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REAL as an Instructional Design Teaching Models: Pre-service Teachers' Satisfaction

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A B S T R A C T

Preservice teachers often face challenges in designing instructional plans that are coherent, goal-oriented, and adaptable to diverse student needs. Although various instructional design models exist, their practical use remains limited. This study explores the application of the REAL (Review, Elaborate, Apply, Lead-up) model and Universitas Swadaya Gunung Jati. Using a qualitative approach, data were collected through questionnaires and unstructured interviews. Results show that the REAL model supports systematic and practical instructional design, with a satisfaction score of 2.70 indicating positive responses. Interviews further reveal increased confidence and clarity among preservice teachers. This model is recommended for use as a practical framework in the design of teaching instruction and is suggested for further evaluation to enhance its scalability and impact across different educational contexts.

Keywords: *Educational Evaluation, Instructional Design, Model REAL, Preservice Teacher, Satisfaction.*

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INTRODUCTION

Education in Indonesia faces various challenges, especially in the effectiveness of the teaching and learning process (Zhang et al., 2022). One of the critical challenges is implementing an appropriate, structured, and well-planned instructional design that aligns with the diverse needs and characteristics of students. The use of well-designed instructional frameworks is widely recognized as a key factor in creating learning environments that are not only effective but also engaging, relevant, and meaningful for learners (Abuhassna & Alnawajha, 2023a) Proper instructional design can create learning that suits the needs and characteristics of students, as well as make optimal use of available technology and resources. The instructional design theories based on the general learning theories provide faculty with a framework on how best to create instruction and instructional materials for efficient learning outcomes (Sahin-Taskin, 2017; Razinkina et al., 2018a; Hala & Xhomara, 2024; Obizoba, 2015). However, despite the availability of various models and guidelines, many teachers still struggle to design coherent, goal-oriented, and adaptive learning experiences that accommodate technological developments and diverse classroom conditions.

In practice, teachers need to make instructional teaching practices before learning activities take place. One of the instructional design models that can be used is REAL, developed by Kusriandi et al. to meet the needs of teachers and also make learning easier and more practical (Kusriandi et al., 2023).

The REAL (Review, Elaborate, Apply, Lead-up) learning model is a new instructional model developed by Kusriandi in 2023 through her doctoral dissertation research at Universitas Negeri Semarang. This model is designed to assist prospective students in developing English learning plans that are more systematic, relevant to the curriculum, and easy to apply in field practice. This model is built on a *genre-based approach* and *scaffolding*

principles, with learning stages that are structured simply to facilitate the instructional planning process.

The results of the research in the dissertation showed that there was a significant difference between the ability of prospective teacher students before and after using the REAL model. Before using this model, only about 23% of students were able to develop a complete learning plan with the expected components, such as the relationship between objectives, activities, media, and assessments. However, after the implementation of the REAL model, there was a significant increase, where more than 78% of students were able to design learning systematically and by curriculum standards. This improvement includes several aspects, including the ability to develop learning indicators, choose the proper methods and media, and prepare relevant evaluations.

In addition, the results of the questionnaire show that most students respond positively to this model. Around 85% of respondents stated that the REAL model is easy to understand and helps them in developing a more targeted learning design. Although this research is still limited to the dissertation level and has not been widely published (unpublished research), the results have demonstrated the effectiveness of this model significantly. The REAL model has also been published in 2023 in a book entitled "Mendesain Instruksi Praktik Mengajar Bahasa Inggris", so it has the potential to be adopted more widely in the competency development of prospective teachers.

The REAL (Review, Elaborate, Apply, Lead-up) instructional model is designed to meet the needs of teachers and also make learning easier and more practical (Kusriandi et al., 2023). The stages in the REAL model learning design instruction begin with (1) Review, which is reviewing the lessons that have given to make it easier for students to interpret the learning that obtained 2) Elaborate, which is the stage where students asked to provide examples that are relevant and easy to understand (3) Apply, explore students' abilities with cooperative learning (4) the last stage is Lead up, namely evaluating student learning outcomes.

