathering and reporting information. *Quantitative approach* relies on numerical data and gives statistical analysis. It intends to describe relationship between variables and predict consequences. It includes descriptive studies, correlational research, causal comparative research and experimental studies. Whereas *Qualitative approach* relies on meaning, context, concept, description and settings. It intends to describe and interpret a phenomenon observed in its natural setting.

Primary preoccupation of *quantitative approach* is *Establishing Causality*. There are 3 criteria of establishing causality: *temporal precedent; covariation of cause and effect; and no plausible alternative explanations*. It is committed to nomothetic reasoning, and attempts to establish general laws and generalizations.

Lesson 7

Theory testing; Structured approach.

Quantitative studies are closely related to theory testing and enhancing. It investigates cause-effect relationships and provides clear and unambiguous results. These use structured modes to maintain the focus on particular concept/s.

Defining Qualitative Approach & purpose; Capturing process; Commitment to ideographic approach.

Qualitative studies deal with in-depth understanding of human behavior and challenge objectivity. These studies provide *emic* and empathetic understanding. Qualitative studies promote openness and focus on findings based on real-world setting. They refuse generalization and provide a holistic understanding on an individual. These studies are inductive and exploratory, and do not intend to testify or validate a theory.

Lesson 8

Flexibility in Approach & Researcher's Role. Literacy.

Qualitative methods are very flexible and provide maximum interaction between the subject and the researcher. Researchers are seen as an *instrument* and are supposed to eliminate/reduce the risk of personal bias and own assumptions.

Literacy. A prominent concern of CE researcher. Quantitative studies seek accurate method to measure literacy and often define it from the outset. However qualitative studies look for insight into what literacy means to literate themselves. Both approaches differently address questions regarding acquisition and consequences of literacy.

Lesson 9

Literacy in Pakistan. Comparing Places.

PSLM Survey 2011-12 conducted in Pakistan revealed literacy rate difference between urban and rural areas. This survey indicated difference among provinces, and also gender difference in literacy acquisition.

Comparing Places. Comparative studies are locational in nature; geographical entities offer variety of foci for comparative inquiry in education. *Bray and Thomas* have given three dimensional approach to categorizing various foci: i. Geographical/locational ii. Non-locational demographic

iii. Aspect of education and of society

Lesson 10

Levels of Geographic Entities as Unit of Analysis

Geographical dimension comprises 7 levels, from the highest level of continents to the lowest level of individuals.

Level 1: world regions/continents. At this level, nature of educational provisions in different regions; shared characteristics that differentiate them and their unifying characteristics are investigated. Here researcher faces the challenges of convincing readers that these characteristics are truly shared by region members; and these are educationally important.

Level 2: Country. It is a dominant unit of analysis, synonymous to *Nation* and *State*. Greater regional variations are an important issue at this level. International comparison may involve both qualitative and quantitative studies. Although obtaining systematically comparable & equivalent is a challenge.

Lesson 11

Levels of Geographic Entities

Level 3: Research across states/provinces. High level of decentralization in many countries, and regional disparities makes this level significant.

Level 4: District as a unit of analysis. Districts are administrative units under province/state, which includes both urban and rural areas. It becomes useful in areas where significant intra-provincial variation is evident.

Level 5: Research across schools. It focuses specific communities comprising schools to investigate institutional culture. These studies focus entities within same country, province or district. Crossnational studies may be taken within same state

Level 6: Research across classrooms. This level is not prominent in traditional CE literature due to belated discovery of importance of actual classroom practice and belated development of pedagogy.

Lesson 12

Individuals as Unit of Analysis; Comparison Across Levels. Comparing Systems

Level 7: Individuals as unit of analysis. The lowest level, most likely to emphasize psychology. It includes both the personalized reports and the impersonal large-scale surveys.

Comparison Across Levels. Multilevel comparative analysis provides more complete and balanced understanding. Its dominant form is principally confined to individual. Classroom and school level. While identifying parameters of comparability, researcher must be sensitive to the axis of variation. *Comparing Education Systems.* Education systems are the institutions that operate together within a common legal and administrative framework. Co-existence of multiple education systems within countries creates room for intra-national as well as cross-national comparisons. Presenting generalities as if there is a unified education system is misleading.

