# Development of a Website-Based Self-Evaluation Instrument for Teacher Professional Education Study Program at Lembaga Pendidikan Tenaga Kependidikan (LPTK) of IAIN Pontianak

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**Abstract:** The development of a website-based questionnaire can retrieve, store, and analyze statistical information on the results of the self-evaluation of the study program. The development of a website-based questionnaire begins with developing an evaluation instrument and developing a template on the website that would be used as a medium to absorb information from respondents. The research was to develop a website-based survey instrument, to validate a website-based survey instrument, to find the educators' perceptions of study program services and to find the students' perceptions of learning services. This study used the research and development method. The selection of the method was based on the need to develop a survey instrument using the LimeSurvey application. The respondents consisted of lecturers teaching courses in the study program and students of the PPG study program. The results showed that using web-based survey instruments, such as Limesurvey, enhances efficiency and expedites data collection and analysis processes. The survey instruments designed for study programs and learning services have demonstrated both validity and reliability, making them suitable for implementation. Lecturers express highly favourable perceptions of the Teacher Professional Education (PPG) study program services at IAIN Pontianak, with high scores, particularly in areas like vision, mission, and study program service management. Students exhibit satisfaction with the provided learning services, although they highlight certain aspects that need improvement. The overall satisfaction score among students indicates that the learning services at the Teacher Professional Education (PPG) Study Program of IAIN Pontianak are very satisfactory.
**Keywords:** survey instrument; program evaluation; web-based, PPG

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## Introduction

Education providers must carry out learning program evaluation as a follow-up to program sustainability (Suparno & Asmawati. L, 2019). The evaluation component is one of the supporting aspects of study program accreditation. The IAIN Pontianak PPG Study Program holds a minimum accreditation certificate with the predicate "good" from the National Accreditation Board for Higher Education through Decree number 3130/SK/BAN-PT/PB-PS/PP/V/2022 dated 24 May 2022. The minimum accreditation certificate is valid until 2026 and must be reapplied before it expires.

PPG Study Program managers must prepare all aspects of accreditation assessment and preparation is carried out regularly by documenting every activity conducted by the study program (Saputro et al., 2012). One of the components that must be prepared is the self-evaluation of the study program, the self-evaluation component consists of several variables including; the quality of education personnel, the quality of education personnel, facilities and infrastructure, financial management and others. The accreditation assessment of the PPG Study Program in 2026 was carried out by the Educational Self-Accreditation Agency covering 9 (nine) criteria.

The documentation technique is the key to success in obtaining the maximum assessment of the study program (Syam & Amri, 2017). This study conducted a satisfaction survey of study program services and learning services by lecturers in Prodi PPG, which is one part of the self-evaluation component (Ashifa, 2023). So far, the measurement of management satisfaction level of study program services and learning services in the IAIN Pontianak PPG study program tends to be neglected, while the survey is carried out over a long time after the end of learning so that the level of student participation is very low and less accurate. In the aspect of self-evaluation in the form of a satisfaction survey with study program services and learning services that must be prepared during the learning process, a measurable strategy is needed so that these components can be fulfilled properly. The implementation of the evaluation includes the response of students, lecturers and stakeholders to educational services in the PPG study program will be carried out in the form of a website-based questionnaire, making it easier for respondents and study program managers to obtain data on self-evaluation results effectively and efficiently.

The development of a website-based questionnaire can retrieve, store and analyze statistical information on the results of the self-evaluation of the study program (Maharani & Rindaningsih, 2023). The development of a website-based questionnaire begins with developing an evaluation instrument and developing a template on the website that will be used as a medium to absorb information from respondents. The use of information technology today is a necessity and these facilities provide convenience and can store accurate information according to user desires. Optimization of the website as a medium to absorb information related to stakeholder responses to the quality of study program learning services needs to be developed by IAIN Pontianak's teacher professional education (PPG) study program.

This research seeks to conduct an in-depth study to produce a product to develop a study program self-evaluation questionnaire to support accreditation with the formulation of problems: How to develop a web-based survey instrument for IAIN Pontianak's PPG study program? How to validate a web-based survey instrument for

IAIN Pontianak's PPG study program? How do teaching staff perceive study program services at IAIN Pontianak's PPG study program? How do students perceive learning services at IAIN Pontianak's PPG study program?

