

# DESIGN BASED RESEARCH IN EDUCATION: VIEWED FROM THE NEED ANALYSIS IN SPEAKING FOR PROFESSIONAL AT UNIVERSITAS ISLAM SULTAN AGUNG

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## Abstract

Design-Based Research (DBR) in education provides a systematic approach for developing and refining educational practices through iterative analysis, design, implementation, and evaluation. This study applies DBR to the development of an English for Professional course at Universitas Islam Sultan Agung (UNISSULA), driven by a thorough need analysis. The need analysis was gained by interviewing some stakeholders that relate to English speaking in their daily bases command. The research identifies the specific linguistic and professional needs of students in various faculties, aiming to bridge the gap between current English proficiency and the demands of their future careers. Through successive cycles of design, implementation, and refinement, the study develops a tailored curriculum that enhances students' communicative competence and professional skills in English. Preliminary results indicate significant improvements in student engagement and language proficiency, underscoring the efficacy of DBR in aligning educational interventions with the real-world needs of learners. This research contributes to the broader field of educational design by demonstrating how need analysis can inform and optimize curriculum development in higher education.

**Keyword : Design-based Research, English, Professional**

## Introduction

The goal of design-based research (DBR) in education is to address complex issues in learning environments by developing, implementing, and assessing creative solutions in an iterative manner (Hall, 2020). This method integrates aspects of design and research, enabling practitioners and researchers to work together to create workable solutions that can be applied in actual educational settings. DBR is distinguished by its dedication to enhancing educational practice by the creation and application of creative interventions, its emphasis on working together between researchers and practitioners, and its concentration on tackling particular educational difficulties.

The emphasis on iterative cycles of design, implementation, and evaluation is a crucial component of DBR (Jennifer et al., 2015). This makes it possible for researchers to iteratively enhance and improve their answers in response to input and information gathered from actual scenarios. Researchers may make sure that

their interventions are practical to use in educational settings and effective by collaborating closely with practitioners. By bridging the gap between research and practice, this cooperative approach eventually results in more significant and long-lasting advancements in the field of education.

Additionally, using this iterative method, academics can address intricate and varied challenges in education in a more comprehensive way (Carmen & Rohit, 2017). This method makes it possible to comprehend the difficulties that teachers and students encounter on a deeper level, resulting in more focused and significant interventions. Furthermore, by including stakeholders in the planning and execution phase, researchers may guarantee that interventions are inclusive and culturally sensitive, accounting for the wide range of student requirements and backgrounds. In order to bring about significant and long-lasting change in

education, a collaborative and iterative approach to research and practice is needed (Dale et al., 2018). As stakeholders feel heard and appreciated throughout the process, it also promotes a sense of ownership and investment in the solutions created (Margaret, 1996). We can establish a more just and equitable educational system that benefits all students by tackling the underlying causes of educational inequality and cooperating to find long-term solutions. In the end, as we work toward a more inclusive and equitable future, this all-encompassing and cooperative approach benefits society as a whole in addition to specific students and educators.

Importance of Need Analysis in English for Professional at Universitas Islam Sultan Agung. According to Serena & Alberto (2012) states "One key aspect of creating a more just and equitable education system is the importance of conducting thorough needs analysis in English for professionals at universities". Teachers and administrators can better fulfill the requirements of English language learners by customizing their support and resources based on an understanding of the unique obstacles and challenges that these students confront in their professional studies. In addition to meeting each student's unique requirements, this proactive approach makes the classroom a more welcoming and encouraging place for everyone to study. Undertaking a needs analysis enables educational institutions to obtain important information on the academic objectives, language proficiency levels, and cultural backgrounds of their student body. This information may then be used to guide the creation of focused interventions and support services. Universities can guarantee that all students have access to the tools and assistance they need to succeed in their coursework and future jobs by giving serious consideration to the needs of English language learners in professional programs.