Lesson13

Education Systems in China; UK: Wales, Scotland, Ireland; Pakistan

In *Macao (China)*, 4 parallel systems were found: Portuguese, Anglo-Saxon (imported from Hong Kong), Chinese traditional and People's Republic of China. Number of schooling years and medium of instructions varied in these systems. Only 2 categories, public and private, were found. Mostly teachers got training from other places.

In *UK* there had never been a unified single education system due to diverse historical roots and contemporary shapes. *Wales* has separate body of public examination implying underpinned differences in curriculum emphases. 'Welsh' was compulsory language in all state-funded schools. *Scotland* had a completely different education system, developed before union with UK. Their schooling years, examination system, inspection system, regulation on maximum class size and nature of governance were different from those of England. *Ireland's* national elementary education system was developed in 1830's, later on the main part of Ireland was separated from UK in 1920. North Ireland, that remained part of UK is closer to systems of England and Wales, with significant differences. Systems in these 4 territories show interdependency and common features in broad institutional structures, however similar functions performing differently and similar institutions and structures performing different function due to cultural differences and divergence in priorities and structures.

In *Pakistan* tow two main sectors, public and private are operational. National education policies intend to promote literacy rate, capacity building and educational facilities however systems are facing issues like lack of planning, social constraints, gender gap, war on terror, funding and technical education. These issues can be solved through implementation of national education policy, uniform curriculum, collaborative efforts, training, federal government and provinces cooperating with each other, and through effective use of resources.

Lesson 14

Languages in Education & Social Capital

Education contributes towards social capital and shifts focus from access to equity in learning outcomes. Languages in education play pivotal roles in establishing and maintaining of social capital however these can also trigger inequality in multiple dimensions, can restrict relationship and limit participation. Especially English language in our context intensifies deprivation of the marginalized. *Social capital* can be defined as a resource that facilitates access to certain privileges. It may be economic, social or cultural that positions the individuals in hierarchical social space. Social capital is essentially class-based and exclusive. Language plays crucial role in reproduction of social relationship and enables cross-cultural communication but on the other hand it also promotes dichotomy between “Urdu-medium” vs. “English-medium”. English is seen as a gate keeping to imagined community whereas Urdu is seen as less appreciated as a mean to bridging capital.

Lesson 15

Bonding Capital. Implications of Language in Education.

Urdu is a medium of bonding with close friends and family that ensures clarity in mutual understanding. Despite of being national identity, it gives feeling of being let down. English seems to intersect with existing bonds and erode them. Its widespread is enough to dismiss local language.

Bonding capital is more useful to the English-medium as compared to Urdu-medium. Marginalization of a majority is compelling and worrying factor.

Comparing Systems

It is a prominent unit of analysis that includes a system's comparison with country, sub-national and cross-national systems. It helps understanding differences and examining diversity. Role and impact of regulatory mechanism, power distribution, roles of external examination, language policies and ideologies are major themes of investigation while comparing systems.

Tracking is a process of grouping students according to their academic ability; usually at elementary school. It intends to improve efficiency by tailoring curricula to students' needs. Tracking Comparison of German and American schools revealed that German schools are more flexible in allowing up or downgrade after grade 9/10; selection is based of parents and educational authorities “perceived” ability. Tracking, that was started in USA schools was later on strongly rejected by their supreme court stating it as provision of *unequal access* to educational opportunities. *A nation at risk* and *No Child Left Behind (NCLB)* movements played important role in this regard and ultimately replaced tracking with less rigid system *curriculum Differentiation*.

Issues in tracking system. Lower study groups are disproportionately filled with low socio-economic status and minority students that indicates status-based sorting instead of ability grouping. Low achievers suffer as they remain unchallenged, and are offered *highly* repetitive curriculum and inexperienced or unqualified teachers.