## Research Method

This study used a research and development method. The selection of the method was based on the need to develop a website-based survey application as an effort to support the accreditation program of the Teacher Professional Education (PPG) Study Program at IAIN Pontianak in the form of a self-evaluation system. The website-based study program self-evaluation system using the LimeSurvey application contains data collection instruments, stores, processes, and analyses data. The software development method applied in this research is the waterfall method. The waterfall method consists of several stages, as follows (Pranatawijaya et al., 2019).

1) *Analysis.* At this stage, system requirements analysis is carried out and defines the needs that must be met by the application to be built. Business process modelling uses a Data Flow Diagram (DFD) and Entity Relationship Diagram (ERD).
2) *Design.* The design stage is the application design stage such as database design and interface design.
3) *Implementation.* The implementation stage is the stage of making applications following the database and interface design that has been carried out in the previous stage.
4) *Testing.* The testing stage is the stage of testing the application that has been made. The method used in the testing stage is the black box testing method focuses on functionality factors and software specifications. The parts that will be tested are the features of the application that has been made.
5) *Maintenance.* This stage is the stage of system maintenance in the form of an error repair process if an error is found or the program that has been designed does not run after use.

The preparation of the instrument refers to the indicators set by the Education Self-Accreditation Agency (LAMDIK) with 9 (nine) criteria. The foundation for the development of study program self-evaluation indicators uses a service quality model including; Tangible, reliability, responsiveness, assurance, and empathy. The feasibility of the website used and the self-evaluation assessment indicators before being distributed to respondents went through a series of expert validation. Data analysis on the development results of a website-based study program self-evaluation instrument uses content and construct validity tests and then reliability tests (Fraenkel, Jack R., Wallen, 2009).

## Findings
## Development of Website-Based Instruments

When developing a website-based self-evaluation instrument for the Study Program, the initial step involves defining the evaluation objectives. These objectives play a crucial role in shaping the instrument's format and question structure. After establishing the objectives, selecting an appropriate instrument design is necessary, considering options from objective tests to mobile-based online evaluations, depending on the goals of the evaluation and respondent preferences.

Before implementing the instrument on a larger scale, it underwent a testing stage. This stage involved lecturers, education staff,

and students for feedback purposes. This feedback is essential for refining the instrument as needed. When finalizing the instrument and its visual representation, the next stage involved its implementation into a website-based system. Various answer formats, such as multiple-choice or short-form responses, can be utilized. Common platforms like Google Forms, Qualtrics, or other software are available. However, this study used the website-based Lime Survey platform.

Following data collection, we conducted a response analysis to gain insights and determine subsequent actions. This analysis may use analytical tools available in the survey platform or employ more intricate statistical methods if required. This method aims to enable the Study Program's website-based self-evaluation instrument to identify areas for improvement and outline strategies to improve educational quality. The steps and components for developing the instrument are as follows:

*Limesurvey Log-In Page*

The development of web-based surveys in this study uses the LimeSurvey application. The following is a detailed description of this page:
1) Username, users are required to enter a valid and correct username.
2) Password, the entered password is correct to avoid access problems later.
3) "Login" button, click the "Login" button to proceed. If the details entered are correct, the user will be directed to the LimeSurvey dashboard.
4) Help links and "forgot password", if the user forgets the password, they can click on the "Forgot password" link to recover the account or via help that can be used if there are technical problems or other questions.

5) Language, LimeSurvey supports multiple languages. Users can select their preferred language using the drop-down menu.

The page is designed with a minimalist and intuitive look, allowing users to log in quickly and efficiently, most importantly the LimeSurvey Log-In page uses a strict security system to ensure user data remains safe and secure.

*Survey List Page*

The LimeSurvey application contains survey information that is created and distributed to respondents. The survey list view contains information about various types of surveys that have been conducted in this study, namely about study program services and learning services at the IAIN Pontianak Professional Teacher Education (PPG) Study Program. In this section can decide to open and close respondents' access to the survey distributed. Recapitulation of the number of respondents who responded, including respondents who fully or partially filled in the overall number of respondents in providing answers.