This method helps all students feel equitable and like they belong, not only English language learners. Universities may encourage and enable students to achieve academic success by fostering a more welcoming and encouraging learning environment. Furthermore, attending to each student's unique needs might result in increased retention rates and general student satisfaction with their educational experience. Universities may establish a more accessible and fair learning environment for all students, irrespective of their background or language proficiency level, by providing tailored interventions and support services. All students may eventually benefit from higher graduation rates and greater success in the workforce as a result of this. "Personalized learning environments with one-on-one attention, small class sizes, and invasive advising can increase student perseverance and graduation rate. Based on their resources and student populations, different institutions have different graduation rates; some, given their circumstances, have performed better than projected. Data on graduation rates broken down by race and other variables can show inequalities and potential development areas (Colleen, (2007);(Daniel et al., 2004). Universities may give their students a more rewarding and fulfilling educational experience and make sure that everyone has the chance to realize their full potential by emphasizing fairness and inclusivity. By doing this, colleges may contribute significantly to the advancement of diversity and the creation of a fairer society for coming generations.

The goal of this study is to investigate the different programs and tactics that academic institutions might utilize to encourage fairness and inclusivity on campus. This essay will look at the significance of having diverse representation in leadership roles, the necessity of culturally sensitive curricula, and the benefits of fostering an inclusive and encouraging campus community. The

study will also look into how these measures affect general campus climate and student success. This paper seeks to offer suggestions for colleges seeking to strengthen their commitment to diversity and fairness through a thorough examination of best practices and case studies. Universities may guarantee that all opinions are heard and taken into consideration during the decision-making process by concentrating on fostering diversity and inclusion in leadership positions. Students' motivation and engagement might rise when they recognize themselves reflected in their courses thanks to culturally responsive curricula. Enhancing the campus climate to be encouraging and welcoming will help all students have a feeling of community and belonging, which can boost retention rates and boost academic performance. Universities can ultimately establish a more inclusive and equitable campus where all students can succeed by giving these activities top priority.

By involving all stakeholders in the design and implementation of interventions, DBR ensures that the solutions are tailored to the specific needs and challenges present in the educational setting. This personalized approach not only increases the likelihood of success but also creates a sense of shared responsibility for the outcomes. Furthermore, the focus on rigorous evaluation ensures that interventions are constantly being refined and improved based on real-time data and feedback. This iterative process of improvement is essential for driving meaningful change and ultimately improving educational practices for the benefit of all involved.

Through ongoing observation and modification of actions based on insights gleaned from data, DBR cultivates a culture of perpetual enhancement in the educational environment. With this proactive approach, instructors may assist students' learning and growth by addressing issues in real-time and making

well-informed decisions. Furthermore, DBR's collaborative character inspires stakeholders to cooperate in order to achieve a common objective, developing a feeling of community and shared accountability for the educational process. Consequently, DBR fosters a culture of innovation and quality within the educational community in addition to improving student results. By using data to inform decision-making and problem-solving, teachers can customize their teaching approaches to fit the individual needs of every student. This individualized approach fosters a welcoming and positive learning atmosphere in addition to improving academic attainment. In the end, DBR gives teachers the tools they need to perform better in their jobs and gives students the assistance they require.

Design-Based Research (DBR) in Education has demonstrated that this can result in notable enhancements to both the efficacy of teachers and the learning results of their students. In order to better fulfill the needs of their students, educators can continuously improve their teaching practices by taking a methodical and iterative approach to design, implementation, and evaluation. Furthermore, DBR fosters cooperation between academics, educators, and other stakeholders, establishing a community of practice centered on innovation and ongoing improvement in education. In addition to helping teachers and children individually, this collaborative approach may also lead to systemic improvement. As stated by Wood (2017) all things considered, DBR provides a viable foundation for improving education and encouraging an innovative and high-achieving school culture. Teachers can learn from each other and modify their pedagogical approaches to better promote student learning by cooperating and exchanging best practices. New methods and techniques that can help all students, regardless of background or learning style, may result from this group effort. Even