Lesson 16

Comparing Times

Time as a unit of comparison includes bot personal time and historical time. At macro level it addresses the significance of differences in ‘development time’ while emphasizing different ‘presents’. Perceptions of present educational situation and/or future educational prospects as well as past educational achievements are open to compare. CE is a multidimensional process, grounded in local histories; whereas historical approaches provide lenses or frameworks to compare, explain & interpret historical phenomena. Majority of historians adopt a-theoretical position while others use eclectic theoretical

stance to the topic under investigation. Some major perspectives are: dependency theory, poststructuralism, postmodernism, post-colonialism, neoliberalism, Marxism/critical theory, and feminism.

Marxism/critical theory emphasizes economic factors and stresses influence of social class on policy and practice. This theory is criticized for the air of inevitability it produces.

Feminism intends to define, establish and achieve equal political, economic, cultural and social rights for women. It's been criticized for exaggeration of male chauvinism or female exploitation in situations where gender was not the main issue.

Poststructuralist theory encourages subjective 'deconstructions' of policy and/or practice being at odds with historical statement of intention. Its closely related theory *Postmodernism* provides salutary corrective to rigidly linear and exclusively reasoned-based views. It is a flexible and multidimensional approach that provides impressionistic appreciation of realities.

Post-colonialism theory emphasizes evils of colonialism and challenges dated assumptions about alleged culture and racial superiority. However, it is more interested in political correctness than in actual evidence.

Lesson 17

Neoliberal Approach; Characteristics of historical analysis; Strategies and problems in comparing times. Comparing race, class, gender.

Neoliberalism seeks historical evidence and recommends minimizing government interference in education. It recognizes positive values of the operation of market forces.

Covering laws, colligation and concern for evidence are major characteristics of historical analyses. Nation/state were default units of comparison but queried by recent researchers. Alternative units may be cultures, values, curricula, policies, ways of learning, types of schools, communities, resources and facilities etc. Analysis can be diachronic, Synchronic or Quasi-synchronic. Some major problems in comparing times are related to: accessibility, nature, variety of sources and reliability of evidence; interpretation; and periodization.

Comparing race, class, gender. The most significant categories underpinning educational inequality and inequity. Their significance is highly dependent on the social context. Race & class have very complex interplay; while gender plays important role in shaping educational expectations. Without conscious consideration to these, policies and programs are unlikely to succeed. There is debate among researchers whether or not should the race be considered as serious category of comparison? Some argue that race is just an illusion, while others argue that it is an impacting factor on individual opportunities.

Lesson 18

Comparing Race in CE.

In USA, SAT was originally designed to perpetuate that immigrants and Black are intellectually inferior for genetic reasons. Impact of genetic vs. environmental factors is still controversial to date. CE compares resource distribution across races and other contextual issues impacting educational equity. It also compares race across times and places. *Class* is commonly determined through occupation, education, income and wealth. CE conceives it mostly as family background. Class-based comparison considers national, regional or local context. Teacher-student interaction may indicate social reproduction of inequality. Curricula also need to be examined to content suggesting social inequality. Academic achievements of students from different socio-economic background can be examined.

Exploring Gender.

Gender equality in educational access and achievement has improved dramatically although disparity still exists. Research on parity of educational access can analyze enrolment and attendance; parity change over time within society; and comparison of different countries. Gender is socially constructed differently across racial and class divides within a society. *Quantitative research* can examine attainment rate across different schools, cities or countries while *Qualitative research* compares experiences of different groups within a society, and elaborates the extent to which girls can attain 'good quality education'.

Lesson 19

Gender Equality and Parity.

Gender equality demands for equal educational opportunities for girls and boys while gender parity necessitates *achieving equal participation* of girls and boys in all forms of education. Human rights in education provide states with clear obligation to progressively realize the right to education and gender equality in and through education. Gender parity demands for equal representation in number. It reflects formal equality in recognizing advantage positions and constraints of both genders; mechanism of ensuring equality and commitment to non-discrimination.