The survey list page is the main page on the survey website that presents a diverse list of surveys that are currently active and can be joined by users.
1) Active survey list, users or administrators will find various surveys that are currently active and open for participation. Each survey has a title, a short description, and an estimated duration of time needed to complete it.
2) Survey search, the search feature allows users to search for specific surveys based on desired keywords.
3) Link to survey page, each survey on the list is clickable and will take users directly to the survey page.

4) Survey information, each survey also comes with additional information details such as the number of respondents who have completed the survey and the deadline for completion.

5) Responsive design, this page is designed with a responsive design that makes it look good on desktop, tablet, and smartphone devices.

Through the survey list page, researchers strive to provide a comfortable and easy experience for users participating in various surveys. Researchers believe that by participating, respondents' voices will be heard and help cause positive change.

*Survey Component Editing Page*

The survey component editing page is the core part of the survey website, where users can design, modify, and fine-tune surveys. Users can create a unique experience for respondents with a variety of questions and answer types. Some of the components are as follows.

1) Varieties of question types, providing different types of questions such as multiple choice, Likert scale, short answer, long answer, and so on. Users can choose the one that best suits their information needs.

2) Customization, users can adjust every aspect of their survey, from colouring, font selection, and layout settings, to adding personal logos or images.

3) Logic and filtering, this powerful feature allows users to determine the flow of questions based on respondents' previous answers.

4) Preview and test, before the survey is published, users can preview and conduct tests to make sure everything goes as planned.

5) Draft saving, Users can save their surveys as drafts at any stage, allowing them to go back and do further editing at a later time.

The survey component editing page is a powerful and flexible platform for creating effective and engaging surveys. It is ideal for anyone, from academic researchers to digital marketers, who need authentic information from audiences.

*Respondent Form Page*

The appearance of the respondent page in the survey in this study refers to the format used to collect responses or answers from respondents who are the subject of the research or survey. A good respondent display is designed to make it easier for respondents to submit responses clearly and accurately.

The respondent's page is relatively simple and can be accessed easily, the respondent simply clicks on the column consisting of "very good, good, less good and not good" according to the perception of each respondent. The selection of the LimeSurvey application was developed since it is considered by respondents to be relatively simple, making it easier for respondents to access and provide responses easily and be able to increase participation in this study. The respondent page can be accessed through all types of smartphone devices. The address of the survey link for respondents is through the old https://survey-ppg.iainptk.ac.id/index.php/958569?lang=en.

The Respondent Survey Form page is an interactive platform created to collect feedback and information directly from individuals or target groups. This page is composed of various elements that are carefully planned to maximize the quality and quantity of responses received, the components consist of:

1) Survey form, this page contains a series of questions, which can be multiple choice, rating scale, or short answer.
2) Easy navigation, the design of the page is simple and intuitive, allowing respondents to easily navigate through the form.
3) Data security, personal information and responses provided by respondents are processed and stored securely. The privacy of respondents remains a top priority.
4) Device compatibility, the page is designed to work well on a variety of devices, ranging from desktop computers to smartphones. This makes it easy to access and allows users to complete the survey anytime, anywhere.

### Survey Result Statistics Page

The survey results statistics page on the survey website is a special page that visually displays data and findings from various surveys that have been conducted. The survey results on the statistics page contain various information including:
1) Summary statistics, this section presents basic statistics such as the total number of respondents, the number of answers per question, the percentage of answers, and the demographic data of respondents.
2) Graphs and charts, various graphs and charts are used to visualize the survey results. These can be bar graphs, pie charts, or other types of graphs depending on the type of data.
3) Filter feature, this feature allows users to filter results based on certain criteria, such as the time range of survey deployment, respondent demographics, or answers to certain questions.
4) Download data, an option to download raw data or summary statistics, allowing further analysis using other tools such as Excel or professional statistics applications.
5) Share results, an option to share the survey results through various social media or a direct link to the survey results.

The page is designed with a focus on transparency and easy access to information for users. In addition, using visual representations of survey data can help users understand the findings faster and more efficiently. The survey statistics page provides valuable learnings and insights based on mass opinions and perceptions.

### Instrument Validation

#### Instrument Validity of PPG Study Program Services

Measurement of lecturers' perceptions of PPG study program management services is divided into 2 (two) parts, the first part measures lecturers' perceptions of the vision and mission of the PPG study program through the instrument in Table 1 below.