The research conducted shows a significant improvement in participants' ability to develop coherent and goal-oriented learning plans (van Brussel et al., 2023). Following the intervention, there was an increase in average mastery scores, as well as improved alignment between learning objectives, activities, and evaluations. In addition, participants stated that the REAL model helped them systematically formulate ideas, select the appropriate learning media, and develop structured plans. The research also demonstrates that instructional design using the REAL model is an effective pedagogical framework for enhancing the instructional design competence of preservice teachers.

This research is essential to be carried out as a continuation of previous research to find out the satisfaction of preservice teacher students who have learned the REAL model. Several research studies have shown that student satisfaction is an effective method for monitoring the quality of education and academic development (De-Juan-Vigaray et al., 2024). One of the evaluation models used is the Kirkpatrick evaluation model. There are four levels in this evaluation model: reaction, learning, behaviour, and results. The researcher used Level One evaluation, specifically reaction, to determine the satisfaction of preservice teacher students who have learned the REAL model. According to the reaction stage, the researcher measures the participants' satisfaction with the program. The training program is considered successful if preservice teacher students understand the REAL model in terms of content, delivery, and evaluation so that they can apply the REAL model correctly in their teaching practice (Combn.d; Razinkina et al., 2018b).

METHOD

This study employs a qualitative case study approach to explore the satisfaction of preservice teacher students towards the REAL (Review, Elaborate, Apply, Lead-up) instructional design model. According to Yin (2018), case study is appropriate when the researcher seeks to understand a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident. The

case study method was selected to gain an in-depth understanding of how the REAL model was implemented and perceived within a specific educational context—namely, a teaching practice course at Universitas Swadaya Gunung Jati. This research focuses on a single bounded case involving preservice teachers who had direct experience with the REAL model during their studies. The evaluation is based on the first level of the Kirkpatrick Model (2007): Reaction, which assesses participant satisfaction with the learning experience.

Participants

The subjects in this study are preservice teachers at Universitas Swadaya Gunung Jati who have previously been introduced to and involved with the REAL (Review, Elaborate, Apply, Lead-up) learning model during the lecture period. Preservice teachers have taken a teaching practice course where the REAL model applied as a teaching practice design. The REAL model was chosen as the main focus of this study because it is a teaching practice instruction design model designed to facilitate systematic and practical learning for teachers (Kusriandi, 2023). Preservice teachers are selected because they acquire teaching skills and emphasise the importance of reflection in understanding teaching practices (Yalcin Arslan, 2019). According to (Dinham et al. (2021), reflection in practice in Teacher education helps students develop professional awareness and improve their pedagogical abilities. In this line with the research objective, which is to understand their satisfaction and response to the REAL model as part of their learning experience.

Instruments

This study uses a qualitative approach with main data obtained through questionnaires and interviews. The questionnaire was designed based on the Likert scale of level three 1-3 (agree, neutral and disagree), which consisted of 10 statements. Preservice teachers responses to the questionnaire varied. The questionnaire was given to measure preservice teachers satisfaction after using the REAL model. The questionnaire results were analyzed using the average score and standard deviation (SD). The questionnaire was interpreted based on agree (2.34-3.00), neutral (1.67-2.33), disagree (1.00-1.66) (Pimentel, 2019). In addition, unstructure interviews were also conducted to strengthen and delve deeper into preservice teacher perceptions and satisfaction with the use of the REAL model.