Gender ideologies are often masked as culture, encrypted in institutions and unlikely to be removed unless clear efforts are made to rethink and rewrite the basic rules. Pervasiveness of social norm can lead women to internalize negative self-perceptions. As a result, gender inequalities are perpetuated rather than challenged. Duncan Wilson (2003) has given three-fold characterization of right in education: Rights to education, Rights within education, and Rights through education. Right to education refers to access, participation and survival. Rights within education deals with gender-aware educational environment, processes and outcomes. While rights through education ensures meaningful educational outcomes that link educational equality with gender justice; and strengthens gender equality outside the sphere of education. Some important indicators for rights to education are enrollment, survival & dropout rate, attendance, year repetition rate, literacy level, and number of teachers from both genders.

Lesson 20

Gender Parity Indices and Issues with them

Gender parity indices for rights to education are not holistic, they partially illuminate rights taking place within education while no indicator is given for rights through education. They are unable to conform substantive definition of equality. These cannot answer "why" and "what factors" questions in context of change. These may present apparent progress and hide real patterns of discrimination and disadvantage.

Parity indicators to rights within education do not tell about process of change, neither do they concentrate upon actual experience of schooling. Focus needs to shift to elements of process. Key markers include learning content, teaching method & process, subject choice, learning outcomes, gender balance within classroom, teachers' qualification and level of training etc.

Gender inequalities within education are likely to reinforce wider social inequalities, reproduce gender differentiation and legitimize them in social discourse and practice. Therefore, focus on rights through education becomes pertinent as we witness inequalities women face in public arena. Indicators for these rights include employment across different levels of education by gender, gender differential in wages, political participation etc. Sustainable gender equality entails tackling gender ideologies that constrain positive freedom and put women back into the picture as right-bearers. In context of contemporary schooling in England, less restricted environment was observed especially for girls. Although girls' performance was remarkably increased, their average hourly pay is still less than that of men. Women still face barriers to promotions; and disproportionate responsibilities. Now main gender issue there, is boys' underachievement.

Lesson 21

Boys' Underachievement and Gendered Identities. Failing Schools. Stories about Girls. As mentioned earlier, study indicated that boys' underachievement had become main gender issue in England. These findings created a moral panic in interests of hegemonic masculinity that triggered anti-feminist response by government and media. Concern for *white boys* was given mainstream approval while *failing boys* were identified as public burden. Boys' *laddish* attitudes were considered significant contributory factor in Britain's economic decline. There were three masculinist discourses produced in response to the panic about boys: i. The "poor boy" discourse ii. The "boys will be boys" discourse
iii. The "failing school" discourse

In the first discourse, boys were seen to be *lost* or *damaged* or *under-fathered*; and the blame is placed on women: women teachers or mothers or feminists or all three. Girls' success was seen as a threat to boys. Second discourse is biologically based, essentialist discourse. This discourse leads to recommendations that, girls may be utilized to *police, teach, control and civilize* the boys instead of being seen as threat. Evidence suggests that girls acted as surrogate mothers, providing for boys nurturing and caring role. Segregated classes, and male teaching for boys were also tried but no encouraging results were attained. The third (failing school) discourse buys into the technician and managerialist discourse, primary reference point is competitiveness in global economy; and the primary method is constant testing. This discourse of *winners* and *losers* had no evidence of positive effect on working class and/or certain race.

Based on Diane Reay's (2001) work, four gender discourses for girls' identity were identified in England.

i. Spice girls ii. Nice girls

iii. Girlies

iv. Tomboys

These identities were available in a fluid way, while some girls maintained one position throughout, others move back and forth between different positions.

Lesson 22

Damaging Masculinities. The way Forward.

The stories about gender identities help us understand the gendered dimensions to inequalities of schooling, and highlight how discourses damage and constrain boys and girls. Though girls still have to achieve much more in regard to gendered identity but at least gender regimes for them are more multiple, complex and contested; which might open up some opportunities. However, masculinities available to boys are few, constricted and damaging both to themselves and to others. Therefore, schools need to focus on masculinity as an issue itself; and on construction and performance of femininity. Setting up a plan for addressing gendered identities issue is not an easy task; rather it will be 'complicated and even messy' enterprise. Gaby Weiner's guidelines would be helpful for developing such practice.

Women and Science Careers.