Table 1: Indicators for assessing the vision and mission of the PPG study program

| No | Indicator |
|----|-----------|
| 1 | Professionalism is the foundation of the character of the academic community of IAIN Pontianak's PPG Study Program |
| 2 | Independence is the autonomy of the academic community of the IAIN Pontianak PPG Study Program in making changes |
| 3 | The scholarship is the foundation of the academic community of the IAIN Pontianak PPG Study Program in thinking, behaving, and acting scientifically. |

| 4 | Ulung means that the IAIN Pontianak PPG Study Program is a reference for quality in competing at the national and international levels |
|---|---|
| 5 | Openness is the basis for new thinking, creativity, and discovery by the academic community of IAIN Pontianak PPG Study Program |
| 6 | Innovative means that the academic community of IAIN Pontianak's PPG program conducts development, renewal, and changes that contribute to the development of the Indonesian nation |
| 7 | PPG IAIN Pontianak as a teacher education program has the main task of producing educators with national and international standards |
| 8 | IAIN Pontianak's PPG program develops and disseminates research-based science and technology in solving problems |
| 9 | IAIN Pontianak's PPG program has the task of producing educators who can adopt Information and Communication Technology in Learning |
| 10 | IAIN Pontianak PPG study program is responsible for producing teachers who can organise HOTS and TPACK-based learning |
| 11 | IAIN Pontianak PPG Study Program carry out community service and empowerment for the welfare of the community |
| 12 | IAIN Pontianak's PPG study program organizes governance and services in learning and develops collaborative networks with various stakeholders |
| 13 | IAIN Pontianak PPG Study Program is organized to achieve its objectives under its mission |
| 14 | The strategy to achieve the vision of IAIN Pontianak's PPG study program is to improve the quality of education, research, community service, institutional reputation, and competitiveness of students and alumni |

Achieving the vision and mission of the study program requires commitment from the study program leaders and their supporting devices in providing quality services for students, stakeholders and lecturers as the main components of the study program. The quality of lecturer learning for students is influenced by the quality of study program services in facilitating learning needs. The indicators of service quality and study program management based on lecturer perceptions are measured through instruments in Table 2 below.

Table 2. Indicators of service management assessment of the PPG study program

| No | Indicator |
|---|---|
| 1 | Selection system to become a study program lecturer |
| 2 | Services in the field of reasoning (for example: Learning innovation, written works, utilization of the latest technology and others) |
| 3 | Professional competence enhancement services (training, workshops and others) |
| 4 | Services to facilitate student guidance by lecturers (Provision of technology or other facilities) |
| 5 | Learning support facility services (Example; Media, LMS, modules and others) |
| 6 | Responsiveness: services provided following the specified time |
| 7 | Reliability (reliability): the ability to provide services accurately and satisfactorily |
| 8 | Service friendliness (empathy) |

| 9 | Certainty (assurance): services are provided according to procedures |
|---|---|
| 10 | Tangible: availability of academic and non-academic services (financial administration) |
| 11 | Tangible: availability of academic and non-academic services (infrastructure; such as buildings, dormitories, lecture rooms, laboratory rooms) |
| 12 | Tangible: availability of academic and non-academic services (learning facilities; such as references, learning tools (LMS), WA Group) |
| 13 | Tangible: availability of academic and non-academic services (information and communication technology facility services (Zoom, GMeet, Jitsi and others) |

The indicators that have been compiled make it easy to determine the measurement of service quality in the PPG Study Program. Instruments that can be given to respondents must be declared feasible by experts.

Based on the results of the validation test in Table 4 with statement variables, it shows that the statement regarding the development of a website-based Teacher Professional Education Study Program self-evaluation instrument regarding study program services is declared valid and can be used in conducting research. The results of content validity using the Gregory test obtained a content validity value of 0.78. Then the instrument is declared reliable and meets the requirements of the Gregory test, namely: Vc is greater than equal to 0.75.

The validity test is a measurement method that aims to determine how precise and how accurate a measuring instrument is. The validity test also aims to determine whether there are statements that must be discarded or replaced because they are considered irrelevant. The validity test can be seen by comparing the r-count value with the r-table value. If the r-count value is greater than the r-table value, the results are declared valid.