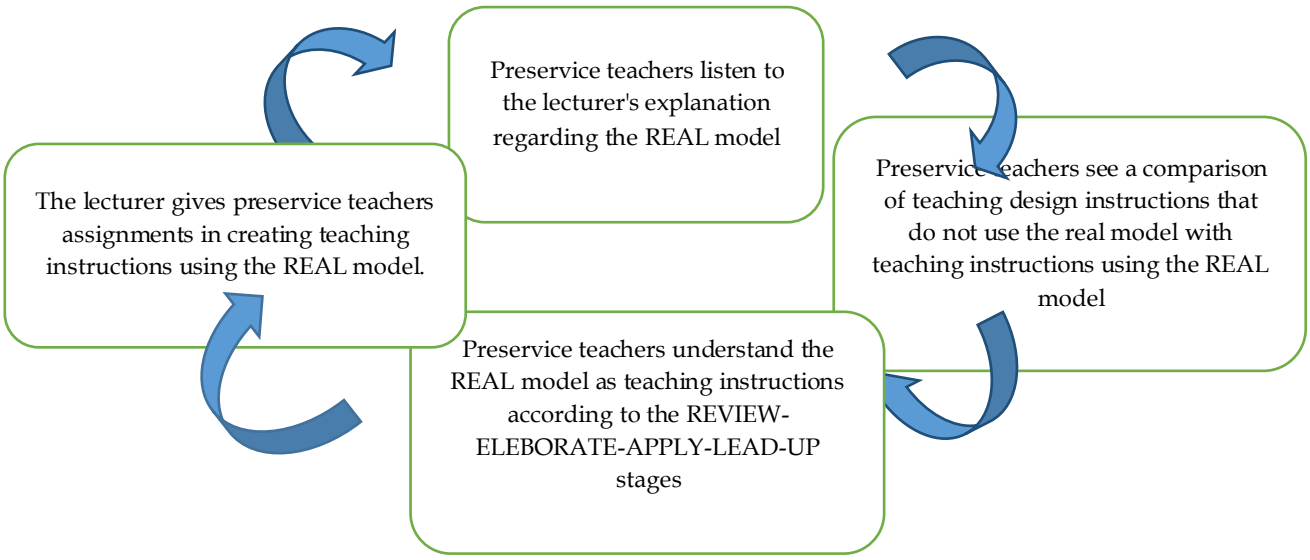
Data Analysis

For the analysis data, the researcher used the evaluation model of (Kirkpatrick, 2007) level 1: Reaction. The researcher analysed the perspective of preservice teachers in this case, specifically their perception and satisfaction with learning the REAL model. The researcher assessed the extent of student satisfaction with the instructional characteristics of the REAL model in learning materials, including the Review, Elaborate, Apply, and Lead-up stages. The researcher used two data collection techniques: questionnaire and unstructured interviews. The researchers thoroughly analysed the final data to gain a comprehensive understanding of how effectively the REAL instruction model improved preservice teachers' satisfaction in designing instructional teaching.

FINDINGS AND DISCUSSION

Implementation of the REAL Instruction Model in the Teaching Practice of Preservice Teacher Students

Based on the research results, the application of the REAL instructional model, delivered by lecturers to prospective teacher students in various courses at Universitas Swadaya Gunung Jati, was carried out systematically through four structured stages. Each stage is designed to guide students step by step in understanding, applying, and reflecting on the material taught, making the learning process more directed, practical, and meaningful. The following image illustrates each stage and its components.



Stage 1

The REAL model was developed by (Kusriandi et al.) is a lecturer at Universitas Swadaya Gunung Jati and was introduced to a preservice teacher who took the English Young Learners Teaching course. The lecture began with a face-to-face activity where the lecturer explained the REAL model. In practice, lecturers provide material directly on what the REAL model is and the use of teaching instruction models using the REAL model. Preservice teachers are expected to use the REAL model to make teaching instruction more structured, practical, and supportive of learning activities that align with learning objectives. The REAL model can also be studied by students through books published by the teaching lecturer, allowing for learning outside the classroom and increasing students' enthusiasm for independent learning.

