Impacts of Teacher Competencies in Facilitation and Inclusiveness to Learner-centered Teaching

Hla Maung Than, Kyal Sin Shint Thant , Virginia Lorene Smith [*]
Asia-Pacific International University
vsmith@apiu.edu

ABSTRACT

Teaching competencies are generally knowledge, skills, and attitudes of teachers. But teaching competencies come in various forms. Specific competencies lead to a variety of teaching practices. As learner-centered teaching (LCT) has become one of the most valued teaching practices, this research investigates how teaching competencies in facilitation and inclusiveness contribute to the practice of learner-centered teaching (LCT). This paper investigates the practices of the LCT approach, based on teacher competencies in facilitation and inclusiveness, by the teachers at Asia-Pacific International University (AIU) and Adventist International Mission School (AIMS), both of which are in Muak Lek, Thailand. There were 57 participants, which is 60% of the teachers of both institutions in this study. Purposive sampling was used in this study. A 30 item self-constructed instrument was prepared for this study. It is interestingly found that there is an average level of agreement or implementation across all instructional strategies for three groups (facilitation, inclusiveness and LCT). There is no statistically significant difference in the practices of facilitation, inclusiveness and LCT among the group means, as the p-value (Sig.) is greater than .05. One factor was extracted using stepwise regression analysis.

Keywords: teaching competencies, facilitation, inclusiveness, learner-centered teaching (LCT).

INTRODUCTION

Traditional teaching which is usually called teacher-centered teaching (TCT) has lessened in importance for the needs of 21st century learners as the educational beliefs are gradually changing to LCT. Thus, today's teaching put students as a priority. Based on the students, teachers try to match what they have to teach with how they should teach their students. Olmedo & Montero (2023) proposed that teachers should have inclusiveness competencies in their professional practice. Kovacevic & Akbarov (2016) found that the traditional teaching style is still predominately practiced in universities, which fact is supported in the previous studies and by other evidence. But the implications of teaching competencies to learner-centered teaching (LCT) deserve to be explored further. This paper investigates the practices of the LCT approach based on teacher competencies in facilitation and inclusiveness by the teachers at Asia-Pacific International University (AIU) and Adventist International Mission School (AIMS).

Statement of the problem

According to Felder (1992), out of all teaching methods, lecturing, which can be also defined as teacher-centered teaching, is the least impactful method. Thus, learners-centered teaching becomes a demand for teachers in this 21st century skills. But it needs some specific teaching competencies in their teaching practice. As teachers are working with the students, students should be first considered in terms of their needs, background knowledge and others so that the teachers can fulfill what the students need. A teacher's inclusiveness of students to help students plays a major role in practicing learners-centered teaching. Though teachers try to be inclusive of students, if their lacks facilitation skills, they will not be able to communicate well with students and find out what their students need.

Purpose of the study

The purpose of the study is to investigate the relationship between teacher competencies and learner-centered teaching. Especially, the two main competencies, facilitation and inclusiveness affect teachers' learner-centered teaching in their teaching practice.

Research Questions

This study aims to answer the following research questions:

1. How did the participants rate their facilitation competence, inclusiveness competence and LCT approach?
2. Is there a significant difference in facilitation, inclusiveness and LCT considering the affiliation of the participants?
3. What factors affect LCT?

Limitations

This study only targets teachers from Adventist International Mission School (AIMS) and Asia-Pacific International University (AIU). Thus, the findings and results of this research may not be applicable to all teaching settings.

LITERATURE REVIEW

Teaching Competencies (Facilitation and Inclusiveness)

Cheng et al. (2023) categorizes teaching competencies from three perspectives: psychological perspective, pedagogical perspective, and sociological perspective. In psychological perspective, teaching competencies refer to psychological features that are used to achieve teaching objectives and to make students engage in the teaching activities in a smooth way. The pedagogical perspective defines teaching competencies as the mastery use of different teaching skills in the practical teaching stages. In the sociological perspective, teacher competencies demonstrate the interaction between teachers and students and social connection.

Prendiville (2004) supports that facilitation is working with people by encouraging and supporting them to accomplishment, but the facilitator does not perform the task. A facilitator assists people by helping them to determine what to accomplish, and reminding them of their responsibilities in the support group, and guiding them to finish a task. This facilitation skill in teaching gives opportunities to focus on students' group work and results, rather than just explaining and lecturing to them.