*Validity of PPG Study Program Learning Services*

This data focuses on evaluating and validating the quality of learning services in the Teacher Professional Education Program (Prodi PPG). The aspects evaluated include the quality of subject matter, teacher competence, learning facilities, and student feedback.

1) Quality of course materials, in-depth review of the curriculum used, relevance of materials to program objectives, and effectiveness of delivery methods.
2) Lecturer competence, evaluation of lecturer qualifications, effectiveness of teaching techniques used, and interaction between lecturers and learners.
3) Learning facilities, analyzing the quality and availability of learning facilities, including laboratories, libraries, and digital learning technologies.
4) Student feedback, responses and feedback from students on the quality of learning services received.

Table 3. Learning service instrument

| No | Indicator |
|---|---|
| 1 | The suitability of the duration of online learning time with the lecture schedule |
| 2 | Achievement of lecture objectives through online learning |
| 3 | Accuracy of lecture methods applied in online learning |
| 4 | Accuracy of feedback given by lecturers in online learning |

| 5 | Ease of understanding online material |
|---|---|
| 6 | Lecturer's mastery of lecture material in general |
| 7 | The suitability of the assignments given with the Learning Outcomes |
| 8 | The suitability of the learning media used with the characteristics of the material in online learning |
| 9 | The general quality of this lecture through online |
| 10 | Lecturer's ability to motivate students in lectures |
| 11 | The meaningfulness of lecture material to the teaching profession |
| 12 | Completeness of teaching materials used by lecturers |
| 13 | Use of up-to-date technology in lectures |
| 14 | Lecturer's response in responding to students' questions and opinions |
| 15 | The suitability of the formative test with the material presented by the lecturer |
| 16 | Lecturer's concern for student difficulties |
| 17 | The suitability of the assessment used by lecturers |
| 18 | Ease of getting access to assessments and course assignments |
| 19 | Clarity of information about assessment |

The indicators that have been compiled make it easy to determine the measurement of the quality of learning services in the PPG Study Program. Instruments that can be given to respondents must be declared feasible by experts.

Based on the results of the validation test in Table 11 with variable statements, show that the statement regarding the Development of a Website-Based Teacher Professional Education Study Program Self Evaluation Instrument on Learning services is declared valid and can be used in conducting research. The results of content validity using the Gregory test obtained a content validity value of 0.84. Then the instrument is declared reliable and meets the requirements of the Gregory test, namely: Vc is greater than equal to 0.75.

Based on the results of the instrument validation test with the PPG study program learning service variable, it shows that statements with positive statements about study program services and management are declared valid and can be used in conducting research with a correlation value greater than 0.05, seen based on the r-count value> 0.0-0.0 from the r-table 0.5.

Table 4. Reliability Statistics of PPG Learning Services

| Cronbach's Alpha | N of Items |
|---|---|
| ,962 | 19 |

In Table 4, the Reliability Statistics section shows the Cronbach's alpha value of the statement item of 0.962 with a significance level of 5% and the attitude question item Cronbach's alpha value of 0.6, it can be stated that the questionnaire is reliable, the reliability test of a research instrument is a test used to determine whether a questionnaire used for research data collection can be said to be reliable or not. In the reliability test using Cronbach's Alpha analysis, if the Cronbach's Alpha value shows a number> 0.60, it can be concluded that the variable can be said to be reliable or consistent in measuring.

**Lecturers' Perception of Vision, Mission, and Management Services of PPG Study Program**

*Perception of the Vision and Mission of The Study Program*

The lecturers' perception of the Vision and Mission of the Teacher Professional Education Study Program is very high with a score of 3.72 on a scale of 4.00. Likewise, on a personal basis, each lecturer has shown high relevance. Lecturers who responded to the suitability of the vision and mission totalled 59 people. Responses from 45 respondents can be categorized as highly relevant, while responses from 14 other respondents can be categorized as relevant. Thus, the vision and mission of the PPG study program are perceived as highly relevant.