In the first stage, students are introduced directly to the theory and practice of using the REAL model. Explanations provided by lecturers and support from guidebooks help students understand the model's structure more comprehensively, enabling them to feel better prepared and more confident as they proceed to the next stages. This stage aligns with the concept of Level 1 evaluation, which emphasises the importance of participants' initial perceptions of the clarity and relevance of the training. (Praslova, 2010)

Stage 2

In this second stage, lecturers and students analysed the comparison between teaching instruction that did not use the REAL model and teaching instruction that used the REAL model. In this case, students analysed two teaching instruction documents: the first was a teaching instruction document using the REAL module provided by the lecturer, and the second was a teaching instruction document that did not use the REAL model, created by students during PLP (Pengenalan Lingkungan Persekolahan). Students analyse the differences in terms of instructional structure, clarity of learning instruction, and expected learning objectives (Waris et al., n.d.). The results of their analysis show that the use of the REAL model produces more systematic and focused instruction. The positive reactions of students at this stage strengthen the assumption that understanding a structured instructional model improves the quality of learning design (Abuhassna & Alnawajha, 2023b). This activity aims to help students understand the advantages of the REAL model as a teaching instructional design model.

Stage 3

In this third stage, students learn more deeply about each stage of the REAL model. Review: at this stage, preservice teacher students learn how to review the previous material or knowledge that students have and relate to the new material to be delivered (Kikas et al., 2021). Elaborate, preservice teacher students invited to develop their understanding by providing examples or applications of the material they have learned, making it easier for them to grasp (Magaji et al., 2024). Apply, preservice teacher students learn to create collaborative activities

and provide creative assignments (Peralta Hernández & Tirado Segura, 2023a). Lead-up to the preservice teachers learn to develop final projects or evaluation activities to assess results and understandingservice teacher. Explanations provided on how to create practical and relevant assessment rubrics.

Stage 4

The final stage in understanding the REAL model requires preservice teacher students to design teaching instructions using the REAL model, focusing on achieving competencies and skills such as analyzing, identifying, and practicing. Meanwhile, students can achieve four skills: listening, speaking, reading, and writing. In this task, students create activities for each stage of REAL (Review, Elaborate, Apply, and Lead-up), complete with the learning media, learning objectives, and assessment rubric. (Ansyari, 2018). Finally, the application of the REAL instruction model in the teaching practice of preservice teacher students can be further studied and utilised as a teaching instruction design model.

The results of student reactions indicate that the REAL model is well received and is considered to support a more focused and practical teaching and learning process. This positive reaction is an early indicator that this model is effective in the context of training preservice teachers (Peralta Hernández & Tirado Segura, 2023b). For further research, it is recommended to evaluate Levels 2 (Learning) and 3 (Behaviour) to assess the extent to which students' understanding and behavioural changes are affected after participating in this training.

The impact of REAL as a teaching instruction design model of preservice teachers satisfaction

The result of mean score and standard deviation preservice teacher satisfaction can be seen on the table below.

No	Statement	Mean	SD
1	The REAL model helps me in designing teaching activities according to the needs of preservice teachers.	2.91	0.28
2	The REAL model is delivered in an engaging and easy-to-learn way.	2.83	0.38
3	The learning process with the REAL model is explained simply and easily understood	2.66	0.65
4	I feel like I can apply many practical examples from the REAL model in my teaching activities.	2.5	0.52
5	I understand how to create learning activities that match the "skill" I want to achieve	2.75	0.45
6	I understand how to use Edu-tech media effectively in learning activities	2.75	0.45
7	I understand the relationship between learning objectives and instructional objectives/achievement indicators.	2.75	0.45
8	I understand how to conduct a final evaluation of an activity that fits the instructional objectives	2.91	0.28
9	I understand how to analyze the effectiveness of teaching implementation.	2.66	0.49
10	I feel satisfied in designing and executing learning activities after learning the REAL model	2.33	0.49

Based on the questionnaire results, the mean score of all statements was calculated and found to be 2.70, indicating a generally positive response from participants toward the use of the REAL model. Based on the table above, it can be seen that the average value of each statement reaches the level of 2.70. It was concluded that the participants in this study agreed that the REAL model can be used as a teaching instruction design that suits the needs of preservice teachers. However, a preservice teacher firmly stated that using the REAL model or other models still helps in designing teaching instruction (R2). In general, this statement is understandable because the purpose of instructional design in teaching is to help preservice teachers design learning activities that encourage students' critical thinking and creativity (Liu et al., 2025). This aligns with the students who chose to agree that "Using the REAL model, teaching activities can be designed to meet the specific needs and improve the skills of preservice teachers" (R8). This aligns with the findings of Kusriandi et al. (2023), who noted

that the teaching practice instruction model is not only developed based on the needs of teachers but also facilitates simple learning in designing teaching practice activities.

