An Examination of Utilization of Learner-Centered Teaching Strategies in Selected Secondary Schools: A Case Study of Juba City

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Abstract

Learner-centered teaching is a teaching approach that is increasingly being encouraged globally. This study aims to find out how the classroom environment influences the implementation of learner-centered teaching strategies. The study was guided by one research question that sought to identify learner-centered teaching styles applied in selected secondary schools in Juba city. The study adopted a qualitative approach using structured observations through administering classroom observations in four purposefully selected schools. The principle intend of observations was to examine learner-centered instructional strategies employed and learner-centered classroom management practices. The researcher paid attention to the subjects observed, and the general physical classroom seating arrangement. Findings demonstrate that all the classrooms observed were organized; in rows with squeezed seating; affixed facing the podium at the front of the room. The lesson plan presented was established in a format of teacher-centered lesson plan, limited teaching learning materials, lack of textbooks, the position of the teacher is consistently maintained in front of the class at the event of lesson delivery and majority of the classes observed hold limited space. Field data denote frequent utilization of questions and answers followed by activity, exercise, problem based, solving problems, real world scenarios then brainstorming. Inquiry based learning, case studies, group discussions and cooperative learning were occasionally employed. While partner work, project work and learning

by making were rarely employed. On the other hand, lecturing and writing notes as one of the teacher-centered modes of instruction is consistently employed. Results deduced application of learner-centered teaching strategies despite the dominant use of lecture and writing notes

Keywords: *Learner-centered, learner-centered strategies, learner-centered classroom management, 2014 Curriculum Framework, classroom observation.*

1. Introduction

Learner-centered instruction is a learning approach in which learners independently or with assistance from colleagues hold a vital role in shaping, managing, and judging their learning (Jacobs & Renandya, 2019). In a study Westwood and Westwood (2008) pointed that learner-centered instructional strategies include activity based learning, guided discovery, inquiry based, problem based, project based, and situated learning altogether bear analogous principles and practices. So far the basis for these approaches implies active engagement of learners in the learning proceeding, internal motivation, the topics discussed ought to be compelling, appropriate, and the learning experiences must be carried in real world activity where learner's real knowledge and skills are mandatory and utilized (Westwood & Westwood, 2008). However, learner-centered instructional strategies permit learners to diligently engage in the process of instruction and learning as a consequence strengthens assertiveness and realization, accordingly it's significant that instructors in secondary schools continuously employ learner-centered styles in the course of their teaching plenary (Emmanuel & Manjale Ngussa, 2021). Similarly most learner-centered instructional strategies centres around knowledge creation, buildup of constructive learning methods and assimilation of the procedure through which learning takes place (Westwood & Westwood, 2008).

Contextually South Sudan launched and implemented a competency based curriculum in 2018 to be implemented from preschool up to secondary level; The 2014 National curriculum framework philosophical approach to learning is based on constructivist approach. The framework emphasizes learning to be extended beyond textbooks from teacher directed lessons (teacher centered) to learner's active engagement. Teaching and learning strategies be learner-centered availing the learner's opportunity for active engagement with their learning rooted firmly in learner's experience. Since inception of the curriculum in 2018, there exist limited scientific data disposing the accomplishment of learner-centered teaching in secondary schools in Juba city therefore, this gap had activated the researchers to conduct critical investigation to establish the findings associated with classroom environment practices and learner-centered teaching strategies employed in selected secondary schools within Juba city. Therefore, the purpose of this study was to explore learner-centered teaching strategies employed in secondary schools in Juba city, to respond to the following matter the following research question was formulated;

1) What are the learner-centered instructional strategies existent in secondary schools in Juba city South Sudan?

2. Literature Review

2.1 Theoretical Foundation

Theoretically this study was based on constructivism theory, yet constructivism is a learning theory that holds various paradigms (Gingell & Winch, 2008). Social constructivism is one of the paradigms of constructivism founded by Lev Vygotsky (Westwood & Westwood, 2008). Thus the present study employed social constructivism learning theory as its lens on account that the theory's main assumption is knowledge construction owing to the fact that the theory clearly illustrates instructional methods that are interactive involving peer collaboration. Based on the theory Vygotsky pointed out that learning can only materialize when there are collaborative discussions, social participatory activities as well as grasping the historical context of knowledge (Mohammed & Kinyó, 2020). Vygotsky believes that much of a child's learning occurs through interactions within an environment which to an extent determines what the child manifests (Sternberg, 2004). This implies that learning can only take place when there are interactive activities among learners.