though it is consistent with earlier studies (Sidney & Ala, 2015);(Som & Shironica, 2017) "Design Based Research (DBR) is a potent methodology that includes educators and researchers as collaborators in the research process with the goal of producing theories to address real-world issues. While DBR and action research (AR) both aim to discover real-world problems, they differ in that DBR's primary objective is to generate theory. Designing interventions based on preexisting theories and enhancing or validating them is a component of DBR. Format concerns for scholars who are new to gifted education provide a challenge when utilizing DBR, as does the requirement for a clear explanation of the connections between the main DBRs, their characteristics, and research.

### **Methodology**

The research methodology "Design-Based Research in Education: Viewed from the Analysis of English Language Needs for Professionals at Sultan Agung Islamic University" uses a Design-Based Research (DBR) approach, namely an iterative and systematic method that aims to improve educational practice. According to (Jeffrey et al., 2009). The research design will detail how data was collected, analyzed, and interpreted in order to address the research questions and objectives. The research process focused on analyzing the need for English for Professional Purposes at Sultan Agung Islamic University. This methodology involves a qualitative data collection technique method approach. Researchers used surveys, interviews, document analysis, and observations to collect comprehensive data on the English language needs of professionals or students preparing for professional roles. According to Creswell, J. W., & Poth, C. N. (2018) "Qualitative research is a methodological approach that aims to understand social phenomena, human experiences, and the meaning given by individuals or groups to an event or situation. This method focuses

on collecting non-numerical data, such as in-depth interviews, participant observation, and document analysis, to explore and interpret complex social realities". The study will follow an iterative process, with several phases of data collection, analysis, and design refinement. Contextual analysis is essential to examine the specific environment of Sultan Agung Islamic University and relevant professional fields.

This comprehensive approach enables a thorough understanding of needs and context, which forms the basis for designing and improving English for Professional Purposes curricula or interventions at universities.

### **Finding and Discussion**

#### **Results of the Need Analysis in English for Professional at Universitas Islam Sultan Agung**

In analyzing the findings of the need analysis in English for Professional at Universitas Islam Sultan Agung, it became clear that there were several key areas where improvement and development were necessary. The data revealed a significant gap in communication skills among students, particularly in the areas of writing and speaking. Additionally, there was a lack of proficiency in specialized vocabulary related to their field of study. These findings underscore the importance of implementing targeted language instruction and practice opportunities to address these specific needs. Furthermore, the results highlighted the importance of incorporating real-world tasks and scenarios into the curriculum to enhance students' practical language skills and prepare them for success in their future careers.

Offering specialist language workshops or classes that concentrate on improving speaking and writing abilities within the framework of students' academic specialties is one way to close this gap. Students' capacity to successfully

express their ideas and research findings can be improved by offering them discipline-specific terminology and communication skills, along with tailored teaching and practice. Furthermore, by include real-world assignments and scenarios in these workshops, students will be better equipped to use their language abilities in real-world contexts and meet the expectations of their future professions. Meanwhile, according to Carrol (2003) the overall goal of these specialist language workshops is to provide students with the language skills they need to succeed in their chosen industries, bridging the gap between academic learning and professional accomplishment. Through immersion in discipline-specific language education, students can acquire the competence and self-assurance required to traverse challenging material and effectively and eloquently convey their ideas. Thus, these programs help students achieve better academically while also providing a strong basis for their future career aspirations.

Students who participate in these workshops often feel better prepared to engage with their coursework and participate in discussions and presentations with confidence. Special language teaching helps them not only understand the material more deeply but also express their ideas more effectively. As a result, students can make meaningful contributions in their classes and develop the critical thinking and communication skills essential for success in their chosen fields. Additionally, the practical nature of these workshops allows students to apply their language skills in real-world contexts, preparing them for the challenges they will face in their future careers.