The REAL model helps meet the needs of preservice teachers, specifically by identifying the focus skills they aim to achieve in teaching and learning activities, ensuring alignment with predetermined learning objectives. One of the preservice teachers who agreed with this opinion revealed:

> *"Because by understanding how to break down the target 'skill' into concrete steps in an activity, we can ensure that every task and interaction designed directly contributes to the development of the skills that students want." (R12)*

Preservice teachers who chose the neutral option argued that implementing the REAL model requires more practice and guidance in designing activities that are truly aligned with the targeted skills, especially in the context of diverse English language learning, such as listening, speaking, reading, and writing. Although the basic concept is understood, the application still feels challenging (R10). This student's perspective aligns with research by Meutstege et al. (2023) on the importance of training to help teachers develop skills in designing, implementing, and evaluating differentiated learning. Teachers need to understand student characteristics, possess pedagogical knowledge, and master the subject matter to effectively align instruction with students' needs. Through the REAL model, prospective teachers can more easily understand how to conduct the final evaluation by the learning objectives (R1, R2, R3, R10, R12). Preservice teachers who can design the final evaluation of the activity after learning the REAL model consider

> *"The REAL model directs in designing measurable evaluations that are in accordance with learning objectives" (R7)*

Preservice teachers who can design final evaluations of activities after learning the REAL model consider that "The REAL model guides in designing evaluations that are measurable and by learning objectives" (R7). This statement confirms that measurable evaluations aligned with learning objectives are crucial to ensure that what is assessed accurately reflects the competencies to be achieved. Such evaluations help teachers objectively measure students' learning success, identify areas for improvement, and enhance the quality of learning (Ponomariovienė et al., 2025). Therefore, teachers need to design appropriate evaluations so that the results are valid and meaningful and support the achievement of learning objectives.

To reinforce the statement on satisfaction in designing and implementing learning activities after learning the REAL model, the researcher conducted interviews. Most preservice teachers argue that the REAL model, as a teaching instruction design, is easy to understand and supports their needs in creating practical and effective teaching instructions to achieve learning objectives. The following data represent the results of interviews with preservice teachers who used the REAL model as a teaching instruction design.*R-1*

> *"I am satisfied with the learning outcomes after using the REAL model showing that it is effective in helping to achieve learning goals".*
>
> *R-3* *"In designing learning activities using the REAL model, I am quite satisfied".*
>
> *R-4* *"The REAL model helps me in designing and implementing more effective and structured learning activities. By using this model, I feel more confident and satisfied because I can create a better learning experience for students and achieve learning goals more effectively."*
>
> *R-5* *"If I had known this model before, I would have been more comfortable using this model".*
>
> *R-7* *"I feel satisfied in designing and executing learning activities after learning the REAL model because it provides a clear and structured approach".*
>
> *R-8* *"I am satisfied that after learning the REAL model, I have clear and practical guidance in designing and implementing learning activities that are more contextual, meaningful, and engaging for students".*

R-9 "*How to make teaching instructions using the REAL model easier and straightforward*".

R-12 "*The REAL model provides clear and practical guidance so that I am more confident and satisfied in designing and executing learning*".

The results of the interview above show that some preservice teachers are satisfied with designing and implementing learning activities after learning the REAL model. They view the REAL model as an effective, practical, and satisfactory teaching and learning design for planning and implementing instruction. This is because the structure of the Review, Elaborate, Apply, and Lead-up stages provides clarity in thinking and acting for preservice teachers so that they do not have difficulties in designing teaching instructions.