2.2 Learner-Centered Teaching Strategies

An extensive literature have been undertaken to examine learner-centered teaching strategies incorporating in studies by various scholars including a study by Mavumba and Mtitu (2020) who examined the applications of learner-centered approach in mathematics, findings indicate that teachers employ both teacher-centered and learner-centered teaching strategies. Classroom observation reveal the use of lecture, question, and answer then think pair share. Group discussions, deliberating learning, inquisition learning, and disclosure learning were seldom applied. Another study carried by Nsengimana et al. (2017) investigated how Rwandan secondary school instructors of mathematics and science acknowledged and implemented learner-centered pedagogy. Findings revealed consistent use of question and answer, group discussion, exercise, or experimentation in teaching science and mathematics at different levels based on the subject taught. In a study Cain (2020) explored the utilization of learner-centered teaching approaches by secondary school teachers. Results demonstrate problem-based learning, discussion, learner's varieties, tasks, and the use of electronic materials. Consequently inquisition-based learning permit learners to be involved in discovering, questioning, brainstorming, and deliberating to intensify knowledge (Johnson & Cuevas, 2016). Moreover Warnich and Meyer (2013) administered a study that examined the extent to which history and social science trainee teachers adjust from traditional teacher-centered to learner-centered instructional and assessment practices. Findings revealed regular use of inquiry learning, group tasks, panel discussions and broad conversation**.** Inquiry learning involves project work. Finally Emmanuel and Manjale Ngussa (2021) carried a study on learner-centered teaching strategies employed in secondary schools of Arumeru district in Tanzania; Result illustrate learner-centered teaching strategies employed inform of questioning, self –learning through questioning, preparation and delivery of presentations, response to challenging task and independent activity on textbooks or worksheets.

3. Research Methodology

Examination of learner-centered instructional strategies employed in Secondary Schools in Juba city is part of a doctoral study that place emphasis upon the nature of the physical classroom environment on account of utilizing learner-centered practices in secondary schools within Juba city. The philosophical approach to this study was based on the interpretivist approach. Interpretivist believed that the cornerstone for generating knowledge is through social interactions (O'donoghue, 2006). What counts as knowledge can only be obtained through researcher's interaction with study subjects either through living with them or observing study subjects. Hence investigators employed classroom observations.

The study employed qualitative approach to gather data through classroom observations. Qualitative approach to data collection was favored owing to its significance of precise fruitful description of complicated processes (Guest et al., 2013).

3.1 Research Design

The investigator employed a case study design involving 4 schools. A case study is a research approach that entails the examination of an extensive number of meager cases with an assumption of acquiring in-depth information through the course of the study (Bacon-Shone, 2015). The researcher employed case study design to gather in-depth information about the general physical classroom setup, learner-centered teaching strategies as well as classroom management strategies employed.

3.2 Geographical Scope

The geographical scope for the study is Juba city. According to South Sudan Education Statistics 2015 for Central Equatoria (MoEST, 2015) Juba county host the largest number of secondary schools both public and private compared to other counties in South Sudan. This demonstrates the basis for selecting Juba city as the geographical scope for the study.

3.3 Sample Size and Sampling Technique.

School samples were selected purposefully in relation to schools that contain all the four streams from senior one through senior four. The total number of school samples were 04, 02 governments and 02 private within the vicinity of Juba city. Both private and public schools were involved to ascertain representation. The sample size for study subjects was 71 selected purposefully with the aim of observing them while teaching. Both school samples and study subjects was computed through Yamane 1967.

3.4 Data Collection Instrument

The instrument employed for data gathering was observation checklist. A checklist comprises of prearranged records of behaviors or activities that constitute observers focal point of attention. It's used for documenting information such as behaviors, skills and supplemental events (Efron & Ravid, 2013). The observation checklist embodies general information such as the subject

observed, class size, then physical classroom setup which comprise of physical arrangement, teacher's preparedness, degree of classroom flexibility, teachers position, availability of light, lastly learner-centered teaching strategies and learner-centered classroom management practices applied.