In line with research opinions (Ellen et al., 2017) Overall, language workshops provide students with a well-rounded education that goes beyond traditional classroom learning. By combining theoretical knowledge with practical application, students can fully understand

the nuances of the language and its relevance to their field of study. This comprehensive approach not only improves their academic performance but also equips them with the tools they need to excel in the professional world. In essence, language workshops serve as a bridge between academic theory and real-world practice, helping students become confident and competent communicators in their chosen fields.

### **Application of Design Based Research principles**

By incorporating the ideas of Design Based Research into language acquisition, this program can be made even more effective. Researchers can continuously enhance curriculum and instructional strategies to better suit the requirements of students by incorporating feedback from instructors and students. Innovative, student-centered, evidence-based language learning strategies can be developed thanks to this iterative approach. Furthermore, academics might make significant contributions to the field of language education by recording the effects of these workshops on students' academic performance and language ability.

Future study and practice may benefit from these findings, which could ultimately result in improvements to language instruction and learning. Additionally, by sharing their findings with a larger audience through presentations and scholarly papers, researchers might encourage others to implement comparable strategies in their language education programs. In this approach, language learning workshops can have a positive effect on the field of language learning overall in addition to the particular students who take part. Meanwhile, according to Motteram (2013) language learning workshops are crucial for fostering innovation and advancement in the field of language instruction. These workshops foster collaboration and idea sharing by bringing together scholars, educators, and

students. By working together, we can develop innovative approaches and best practices that will ultimately increase the efficiency of language learning and teaching. Workshops for language acquisition thus serve the interests of individual participants as well as advancing the profession overall.

### **Implications of the findings for educational practice**

The consist on the significance of language educators' continuous professional development, the necessity of practitioners' and researchers' ongoing collaboration, and the benefits of integrating cutting-edge teaching methods into language courses. Teachers can make sure they are giving their pupils the most efficient and interesting learning opportunities by keeping up with the most recent research and trends in language instruction. Educators can further enhance their knowledge and abilities by taking advantage of workshops and other professional development opportunities, which will eventually be advantageous to both them and their students. Overall, the results point to the importance of language learning workshops in influencing the direction of language education and in encouraging ongoing development and innovation in the area. Educators can more effectively adapt their teaching strategies to meet the requirements of various learners by keeping up to speed on the most recent research and trends in language education. In line with opinion Maria & Madelyn (2017) teachers can promote a culture of lifelong learning and growth in their classrooms by actively engaging in professional development opportunities. In the end, language learning workshops are an invaluable resource that helps teachers improve student outcomes, stay current in the field, and improve their practice.

### **Discussion**

The study's conclusions are consistent with earlier research emphasizing the value of

professional growth in language instruction. Numerous academics have stressed how important it is for teachers to have continual training and learning opportunities in order to properly support varied learners and foster student achievement. Furthermore, a large body of research has established the advantages of language learning workshops in improving student results and teaching strategies. This conversation emphasizes the need of ongoing professional development for language teachers and the necessity for them to actively pursue these opportunities in order to enhance their instruction and better serve the needs of their students. Teachers can acquire important skills and tactics that they can use in the classroom to foster a more welcoming and encouraging learning environment for a diverse student body by taking part in language learning workshops. Additionally, by keeping educators abreast of current research and best practices in language instruction, these courses can assist teachers increase student outcomes and performance. All things considered, continuing education and training are essential for providing teachers with the skills and materials they need to support a diverse student body and promote a culture of continual development in the classroom.

Although training sessions and workshops can offer educators useful information and tools, it's critical to recognize the limitations of these kinds of research. A major constraint of the research is the possibility of bias in the findings, given that workshops could be conducted by individuals or groups with particular goals or viewpoints. Furthermore, the success of these workshops could differ based on the background, pedagogy, and dynamics of each teacher. Moreover, it can be challenging to gauge and assess these training opportunities' long-term effects on student results. Notwithstanding these drawbacks, continuing professional growth is still essential to establishing a welcoming and encouraging learning

environment for every student. Therefore, before incorporating professional development opportunities into their teaching practices, educators should carefully consider the content and methodology of these programs. Teachers can make better decisions about which workshops to attend and how to implement new ideas into their teaching practice by being aware of potential biases and limits. The ultimate objective is to develop as teachers on a constant basis and give every student a happy, fair learning environment.