According to Olmedo & Montero (2023), for inclusiveness competence, teachers are mainly responsible for minimizing all the burdens that block access to knowledge, and to perform alternative actions to achieve the goals of the curriculum (as cited in Royo Pena et al., 2019).

For Nimante & Kokare (2022), teachers will have to cope with day-to-day challenges associated with learners' educational needs for high quality learning and individual development. even for students with special needs. Likewise, teachers will consider the challenges students face in terms of academic, emotional, social and other needs as a part of their more learner-focused teaching.

According to Corno (2008), for the purpose of adaptation, teachers need to be aware of students' abilities and their challenges within the learning environment. Distinguishing those abilities and challenges involves establishing unique learning objectives. It is linked to methods aimed at improvement (Janney & Snell, 2006).

Learner-centered teaching

Learners-centered teaching (LCT) is also given many other names, such as child-centered education; child-centered pedagogy; child-centered teaching; child-centered learning; learner centered approach; student-centered teaching; student-centered learning; learner centeredness; or student-centered (Shah, 2020). According to Dupin-Bryant (as cited in Shah, 2020), in LCT, both students and teachers agree on the timing and methods of learning in a responsive, collaborative, problem centered, and democratic way. Weimer (as cited in Shah, 2020), supports that the focus of LCT is the needs, abilities, interests, and learning styles of learners while the teacher serves as a facilitator of learning.

Kovacevic & Akbarov (2016) in their study explain that in the beliefs of learner centered styles, each learner possesses unlimited potential for their individual development. As a result, learner-

centered styles attempt to match the content, and how to present it, with the needs of individual learners.

For Olugbenga (2021), in the learner-centered teaching, the learners are viewed as active agents who show their individual knowledge, prior learning experience, and educational background. All of this influences how they absorb information. Bas and Beyhan (2019) give six different types of learner-centered teaching: (1) cooperative learning, (2) inductive learning, (3) gamify learning, (4) expeditionary learning, (5) active learning, and (6) flipped classroom (as cited in Olugbenga, 2021).

Related Studies

Olmedo & Montero (2023) as discussed in their studies,' concluded that, to put these competencies into practice, inclusiveness competencies should be integrated into the teacher training curriculums. Caleb et al. (2018) found that practicing problem-based learning environments need facilitation skills to help students scaffold and mentor effectively in a problem-based learning setting which is also learner-centered teaching (LCT).

It was found that LCT is not well practiced by university professors, and they still use traditional teaching styles where teachers dominate students' participation (Kovacevic & Akbarov, 2016). It was discovered that creating a learner-centered teaching environment promotes student choice in assignments, cafeteria-style grading, higher completion rates of assignments and higher motivation to participate (Hanewicz, Platt , & Arendt, 2017).

In a case study, it was also reported that 78% (25) of the students prefer a student-centered approach while 22% (7) of them also want some lectures with the student-centered approach (Griffiths , Oates, & Lockyer, 2007).

Gill & Holton (2006) in their studies reported that the introduction of self-paced approaches, which can also be defined as learner-centered teaching, has a great influence on positive learning outcomes.

Poindexter (2003) also found that even though active and cooperative learning can improve problem-solving and interpersonal skills, plus improvement in attitude, some lectures are necessary.

Dale (1969) found that different methods of presenting course material have a great correlation to levels of effectiveness in learning. When we do something we have learned, we remember 90% of it. As doing is a kind of learner-centered teaching, it is interpretable that the LCT approach is highly effective.

It was also observed that the three key themes—lecturing, facilitating, and other environmental, social and psychological factors—influence teaching methods (Regmi, 2012).

Svendby (2024) found that lecturers in higher education still have struggles to meet the inclusive needs of a diverse population. In the study, it is also suggested that every college and university should require all instructors to have inclusiveness training and should allocate time for them to improve their inclusive skillset.

It is found that there is a significant relationship between teachers' facilitation and students' academic performance. Thus, students instructed by teachers who incorporate their facilitation skills, typically demonstrate higher academic performance (Dupa & Maimad, 2023).

RESEARCH DESIGN AND INSTRUMENT

This research is under the quantitative research design. A thirty-item self constructed instrument was used in this study. The 5-point Likert scale (Always, Often, Sometimes, Rarely, Never) was applied to the items. There are also open ended questions in the questionnaire. The questionnaires investigated those three categories: facilitation, inclusiveness, and learner-centered approach. Each category had 10 self-constructed questions to ask their rates of practice. The researchers used purposive sampling technique to obtain the samples. The researchers gathered the data in person.