3.5 Data Collection Procedure

Observation is the collection of data available in the actual situation captured first-hand, it involves what people do in the situation as it is opposed to the researcher about what they do (Bacon-Shone, 2015). The researcher conducted non-participant structured observation using a checklist to observe physical classroom setup, learner-centered teaching strategies, and classroom management practices. The observer embraces a docile non-interfering role easily by listing occurrences of the elements being researched. Observations were employed owing to the fact that observations provides the opportunity to collect vital data from basically occurring collective settings (Cohen et al., 2011). In addition, any educational research on the nature of instruction would not be complete without observing and examining what goes on in the actual educational setting.

Through prior arrangements with a teacher, a 40-80 minutes' lesson of English language, English literature, French language, Christian Religious Education (CRE), Physics, Biology, Chemistry, Citizenship, Mathematics, History, Geography, Commerce, Accounting, Economics, ICT, Arabic and Agriculture were observed with the help of an observation checklist. The principle intend of the observations was to examine learner-centered instructional strategies and learner-centered classroom management practices employed. The researcher paid attention to the class size, subject observed, number of years spent by the participant teaching, the general physical classroom setting and seating arrangement.

3.6 Data Analysis

Data from structured observations can be summed up or tally frequencies concerning individuals, clusters, classes, occurrences, tasks, or practices. The data will later be transformed into numbers then calculated in form of frequencies (Cohen et al, 2018). Because numerical data assist researchers in implementing contrast between contexts and situations and allow frequencies, samples, and tendencies to be easily computed (Cohen et al., 2018). After observing 71 lessons in the four sampled schools, all the 71 observation checklist were collected coded and entered in to the SPSS then analyzed quantitatively using descriptive statistics inform of frequencies and percentages.

3.7 Data quality

Observations can be validated through piloting the observation checklist to avail guarantee that observational items are suitable, complete, distinct, clear and useful to achieve motive (Cohen et al., 2018). The validity of observation checklist was established through conducting a pilot test in a setting analogous to the study setting with groups similar to the population (teachers and

learners) to check whether all observational items are included, suitable, useful and clear in the observational checklist.

3.8 Ethical Considerations

This study adhered to ethical issues. The researcher obtained a clearance letter from Research Ethical Committee of Mbarara University of Science and Technology (MUST REC) on 6th March 2024 under the ethical clearance No. must-2023-1125 to formalized this study. Then, permission to gather data was finalized by the Dean Faculty of Science. Access to targeted schools was granted by the state Ministry of General Education and Instruction, Central Equatoria State, Republic of South Sudan through an official letter dated 3rd April addressed to head teachers of the selected schools. Consent was obtained from respondents, pseudo names for anonymity, and participation was purely free will.

4. Results

This section presents the general characteristics of the observation. These included class level, class size, date of observation, subjects observed, and number of years spent by the participant in teaching profession. All the observations were conducted between May to July 2024.

Table1: Class level

	Class Grade	Frequency	Percent	Valid Percent
	Senior 1	20	28.2	29.0
	Senior 2	14	19.7	20.3
	Senior 3	14	19.7	20.3
	Senior 4	21	29.6	30.4
	Total	69	97.2	100.0
Missing	System	2	2.8	
Total		71	100.0	

Source: Field data 2024

Table 1 above demonstrates a comprehensive record of classrooms observed in accordance with their grades from senior 1through senior 4. Findings demonstrate that majority of observations 21 (30.4%) were conducted in senior 4, followed by 20(29%) in senior 1 and minority number of observations 14(20.3%) were conducted in senior 2 and 3; This implies that lesson observations administered in various classes along the different grades in secondary school were ably represented.

Table2: Class size

No. of students	Frequency	Percent	Valid Percent
50-69 students	26	36.6	37.1
70-89 students	18	25.4	25.7
80-100 students	8	11.3	11.4
20-49 students	18	25.4	25.7
	70	98.6	100.0
Missing	1	1.4	
Total	71	100.0	

Source: Field data 2024

Table 2 above illustrates the range of class size and frequency of observation; 26 (37.1%) of all the classrooms observed hold 50-69 learners, followed by 18 (25.7%) holding learners between the range of 70-89 then 20-49. The highest class size range between 80-100 less 8(11.4) observation occurrence. This implies that the highest class size falls within the range of 80 - 100 and the lowest class size range between 20 - 49. Majority of observations conducted indicate large class size range.