CONCLUSIONS

This study provides new insights for lecturers and researchers in facing the challenges of instructional design teaching in education programs. Evaluation with the Kirkpatrick Model Level 1 showed that preservice teachers were satisfied with this REAL model as instructional design teaching effective in helping learning and increasing student satisfaction. The researcher recommends the REAL model to be used more widely and further evaluated to see its impact on learning outcomes and teaching behaviour.

REFERENCES

Abuhassna, H., & Alnawajha, S. (2023a). Instructional Design Made Easy! Instructional Design Models, Categories, Frameworks, Educational Context, and Recommendations for Future Work. *European Journal of Investigation in Health, Psychology and Education*, *13*(4), 715–735. https://doi.org/10.3390/ejihpe13040054

Abuhassna, H., & Alnawajha, S. (2023b). Instructional Design Made Easy! Instructional Design Models, Categories, Frameworks, Educational Context, and Recommendations for Future Work. In *European Journal of Investigation in Health, Psychology and Education* (Vol. 13, Issue 4, pp. 715–735). MDPI. https://doi.org/10.3390/ejihpe13040054

Ansyari, M. F. (2018). Developing a rubric for assessing pre-service English teacher struggles with instructional planning. *Cogent Education*, *5*(1). https://doi.org/10.1080/2331186X.2018.1507175

CAHAPAY, M. (2021). Kirkpatrick Model: Its Limitations as Used in Higher Education Evaluation. *International Journal of Assessment Tools in Education*, *8*(1), 135–144. https://doi.org/10.21449/ijate.856143

De-Juan-Vigaray, M. D., Ledesma-Chaves, P., González-Gascón, E., & Gil-Cordero, E. (2024). Student satisfaction: Examining capacity development and environmental factors in higher education institutions. *Heliyon*, *10*(17), e36699. https://doi.org/10.1016/j.heliyon.2024.e36699

Dinham, J., Choy, S. C., Williams, P., & Yim, J. S. C. (2021). Effective teaching and the role of reflective practices in the Malaysian and Australian education systems: a scoping review. *Asia-Pacific Journal of Teacher Education*, *49*(4), 435–449. https://doi.org/10.1080/1359866X.2020.1824267

Hala, M., & Xhomara, N. (2024). The impact of technology, learning style, instructional approach, and attitude on learning outcomes. *International Journal of Evaluation and Research in Education*, *13*(6), 3609–3617. https://doi.org/10.11591/ijere.v13i6.29973

Kammur, A. A. (n.d.). *The Quality Of Educational Services And Its Effect On Students Satisfaction An Empirical Study On Students Of Alrifaq Private University In Libya* (Vol. 6, Issue 1).

Kikas, E., Silinskas, G., Mädamürk, K., & Soodla, P. (2021). Effects of Prior Knowledge on Comprehending Text About Learning Strategies. *Frontiers in Education*, *6*. https://doi.org/10.3389/feduc.2021.766589

Kirkpatrick, D. L. , & K. J. D. (2007). *Implementing The Four Levels*.

Kusriandi, W. (2023). *Instructional teaching design using edu-tech to prepare prospective teachers to teach English as a foreign language in the senior high school* [Unpublished doctoral dissertation]. Universitas Negeri Semarang.

Kusriandi, W., Mujiyanto, J., Rukmini, D., & Fitriati, S. W. (2023). *Mendesain instruksi praktikum mengajar*. Adab.

Liu, C.-C., Wang, D., Gu, X., Hwang, G.-J., Tu, Y.-F., & Wang, Y. (2025). Facilitating pre-service teachers' instructional design and higher-order thinking with generative AI: an integrated approach with the peer assessment and concept map. *Journal of Research on Technology in Education*, 1–26. https://doi.org/10.1080/15391523.2025.2474528

Magaji, A., Adjani, M., & Coombes, S. (2024). A Systematic Review of Preservice Science Teachers' Experience of Problem-Based Learning and Implementing It in the Classroom. In *Education Sciences* (Vol. 14, Issue 3). Multidisciplinary Digital Publishing Institute (MDPI). https://doi.org/10.3390/educsci14030301