The participants are teachers from Asia-Pacific International University (AIU) and Adventist International Mission School (AIMS), investigating their competencies and how their teaching approaches are different.

The sampling technique used was purposive sampling.

Responses were gathered from participants regarding their ratings of facilitation competence, inclusiveness competence, and LCT approach. The data collection process was standardized and included clear instructions for rating each aspect.

After collection, the data were input into a structured format, such as a spreadsheet or database. Then, the data was well-organized according to participant identifiers and the three variables of interest: facilitation competence, inclusiveness competence, and LCT approach.

The information was double-checked for any errors or inconsistencies. This involve verifying the accuracy of responses, identifying missing values, and correcting any discrepancies. Next, descriptive statistics were calculated for each variable, including measures such as mean, median, standard deviation, and frequency distributions. This provided an overview of the participants' ratings for facilitation competence, inclusiveness competence, and LCT approach.

Participants were grouped based on their affiliation (e.g., organization, department) and compare for ratings of facilitation, inclusiveness, and LCT, using appropriate statistical tests, such as t-tests or ANOVA. It was observed whether there were significant differences in ratings based on affiliation.

Regression analysis was performed to identify factors that affect LCT. LCT approach ratings were used as the dependent variable, and potential influencing factors (e.g., facilitation competence, inclusiveness competence) were considered as independent variables. After that, the strength and significance of the relationships between variables was analyzed.

Visualizations, such as bar charts or scatter plots, were created to illustrate the distribution of ratings and the relationships between variables. This aided in effectively interpreting the findings and communicating results.

The results of the data analysis in relation to the research questions was interpreted. Insights into participants' perceptions of facilitation competence, inclusiveness competence, LCT approach, and any other significant differences based on affiliation were provided. Finally, the factors that influence LCT were summarized, and implications for practice or further research are discussed.

Affiliation

Participants are from two institutions. School 1 represents Asia-Pacific International University and School 2 represents Adventist International Mission School (AIMS). Both schools are in Muak Lek, Saraburi Province in Thailand. There were 37 participants from School 1, and 20 participants from School 2.

Participants have a variety of teaching experiences. 58% of the participants have above 10 years of experience while 25% of the participants have 6-10 years of teaching experience. Then, 18% of the participants have 0 to 5 years of experience.

There were 57 participants. 53% (30) of them were female and 47% (27) of them were male.

There were three age categories. There were 9 (16%) participants from 20-30 years old. There were 13 (23%) who were from 31-40 years old. There were 35 (61%) participants above 40 years old.

Participants were from diverse countries. The countries included Thailand, Philippines, India and others. Eight (14%) of the participants were from Thailand. Twelve (21%) of the participants represented the Philippines; 13 (23%) were from India and 24 (42%) from other countries.

RESULTS AND FINDING

Research Question: (1) How did the participants rate their facilitation competence, inclusiveness competence and LCT approach.

Items F1, F2, and F3, related to giving one-to-one consultations, individualized feedback, and individualized recommendations, respectively, have relatively higher mean scores (above 2),

indicating a moderate level of agreement or implementation. Item F4, concerning communication with students to address their struggles in various areas, also has a moderate mean score. Items F5, F6, F7, F8, F9, and F10 have lower mean scores, suggesting lower levels of agreement or implementation compared to the first set of items. The overall mean score (1.9018) reflects the average facilitation competence across all items. The variability in responses, as indicated by the standard deviations, suggests that opinions or practices regarding these strategies vary among respondents.

TABLE 1 FACILITATION COMPETENCE

	Mean	Std. Deviation
F1. I give one-to-one consultations with my students.	2.2281	.80217
F2. I give individualized feedback to my students.	2.0877	.82982
F3. I give students individualized recommendations based on feedback.	2.1228	.90771
F4. I communicate with my students to reach out their struggles in terms of academics, social, emotional, and mental well-being.	1.9649	.77839
F.5 I give constructive feedback to their assignments.	1.9123	.89204
F.6 I teach my lessons from guided practice to independent practice.	1.7544	.82982
F.7 I give more interactive and teamwork activities in the class.	1.7018	.73107
F.8 I elicit students' background knowledge first.	1.9649	.92514
F.9 I relate lessons to real-life situations.	1.5439	.65657
F.10 At the end of the lesson, I summarize what the students have discussed and relate it with the lessons in the textbooks.	1.7368	.74466
Overall	1.9018	.56773