Table3: **Subjects Observed**

Subjects	Frequency	Percentage	Valid Percent
Chemistry	5	7.0	7.0
History	4	5.6	5.6
Geography	4	5.6	5.6
Citizenship	5	7.0	7.0
French language	4	5.6	5.6
Physics	3	4.2	4.2
Biology	4	5.6	5.6
ICT	4	5.6	5.6
English Literature	3	4.2	4.2
English	6	8.5	8.5
Mathematics	8	11.3	11.3
CRE	6	8.5	8.5
Agriculture	3	4.2	4.2
Accounting	4	5.6	5.6
Economics	2	2.8	2.8
Arabic	2	2.8	2.8
Commerce	2	2.8	2.8
Total	71	100.0	100.0

Source: Field data 2024

Table 3 above displays the subjects observed and their occurrence. Subjects observed were mathematics 8(11.3%), followed by English and CRE 6(8.5%) then chemistry and citizenship 5(7%). Subjects with moderate frequency of 4(5.6%) observation occurrence include history, geography, French, biology, ICT, and accounts. Physics, English literature and agriculture assume 3(4.2%) occurrences then Arabic, commerce, economics observed 2(2.8%) have very low occurrence.

Table 4: Years of experience spent by participants

No. of years in profession	Frequency	Percent	Valid Percent
2-5 years	23	32.4	32.4
6-10 years	19	26.8	26.8
11-15 years	15	21.1	21.1
16-20 years	3	4.2	4.2
20 and above	11	15.5	15.5
Total	71	100.0	100.0

Source: Field data.

Table 4 above illustrates the years of teaching experience spent by participants; large majority of participant 23(32.4%) have 2-5 years of teaching experience, followed by 19(26.8%) with 6-10 years of teaching, then 15(21.1%) with 11-20 years, 11(15.5%) with 20 years and above teaching then lastly 3(4.2%) with 16-20 years of teaching constitute the least number of participants. It can be deduced that most of the participants observed were competent because of the number of years spent in the field.

4.2 Section two of the checklist include description of the physical classroom setting with focus on infrastructural arrangement, availability of light, classroom arrangement, teacher's position during instruction, degree of classroom arrangement, teaching and learning resources available then teachers preparedness on account of the lesson plan developed.

Table 5: General Physical Classroom Setting

Property	Description	Frequency	Percentage
Physical infrastructure	Semi-structured	55	77.5
	Well structured	16	22.5
Lighting	Available	34	47.9
	Adequate	32	45.1
	Inadequate	5	7.0
Classroom Arrangement	Rows squeezed	71	100.0
Teacher's position	In front	71	100.0
Degree of classroom flexibility	Inflexible	69	97.2
	Flexible	2	2.8
Teaching and learning resources available	BB/Chalk/Textbook	71	100.0

Source: Field Data 2024

Table 5 above comprise of traits describing the classroom setting. Based on the result 55(77.5%) of the observations indicate that classrooms were partly arranged, while 16(22.5%) extensively arranged. In addition, the data demonstrate the degree of luminosity inside the classroom, findings indicate that 34(47.9%) of the classrooms possess light, 32(45.1%) intense illumination and 5(7%) of the classrooms possess light with low intensity. All the observations demonstrate that seats were arranged inform of ranked rows and squeezed leading to the focal point, where the position of the teacher holds forth in front of the class during lesson delivery. Furthermore, the data describes the degree of classroom flexibility examined on the account whether the classroom can allow rearrangement. 69(97%) of the investigation indicate that the physical state of the class is inflexible and cannot permit rearrangement while 2(2.8%) pointed flexible and can allow rearrangement. Lastly, all the observations demonstrate that the only teaching and learning materials utilized were blackboard, pieces of chalks and teacher’s/ learners textbook.

Table 6: Lesson plan developed

Lesson plan format.		Frequency	Percent	Valid Percent
	Teacher-centered	70	98.6	100.0
Missing	System	1	1.4	
Total		71	100.0	

Source: Field data 2024

Observations involved examination of the level of teacher's preparedness on account of the lesson plan developed. As can be noted from table 6 above, all the lesson plans presented edify teacher-centered lesson plan format.

4.3 Section three of the checklist covers information on learner-centered teaching strategies and classroom management practices employed during lesson delivery.