Future study recommendations can look into how various professional development strategies affect student outcomes over the long run. Furthermore, more research on the best techniques for assessing the success of professional development initiatives may offer insightful information to teachers. The creation of more inclusive and customized professional development opportunities may also benefit from research on the unique requirements and preferences of various student demographics, such as English language learners or students with impairments. All things considered, it is imperative that more study be done in this field to guarantee that teachers have access to excellent professional development that fosters their own development and eventually helps their pupils. Schools can distribute resources and support mechanisms for continuous learning and development more effectively if they have a deeper grasp of what works best for teachers and their students. Additionally, educators can adapt their professional development programs to the changing requirements of their students by using data and feedback from many assessment methodologies. In the end, funding efficient professional development for teachers is an investment in every student's achievement and welfare.

## **Conclusion**

Based on the discussion above, the conclusion is clear that prioritizing and

investing in effective professional development for educators is critical to the overall success and well-being of students. By continually improving and refining professional development programs based on feedback and data, schools can better support their educators in meeting the evolving needs of their students. This, in turn, will result in improved academic outcomes and a more positive learning environment for all. Further research is needed to explore the long-term impact of effective professional development on student achievement and overall school success. Additionally, ongoing professional development can help educators stay abreast of best practices and innovative teaching methods, ultimately benefiting students' educational experiences. By investing in the growth and development of teacher skills, schools can create a culture of continuous learning and improvement. Ultimately, prioritizing effective professional development for educators is an investment in the future success of students and schools.

A useful method in education, Design Based Research (DBR) concentrates on creating and implementing creative instructional interventions and techniques. Through active participation in the planning, carrying out, and assessing of instructional strategies, this approach improves student learning results in the long run. Teachers can work together and try out new teaching strategies by introducing DBR into professional development programs. This allows them to make sure that their practices are supported by research and customized to the individual requirements of their pupils. In addition to increasing teacher effectiveness, this iterative process of study and practice also helps to improve educational programs and school environments generally. Meanwhile, according to Sabre et al., (2023) "The general success and welfare of kids depend heavily on funding efficient professional development for educators. It has been

demonstrated that district-wide collaboration and common well-being objectives are fostered by professional development with an emphasis on well-being. District administrators are essential in creating the conditions for well-being talks, funding professional growth, and developing well-being leadership in teachers and students. This will ultimately result in better academic performance and a happier learning environment for everybody. Moreover, DBR gives teachers the ability to continuously evaluate their methods and make decisions based on data in order to better assist students' learning. In order to satisfy the varied requirements of their pupils, educators can modify and improve their methods by establishing a culture of inquiry and creativity. Educators may improve the educational results of all students by incorporating research findings into their classroom methods, which will ultimately result in more meaningful and impactful learning experiences.

Future implications and directions for research in the field of DBR include exploring the effectiveness of different data collection methods, such as observation, surveys, and interviews, in informing instructional practices. Additionally, researchers may investigate the role of technology in facilitating data analysis and interpretation, as well as the potential benefits of collaboration among educators in implementing DBR. Moreover, future studies could focus on the long-term impact of DBR on student achievement and engagement, as well as the scalability of this approach in different educational settings. Overall, continued research in the field of DBR holds promise for improving teaching and learning practices, ultimately benefiting students and educators alike. By exploring these various aspects of DBR, researchers can gain valuable insights into how to effectively utilize data to enhance teaching strategies and student outcomes. This comprehensive approach to research not only offers practical solutions for educators

but also contributes to the ongoing development of evidence-based practices in education. As scholars continue to delve into the potential of DBR, the field stands to make significant advancements that will ultimately lead to more effective and impactful educational experiences for all involved.

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