Inclusiveness competence

Items I1, I2, I4, and I5 have relatively higher mean scores, suggesting a moderate to strong level of agreement or implementation. These items relate to surveying student expectations, differentiating learning tasks, allowing student choice in topics, and providing extra support to weak students. Items I6, I7, I8, I9, and I10 have lower mean scores, indicating lower levels of agreement or implementation compared to the first set of items. These items pertain to incorporating different perspectives, using various assessment methods, assessing different thinking skills, respecting diverse backgrounds, and setting rules to respect diversity. The overall mean score (1.8702) reflects the average level of agreement or implementation across all instructional strategies. The variability in responses, as

indicated by the standard deviations, suggests that opinions or practices regarding these strategies vary among respondents.

TABLE 2 INCLUSIVENESS COMPETENCE

	Mean	Std. Deviation
I1. I survey my class to incorporate their expectations in my teaching.	2.2632	.91664
I2. I differentiate learning tasks based on the levels of students.	2.1228	.84664
I3. I use different methods of teaching such as group discussions, pair works, group works to accommodate the students' diverse learning styles.	1.5088	.63027
I4. I allow my students to choose the topics within allocated contexts or themes.	2.4737	1.25506
I5. I give private coaching and extra time to weak students in my class.	2.4737	1.07080
I6. I incorporate different points of view or perspectives in my teaching.	1.7719	.65513
I7. I assess in different ways such as quizzes, projects, presentations, tests, portfolios, and others.	1.5439	.65657
I8. I implement the tests to assess both lower order thinking and higher order thinking skills.	1.6491	.66792
I9. I respect students' different background regardless of religions, nationalities, sexual orientation, and gender identity.	1.3158	.65895
I10. I set rules and boundaries in the class to respect diversity in the classroom as I respect them.	1.5789	.82261
Overall	1.8702	.47770

LCT approach

Items L3, L9, and L10 have relatively higher mean scores, suggesting a moderate to strong level of agreement or implementation. These items involve role-play activities, debate activities, and using games and competition in teaching, respectively. Items L1, L2, L6, L7, and L8 have moderate mean scores, indicating a moderate level of agreement or implementation. These items relate to giving group projects, individual presentation tasks, allowing student opinions, adjusting teaching based on feedback, and tracking students' progress. Items L4 and L5 have lower mean scores, indicating lower levels of agreement or implementation compared to the other items. These items involve using discussion activities and asking open-ended questions for reflection. The overall mean score (2.0421) reflects the average level of agreement or implementation across all instructional strategies. The variability in responses, as indicated by the standard deviations, suggests that opinions or practices regarding these strategies vary among respondents.

TABLE 3 LCT APPROACH

	Mean	Std. Deviation
L1. I give group projects to my students.	2.0351	.82299
L2. I give students individual presentation tasks.	2.0526	.89485
L3. I do role-play activities in the classroom.	2.5965	1.23722
L4. I use discussion activities for communicative teaching.	1.6316	.69774
L5. I asked open-ended questions to elicit their own reflections.	1.5088	.60127
L6. I allow students to share their opinions about my teaching.	1.8596	.97172
L7. I adjust my teaching based on learners' feedback.	1.8246	.68460
L8. I track my students' progress about lessons, and I adjust to their pace of learning.	1.8070	.78918
L9. I use debate activities in my class.	2.7368	1.21782
L10. I use games and competition activities in my teaching.	2.3684	1.15930
Overall	2.0421	.50212

Research Question (2): Is there a significant difference in facilitation, inclusiveness and LCT considering the affiliation of the participants?

Both schools have a similar minimum and maximum value, ranging from 1.10 to 3.50. School 2 has a higher mean (2.0700) compared to School 1 (1.8108). The standard deviation for School 1 (0.56262) is slightly lower than that of School 2 (0.55165), indicating that the data points in School 1 might be more tightly clustered around the mean compared to School 2. The standard error for School 1 (0.09249) is lower than that of School 2 (0.12335), suggesting that the sample mean for School 1 might be more representative of the population mean compared to School 2. The 95% confidence intervals for the mean provide a range within which we are 95% confident that the true population mean lies. Both intervals overlap slightly, indicating that there might not be a statistically significant difference between the means of the two schools. Overall, School 2 seems to have a higher mean value compared to School 1, but further statistical analysis would be needed to determine if this difference is statistically significant.