Table 7: Teaching Strategies Identified

Learner-centered teaching Strategies	Responses	
	Frequency	Percentage
Question and Answers	59	83.09%
Cooperative learning	2	2.8%
Partner work	1	1.4%
Project based learning	1	1.4%
Activities	31	43.7%
Case studies	5	7.0%
Problem- based	24	33.8%
Real world scenario	13	18.3%
Solving problems	16	22.5%
Learners formulate their questions (inquiry based learning)	6	8.4%
Learning by making	1	1.4%
Brainstorming	11	15.4%
Exercise	25	35.2%
Group discussion	3	4.2%
Lecturing and writing notes	54	76.0%
Total	252	100.0%

Source: Field data 2024

Table 7 above demonstrates utilization of learner-centered teaching strategies established while administering classroom observations displayed inform of frequencies and percentages where

59(83.09%) of the lessons observed indicate frequent utilization of questions and answers, 31(43%) activity based, 25(35.2%) exercise, 24(33.8%) problem based, 16(22.5%) solving problems, 13(18.3%) real world scenarios, then 11(115.4%) brainstorming. Followed by 6(8.4%) inquiry based learning, 5(7.0%) case studies, 3(4.2%) group discussions, and 2(2.8%) cooperative learning. Lastly learner-centered strategies with minimal application of 1(1.4%) is partner work, project work and learning by making. On the other hand, lecturing and writing notes as one of the teacher-centered modes of instruction is illustrated with an occurrence of 54 (76. 0%).

This denotes an extensive utilization of lecturing and writing notes an implication of application of teacher centered mode of instruction .

Table 8: Classroom Management practices employed

Classroom management practices applied	Responses	
	N	Percent
Class room authority is entirely exercised by the teacher	71	100 %
Teachers and learners agree on learning activities	1	1.4%
The teachers and learners agree on rules for managing the class	2	2.8%
The teacher is the final decision maker concerning the nature of activities done during learning	71	100 %
Total	145	100.0%

Source: Field data 2024

Table 8 above denote that 71(100%) of the observation indicate manifestation of authoritative approach to classroom management where the teacher is the sole decision maker concerning the nature of activities to be accomplished during learning, 1(1.4%) shared decisions and 2(2.8%) shared authority.

5. Discussion

Learner-centered instruction is an instructional approach in which learners have influence on the content, activities, materials, and the rate of learning, it is a learning approach that places the learner at the midpoint of the learning proceeding. In the course of learning, instructors offer learners chances to learn individually or from one another then mentor the learners in the competence they require functionally (Jony, 2016).

In learner-centered system every learner matters, therefore an extensive promotion of utilization of learner-centered practices usually imparts the means of reinstituting optimism in schools as settings that inspire learners to learn meaningful suitable skills for effective service that will

permit learners to be active participants while assuming their roles in the society (McCombs & Miller, 2007)

In general, observations demonstrate that all the classrooms observed seating were organized; in rows, fixed and squeezed and the lesson plan presented were established in a format of teacher-centered lesson plan contrary to what Johnson (2013) emphasized that in the process of formulating lesson plans for learner-centered, usually, experiences (practical activity) should precede instruction to enable learners develop instruction that follows a sort of logical setup. Cullen et al. (2012) indicate that for creativity to emerge learning spaces should encourage collaboration, teamwork and community.

Although Social constructivist classrooms focus on learner's interaction on tasks or projects, learner's reliance on one another for help when necessary, partaking, echoing, and debating ideas. Learning usually rest on the encounters and knowledge of learners, the knowledge and competencies of the teacher, layout of activities, learning resources available, and the community that is to be built (Christopher, 2008). Findings reflect limited use of teaching learning materials which comprise of blackboard, pieces of chalks and teacher's/ learners textbook. All observations reflect lack of textbooks availed for learners during lessons. Despite language teaching require supportive materials yet all the English language lessons observed lack supportive materials which were supposed to be availed for learners.

Moreover, study findings indicate that the position of the teacher is consistently maintained in front of the class at the event of lesson delivery; this configuration might establish a unidirectional communication pattern from the teacher to the learner hence limits and even discourages learners interaction.

Majority of the classes observed contained limited space that cannot permit rearrangement or sitting organization at the event of executing group work. Although the role of the teacher in a learner-centered domain usually assume the role of a facilitator, motivator and a mentor with main focus on questioning, correcting, mentoring, watching, explaining, and inspiring learners to learn accurately and gain properly (Singh, 2011).

Limited classroom space might likely hinder teacher's movement while assuming the role of a facilitator and hinder group work as well, limited classroom space could be one of the factors that hindered application of teaching strategies that are learner-centered in the classrooms observed.