Women are under-represented in science, technology, engineering and mathematics (STEM) majors and careers in most industrialized countries around the world. It is said that the *leaky pipeline* of STEM leaks students at various stages, and women leak out more than men do. Many explanations for this imbalance have been given, few have been rejected due to lack of evidence.

of evidence whereas the valid causes of this imbalance need a serious consideration. Studies have rejected assumptions of girls' inferior intellectual abilities or lack of preparation etc. Qualitative studies established that girls enjoy science, and are keen in life science as opposed to physical science due to *their desire to care for people or animal*, however they tend to dislike dissection. Among reasons for their negative feeling about science subjects, one important reason is that they notice bias in textbooks and TV programs where very few scientists are depicted as female.

Lesson 23

Role Models; Curriculum material and design; Pedagogy; Chilly environment; Pressure to fill gender roles; The Masculine worldview of science

Male dominance in the field of science and engineering in most industrialized countries and insufficient role models for female students in field has affected perception about science subjects.

Low proportion of women send message that this discipline is probably *unattractive* for the girls. Moreover, practicing female scientists are also unable to provide an example of balancing career and family. Furthermore, sex bias in wordings, example illustrations and photographs in science textbooks also contributes in women's lack of interest. Teaching pedagogy and stereotype that *science is a boys' subject* is another main hindrance for girls. It is often noted that boys' work is constantly rated better in *scientific accuracy, organization of ideas and conciseness* while girls' papers are rated higher than boys' on 'neatness'. Despite of high achievements in exit exams, girls still encounter teachers' sexist attitude. Even at university level they feel isolated, intimidated, and loss in self-confidence. Climate for them can be merely cool or even hostile.

Recent scientists have rejected the past notions of inferior mental capability of Blacks and women. Feminist critics of science claim that science is inherently masculine in its structure, epistemology and methodology; it should be done from the women perspective.

Lesson 24

Soluble model; Intersection of race, class and gender in CE.

To make science more inclusive for women, we need to support women already in science; ensure equal access to the teacher and classroom resources; emphasize science's contributions in improving quality of life; use cooperative groups in class, avoid sex-based division; eliminate everything that promotes gender inequality; increase depth and reduce breadth in introductory courses; and openly acknowledge political nature of scientific inquiry.

Intersection of race, class and gender is very important to understand as it produces tensions, contradictions and discontinuities in everyday lives.

Student attachment and academic achievement: Role of class and ethnicity.

Attachment and engagement are important yet under-studied aspects. Belongingness & social membership has important consequences in adolescents' life. It reduces school dropouts, and control behavior problems and delinquencies. Attachment is an affective component that gives feeling of being embedded in, while attachment is a behavioral component that refers to participation and enthusiasm. Studies revealed that impact of racial-ethnic differences on attachment varies in different schools; however, girls tend to be more engaged in class. Increased proportion of racial-ethnic groups may promote additional challenges; having more teachers of own group can address this issue. Socioeconomic composition of school and academic atmosphere also influence attachment and engagement.

Lesson 25

Study across ethnic groups. Cast and social exclusion in Asia.

Racial-ethnic composition of school predicts attachment, but not engagement. Therefore, these two should be treated as separate constructs.

Caste is intertwined with class, culture, ethnicity, religion and language; and is powerful stratifying dimension. It ensures social exclusion of stigmatized groups; benefits high-castes. In South Asian countries: India, Nepal and Pakistan caste identities play major role in educational access and school performance. Caste correlating with land ownership and occupational specialization leads to multiple disadvantages; and limits access to social services and political empowerment. Education leads to achievement of other capabilities too. If not equitable, it can institutionalize inequality. Comparative study of exclusionary mechanism in different districts of Punjab highlights active exclusionary processes in land-owning areas, whereas less inequality was evident in small land-holding region where people are hard-pressed to find sources of income.

MAS ALL
ROUNDER

FOR ANY VU STUDY RELATED PROBLEM CONTACT

US: 03024731376

All vu data (midterm final term+ assignments +quiz
+ GDB +) and also WAQAR + MOAZ +TEAM HADI +
VU TOPPER RM AND ALL OTHER STUDENTS FILES
VISIT

<https://masallrounder.blogspot.com/>

ROUNDER