TABLE 4 DESCRIPTIVE FOR FACILITATION

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
School 1	37	1.8108	.56262	.09249	1.6232	1.9984	1.10	3.20
School 2	20	2.0700	.55165	.12335	1.8118	2.3282	1.10	3.50
Total	57	1.9018	.56773	.07520	1.7511	2.0524	1.10	3.50

There is no statistically significant difference between the means of the two groups at the 0.05 significance level, as the p-value (Sig.) is greater than 0.05. However, there may be a trend is towards significance, given the p-value of 0.100. Further investigation or a larger sample size may be needed to confirm any potential differences between the groups. Dupa & Maimad (2023) found that students instructed by teachers incorporate their facilitation skills typically demonstrate higher performance in the academic performance of students.

TABLE 5 ANOVA FOR FACILITATION

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.872	1	.872	2.792	.100
Within Groups	17.178	55	.312		
Total	18.050	56			

Both schools have similar minimum and maximum values, ranging from 1.10 to 3.10 for School 1 and from 1.10 to 2.70 for School 2. School 2 has a slightly higher mean (1.9150) compared to School 1 (1.8459). The standard deviation for School 1 (0.49137) is slightly higher than that of School 2 (0.46029), suggesting that the data points in School 1 might be more dispersed compared to School 2. The standard error for School 1 (0.08078) is lower than that of School 2 (0.10292), indicating that the sample mean for School 1 might be more representative of the population mean compared to School 2. The 95% confidence intervals for the mean provide a range within which we are 95% confident that the true population mean lies. Both intervals overlap, indicating that there might not be a statistically significant difference between the means of the two schools. Overall, School 2 still appears to have a slightly higher mean value compared to School 1, but the difference is not large.

TABLE 6 DESCRIPTIVE FOR INCLUSIVENESS

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
School 1		37	1.8459	.49137	.08078	1.6821	2.0098	1.10	3.10
School 2		20	1.9150	.46029	.10292	1.6996	2.1304	1.10	2.70
Total		57	1.8702	.47770	.06327	1.7434	1.9969	1.10	3.10

There is no statistically significant difference between the group means, as the p-value (Sig.) is greater than .05. But in other studies, Svendby (2024) found that lecturers in higher education still have struggles to meet the inclusive needs of diverse population.

TABLE 7 ANOVA FOR INCLUSIVENESS

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.062	1	.062	.268	.607
Within Groups	12.717	55	.231		
Total	12.779	56			

Both schools have similar minimum and maximum values, ranging from 1.00 to 3.40 for School 1 and from 1.00 to 2.90 for School 2. The mean for School 1 is 2.0378 and for School 2 is 2.0500, indicating a slight difference, but not substantial. The standard deviation for School 2 (0.58893) is slightly higher than that of School 1 (0.45726), suggesting that the data points in School 2 might be more dispersed compared to School 1. The standard error for School 2 (0.13169) is also higher than that of School 1 (0.07517), indicating that the sample mean for School 2 might be less precise compared to School 1. The 95% confidence intervals for the mean provide a range within which we are 95% confident that the true population mean lies. Both intervals overlap, indicating that there might not be a statistically significant difference between the means of the two schools. Overall, there seems to be a slight difference in means between the two schools.

TABLE 8 DESCRIPTIVE FOR LCT

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
School 1	37	2.0378	.45726	.07517	1.8854	2.1903	1.20	3.40

| School 2 | 20 | 2.0500 | .58893 | .13169 | 1.7744 | 2.3256 | 1.00 | 2.90 |
| Total | 57 | 2.0421 | .50212 | .06651 | 1.9089 | 2.1753 | 1.00 | 3.40 |

There is no statistically significant difference between the group means, as the p-value (Sig.) is greater than .05. But Kovacevic & Akbarov (2016) reported that learner-centered teaching is not well practiced by university professors, and they still use traditional teaching styles where teachers dominate students' participation.

TABLE 9 ANOVA FOR LCT

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.002	1	.002	.007	.931
Within Groups	14.117	55	.257		
Total	14.119	56			

Research Question (3): What factors affect LCT?

In summary, this Model Summary indicates that the regression model provides a moderately strong fit to the data, with approximately 50.6% of the variance in the outcome variable explained by the predictor variable(s). The standard error of the estimate suggests that the model's predictions have some level of variability around the actual observed values.

TABLE 10 STEPWISE REGRESSION

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
Inclusiveness	.711ᵃ	.506	.497	.35624

a. Predictor: inclusiveness

One factor was extracted. This means that inclusiveness affects LCT. According to Griffiths , Oates, & Lockyer (2007), 78% (25) of the students want learner-centered approach while 22% (7) of them also goes for learner-centered approach with some lectures.