Observations revealed that in situations where the class is spacious the class might hold large number of learners, hence hinders interactive teaching. However, in situations where the number of learners is manageable, teachers still stick to lecturing and writing notes due to lack of teaching learning materials. Teachers limit themselves to activities such as question and answer on top of the lecture. Learners were not assigned prior reading before class due to lack of textbooks. Reading sessions were only implemented in few schools during literature class. Exposure of learners to upcoming topics of discussion does not exist.

The American Psychological Association (APA) learner-centered psychological principles mentioned issues connected to the learning context. The sixth principle states that environmental status such as technology, instructional practices, and culture greatly influences learning.

Learning cannot take place in a space or area rather it is an interactive process between learners and the teacher. Cultural or group influence on learners can affect many elements of education such as motivation, ways of learning as well as ways of thinking. Therefore, technology and instructional strategies must be planned based on the learner's previous educational background, cognitive abilities, and the way learners think because the classroom environment directly impacts learning (APA, 1997).

Therefore, if the classroom environment has a direct impact on learning, then classroom size and learners' sitting arrangement in learner-centered classrooms must be noted.

Field data denote frequent utilization of questions and answers followed by activity, exercise, problem based, solving problems, real world scenarios then brainstorming. Inquiry based learning, case studies, group discussions and cooperative learning were occasionally employed. Then partner work, project work and learning by making were rarely employed. On the other hand, lecturing and writing notes as one of the teacher-centered modes of instruction is consistently employed. This implies that despite the existence of application of some of the learner-centered teaching strategies yet the use of lecturing and writing notes appear to be dominant. Furthermore, some teachers don't apply problem solving strategy particularly with subjects like Mathematics in situations where problem solving is supposed to be employed.

Furthermore, classroom management practices examined revealed dominant manifestation of authority by the teacher where the teacher act as the sole decision maker concerning the nature of activities accomplished during learning. This is in contrary to what (Weimer, 2012) comprehended that classroom management in learner-centered class, should be inform of power-sharing between learners and the instructor; the powers are divided based on learners' capability to manipulate responsibility. Usually, Powers allotted between the instructor and learners involve the selection of books, concessions on deadlines for submitting tasks, learning activities, course strategy decisions, and course content discussion (Weimer, 2012). This implies that classroom management strategies entirely resemble the format of management of a teacher-centered class. An implication of the mismatch between instruction and classroom management, from a theoretical point of view, is that it would appear suitable to anticipate that teachers should genuinely endeavor to align their instructional practices with managerial approaches.

6. Conclusion

Based on the study findings, it can be deduced that some of the use of learner-centered teaching strategies were employed in the selected school sample despite the dominant use of lecture and writing notes. The dominant use of lecture and writing notes could be attributed to the nature of the classrooms which bears large number of learners, sitting organization inform of rows and; squeezed, limited space and teaching learning materials availed. Since such attributes might not favor learner-centered teaching strategies.

7. Recommendation

In the current study, the purpose was to explore how the classroom environment practices influences the implementation of learner-centered instruction in secondary schools in Juba city, and to identify learner-centered instructional strategies existent in secondary schools in Juba city, South Sudan. Based on the findings, the study recommends that;

- The Government and the stakeholders should support schools with teaching learning materials including modern technologies to enable teachers implement learner-centered teaching strategies comprehensively.
- Government should enforce the policy which regulate the number of learners per a class to enable teachers implement learner-centered teaching strategies effectively.

References

APA. (1997). *Learner-centered psychological principles: A framework for school reform and redesign*. American Psychological Association Washington, DC.[Online] Available: https://www.apa.org/ed/governance/bea/learner-centered.pdf

Bacon-Shone, J. (2015). Introduction to Quantitative Research Methods: A Gude for Research Postgraduate Students at the University of Hong Kong. *University of Hong Kong: Hong Kong, China*.[Online] Available: https://core.ac.uk/reader/38034420

Cain, C. M. (2020). Understanding the Use of Learner-Centered Teaching Strategies by Secondary Educators.[Online]Available: https://scholarworks.waldenu.edu/dissertations/8865/

Christopher, J. H. a. R. M. (2008). Designing learning environments. In L. G. Thomas (Ed.), *21st century education: A reference handbook* (pp. 225 - 235). SAGE.[Online]Available: https://doi.org/https://doi.org/10.4135/9781412964012.n24

Cohen, L., Lawrence, M., & Keith, M. (2011). *Research Methods in Education* (7th ed.). Routledge.[Online]Available:https://islmblogblog.wordpress.com/wp-content/uploads/2016/05/rme-edu-helpline-blogspot-com.pdf