Meutstege, K., Van Geel, M., & Visscher, A. (2023). Evidence-Based Design of a Teacher Professional Development Program for Differentiated Instruction: A Whole-Task Approach. *Education Sciences*, *13*(10). https://doi.org/10.3390/educsci13100985

Obizoba, C. (2015). Instructional Design Models-Framework for Innovative Teaching and Learning Methodologies. In *International Journal of Higher Education Management (IJHEM)* (Vol. 2). ABRM. www.ijhem.abrmr.com

Peralta Hernández, J., & Tirado Segura, F. (2023a). The Teaching of Collaborative Creativity, a Methodological Approach to Designing the Environment. *Journal of Formative Design in Learning*, *7*(1), 46–60. https://doi.org/10.1007/s41686-022-00073-1

Peralta Hernández, J., & Tirado Segura, F. (2023b). The Teaching of Collaborative Creativity, a Methodological Approach to Designing the Environment. *Journal of Formative Design in Learning*, *7*(1), 46–60. https://doi.org/10.1007/s41686-022-00073-1

Pimentel, J. L. (2019). Some Biases in Likert Scaling Usage and its Correction. *Article in International Journal of Sciences Basic and Applied Research*. http://gssrr.org/index.php?journal=JournalOfBasicAndApplied

Ponomariovienė, J., Jakavonytė-Staškuvienė, D., & Torterat, F. (2025). Implementing Competency-Based Education Through the Personalized Monitoring of Primary Students' Progress and Assessment. *Education Sciences*, *15*(2). https://doi.org/10.3390/educsci15020252

Praslova, L. (2010). Adaptation of Kirkpatrick's four level model of training criteria to assessment of learning outcomes and program evaluation in Higher Education. *Educational Assessment, Evaluation and Accountability*, *22*(3), 215–225. https://doi.org/10.1007/s11092-010-9098-7

Ramísio, P. J., Pinto, L. C., & Almeida, M. (2024). The need for scientific-area-related indicators for effective energy planning in higher education institutions. *Heliyon*, *10*(11), e31688. https://doi.org/10.1016/j.heliyon.2024.e31688

Razinkina, E., Pankova, L., Trostinskaya, I., Pozdeeva, E., Evseeva, L., & Tanova, A. (2018a). Student satisfaction as an element of education quality monitoring in innovative higher education institution. *E3S Web of Conferences*, *33*. https://doi.org/10.1051/e3sconf/20183303043

Razinkina, E., Pankova, L., Trostinskaya, I., Pozdeeva, E., Evseeva, L., & Tanova, A. (2018b). Student satisfaction as an element of education quality monitoring in innovative higher education institution. *E3S Web of Conferences*, *33*. https://doi.org/10.1051/e3sconf/20183303043

Sahin-Taskin, C. (2017). *Journal of Education and Practice www.iiste.org ISSN* (Vol. 8, Issue 12). Online. www.iiste.org

van Brussel, S., Timmermans, M., Verkoeijen, P., & Paas, F. (2023). Comparing instructional strategies to support student teachers' learning to prepare an open-minded citizenship education lesson. *Instructional Science*, *51*(3), 451–473. https://doi.org/10.1007/s11251-023-09623-x

Waris, M., Ishaq, P., & Butt, M. N. (n.d.). Scaffolding Students' Learning Through Lesson Clarity And Instructional Variety As An Effective Teaching Behaviour. In *Journal of Positive School Psychology* (Vol. 2023, Issue 2). http://journalppw.com

Yalcin Arslan, F. (2019). Reflection in pre-service teacher education: exploring the nature of four EFL pre-service teachers' reflections. *Reflective Practice*, *20*(1), 111–124. https://doi.org/10.1080/14623943.2018.1564652

Zhang, L., Li, Q., & Liu, W. (2022). A Study on the Effectiveness of College English Teaching Based on Content-Based Instruction Teaching Philosophy. *Frontiers in Psychology*, *13*, 921654. https://doi.org/10.3389/fpsyg.2022.921654