The beta coefficient for Inclusiveness is positive. This means, for each unit increase in Inclusiveness scale, there is a .747 increase in the LCT.

TABLE 11 COEFFICIENTS

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.

	B	Std. Error	Beta		
1 (Constant)	.644	.192		3.351	.001
Inclusiveness	.747	.100	.711	7.500	.000

a. Dependent Variable: LCT

CONCLUSION

The result of this research shows that there are no significant differences in practicing the LCT approach based on facilitation and inclusiveness, whether the participants are international high school teachers or international university teachers. Among the factors considered for LCT, inclusiveness affects LCT. Thus, it is concluded that the more competent that teachers are in inclusiveness with students, the more they will practice LCT to help individual students in the learning environments. It is recommended that this field of topic be expanded and supported by including qualitative studies to provide perspectives on the practice of teaching competencies which lead to LCT.

REFERENCES

Hanewicz, C., Platt , A., & Arendt, A. (2017). Creating a learner-centered teaching environment using student choice in assignments. *Distance Education, 38*(3), 273-287.

Caleb, E., Godwin, A., Akpan, N., & Aniedi, U. (2018). Facilitation Skills and Template for Facilitating Learning in a Problem-Based Learning Environment for Technical Teachers. *International Journal Of Advance Research And Innovative Ideas In Education*, 759.

Cheng, J., Han, W., Zhou, Q., & Wang, S. (2023). *Handbook of Teaching Competency Development in Higher Education.* Springer Singapore.

Corno, L. (2008). On Teaching Adaptively. *Educational Psychologist*, 161-173.

Dale, E. (1969). *Audio Visual Methods in Teaching.* New York: Dryden Press.

Dupa, H. J., & Maimad, F. E. (2023). Analysis On Teachers'Facilitation skills and Students' Academic Performance in Core Learning Areas Under K-12 Framework. Persidangan Antararabangsa Sains Social & Kemanusiaan Kali Kali KE-8, 816-829.

Felder, R. M. (1992). How About A Quick One? *Chemical Engineering Education*, 18-19.

Gill, T. G., & Holton, C. F. (2006). A Self-Paced Introductory Programming Course. *Journal of Information Technology Education*, 95-105.

Griffiths , G., Oates, B. J., & Lockyer, M. (2007). Evolving a Facilitation Process towards Student Centred Learning: A Case Study in Computing. *Journal of Information Systems Education, XVIII*(4), 459-467.

Janney, R. E., & Snell, M. E. (2006). Modifying Schoolwork in Inclusive Classrooms . *THEORY INTO PRACTICE*, 215-223.

Khan , A., Khan, S., Zia-Ul-Islam, S., & Khan, M. (2017). Communication Skills of a Teacher and Its Role in the Development of the Students' Academic Success. *Journal of Education and Practice*, 18-21.

Kovacevic, E., & Akbarov, A. (2016). THE ELUSIVENESS OF LEARNER-CENTERED TEACHING. *Interdisciplinary Description of Complex Systems*, 212-222.

Michael, & Olugbenga, M. (2021, October). The Learner Centered Method and Their Needs in Teaching. *International Journal of Multidisciplinary Research and Explorer (IJMRE), I*(9).

Nimante, D., & Kokare, M. (2022). Perspective of Teachers on Their Competencies for Inclusive Education. *Acta Paedagogica Vilnensia*, 8-22.

Olmedo, T. L., & Montero, D. (2023). Inclusive competence in teaching practice: bibliometric analysis and categorization proposal. *Alteridad*, 170-179.

Poindexter, S. (2003). Assessing Active Alternatives for Teaching Programming. *Journal of Information Technology Education*, 257-265.

Prendiville, P. (2004). *Developing Facilitation Skills A Handbook for Group Facilitators.* Combat Poverty Agency.

Regmi, K. (2012). A Review of Teaching Methods - Lecturing and Facilitation in Higher Education (HE): A Summary of the Published Evidence. *The Journal of Effective Teaching*, 61-76.

Shah, R. K. (2020, June). Concepts of Learner-Centred Teaching. *Shanlax International Journal of Education, VIII*(3), 45-60.

Svendby, R. B. (2024). Inclusive Teaching in Higher Education: Challenges of Diversity in Learning Situations from the Lecturer Perspective. *Social Sciences* , 1-9.