Cohen, L., Manion, L., & Morrison, K. (2018). *Research methods in education.* (8th ed.). New York: Routledge.[Online]Available: https://staibabussalamsula.ac.id › uploads › 2024/03

Cullen, R., Harris, M., & Hill, R. R. (2012). *The learner-centered curriculum: Design and implementation*. John Wiley & Sons. https://scholar.google.com/scholar

Efron, S. E., & Ravid, R. (2013). Action research in education[Online]Available: https://www.daneshnamehicsa.ir ›

Emmanuel, T., & Manjale Ngussa, B. (2021). The Influence of Learner-centered Teaching Styles on Students Academic Achievements Among Secondary Schools of Arumeru District, Tanzania. *University of Arusha Academic Journal*, *1*(1).[online]Available: https://scholar.google.com/scholar?

Gingell, J., & Winch, C. (2008). *Philosophy of education: The key concepts*. Routledge.[Online]Available:https://api.pageplace.de/preview/DT0400.9781134109661_A25025848/preview-9781134109661_A25025848.pdf

Guest, G., Namey, E. E., & Mitchell, M. L. (2013). *Collecting qualitative data: A field manual for applied research*. Sage.[Online]Available: https://books.google.com ›

Jacobs, G. M., & Renandya, W. A. (2019). *Student centered cooperative learning: Linking concepts in education to promote student learning*. Springer.[Online]Available: books.google.co.ug › books

Johnson, A. P. (2013). Educational psychology: Theories of learning and human development.[Online]Avalable: https://works.bepress.com › andrew-p-johnson

Johnson, S. A., & Cuevas, J. (2016). The effects of inquiry project-based learning on student reading motivation and student perceptions of inquiry learning processes. *Georgia Educational Researcher*, *13*(1), 51.[Online]Available: https://scholar.google.com/scholar

Jony, M. (2016). Student Centered Instruction for Interactive and Effective Teaching Learning: Perceptions of Teachers in Bangladesh. *Online Submission*, *3*(3), 172-178.[Online]Available: https://files.eric.ed.gov › fulltext

Mavumba, H. Z., & Mtitu, E. A. (2020). The Use of Learner-centered Approaches in Mathematics Subject: A Case of Pugu Secondary School in Ilala District, Tanzania. *East African Journal of Education and Social Sciences (EAJESS)*, *3*(3), 39-45.[Online]Available: https://scholar.google.com/scholar

McCombs, B. L., & Miller, L. (2007). *Learner-centered classroom practices and assessments: Maximizing student motivation, learning, and achievement*. Corwin press.[Online]Available: https://scholar.google.com/scholar

MoEST. (2015). *South Sudan Education Statistics for Central Equatoria*. Data and Statistics unit.[Online]Available: https://mogei.gov.ss › assets › SSEMIS_2015_CEQ

Mohammed, S. H., & Kinyó, L. (2020). The role of constructivism in the enhancement of social studies education. *Journal of critical reviews*, *7*(7), 249-256.[Online]Available: https://www.scribd.com/document/495474445/197-1589076123

Nsengimana, T., Habimana, S., & Mutarutinya, V. (2017). Mathematics and science teachers' understanding and practices of learner-centred education in nine secondary schools from three districts in Rwanda. *Rwandan Journal of Education*, *4*(1), 55-68.[Online]Available: https://scholar.google.com/scholar

O'donoghue, T. (2006). *Planning your qualitative research project: An introduction to interpretivist research in education*. Routledge.[Online]Available: https://scholar.google.com/schola

Singh, N. (2011). Student-centered learning (SCL) in classrooms—A comprehensive overview. *Educational Quest-An International Journal of Education and Applied Social Sciences*, *2*(2), 275-282.

Sternberg, R. J. (2004). *Psychology* (4th ed.).

Warnich, P., & Meyer, L. (2013). Trainee teachers' observation of learner-centred instruction and assessment as applied by History and Social Sciences teachers. *Yesterday and Today*(9), 00-00.[Online]Available: https://www.scielo.org.za/pdf/yt/n9/03.pdf

Weimer, M. (2012). Learner-centered teaching and transformative learning. *The handbook of transformative learning: Theory, research, and practice*, 439-454.

Westwood, P. S., & Westwood, P. (2008). *What teachers need to know about teaching methods*. Aust Council for Ed Research.[Online]Avilable: https://books.google.com › ... › Levels › Elementary