The assessment of the vision and mission of the IAIN Pontianak PPG Study Program based on the average lecturer perception is 3.71 which can be categorized as highly relevant. The value of each indicator ranges from 3.59 to 3.81. The lowest assessment is on indicator number 7, namely "PPG IAIN Pontianak as a Teacher Education Study Program has the main task of producing educators with national and international standards". This point is currently considered unable to be optimized by the IAIN Pontianak PPG study program. Meanwhile, indicator 10 received the highest point, namely "IAIN Pontianak PPG Study Program is responsible for producing teachers who can organize HOTS and TPACK-based learning". This is perceived as possible to be accomplished at this time by the IAIN Pontianak PPG study program.

*Management Service*

The description of this data is based on a survey of lecturers' perceptions of the management services of the PPG Study Program. The survey involved several lecturers who are teachers or facilitators in this program. Later, data regarding lecturers' perceptions of the quality of Prodi PPG management services will be described. Popular aspects reviewed include the efficiency of the management process, the quality of inter-staff communication, and the support and resources available to lecturers. the overall service of the Professional Teacher Education Study Program is very high with a score of 3.62 on a scale of 4.00. as well as personally, it has shown very good.

Prodi service management has several variables that support the realization of a good service. The indicators in the instrument totaled 13 items, from the data obtained the assessment for indicator 11 was the lowest at 3.36. Indicator number 11 is "Availability of academic and non-academic services (infrastructure; such as buildings, dormitories, lecture halls, laboratory rooms)', respondents considered this point the weakest, because the newest study program at IAIN Pontianak does not yet have the supporting facilities in question and currently occupies a 5x7 meter room facilitated by the Faculty of Tarbiyah and Teacher Training (FTIK). As for indicator number 8 of 3.83, namely "Hospitality", this is a strong asset for the IAIN Pontianak PPG Study Program in facilitating learning by lecturers, while trying to fulfil other supporting facilities.

### Learning Services of The PPG Study Program

*Small-Scale Testing*

The results of student assessment of learning services by lecturers in the IAIN Pontianak PPG Study Program in this study are perceptual assessments. Questionnaires are given to students to respond to lecturers who teach in each class. The distribution of questionnaires on aspects of learning services was carried out in 2 (two) stages. The first stage was a narrow (small) scale testing, namely the assessment was carried out on 13 lecturers together with 13 teachers who taught the subjects of the learning tool development workshop, while those who responded were PPG stage 1 student in 2023, totaling 199 out of 235 students and divided into 13 study groups. The second stage, a broad-scale assessment was carried out during the implementation of material deepening activities for PPG stage 2 students in 2023, totaling 183 students.

The overall learning service of the Teacher Professional Education Study Program is very high with a score of 3.72 on a scale of 4.00. Likewise, personally, it has shown very good with nial> 3.00. Thus, it can be concluded that the learning services at IAIN Pontianak PPG Study Program can be categorized as very good. The weakest aspect of 3.57 according to student perceptions in learning services at IAIN Pontianak PPG Study Program is number 5, namely "Ease of understanding online material". Online learning organized by utilizing the Learning Management System (LMS) Space supported by Zoom Meeting, Google Meet, Jitsi and other supporting devices is perceived by students as not having an impact on the ease of understanding the learning material delivered by lecturers. Meanwhile, the highest point was obtained by number 14 at

3.86, namely "Lecturer response in responding to student questions and opinions". IAIN Pontianak PPG lecturers are very good at responding to every question and paying attention to any difficulties faced by students, then the ability of lecturers to provide answers is considered very good.

*b) Large-Scale Testing*

The implementation of large-scale or broad-scale trials was carried out on PPG students in the position of IAIN Pontianak phase 2 in 2023. Broad-scale testing was carried out based on the results of small-scale instrument testing that was deemed adequate for distribution. Respondents in the broad-scale test amounted to 183 students, the number is smaller than the number of students in the small-scale test. However, the process of collecting data through questionnaires on this broad-scale trial received a larger response, namely 1,742 responses. The number of responses is large because the material depth activities consist of 12 modules, students in category K-1 as many as 2 (two) classes follow learning with 12 modules, while students in category K-2 as many as 9 (nine) classes follow learning with 10 modules. Each module is taught by 1 (one) lecturer, if one class received learning with 10 modules, then it was taught by 10 lecturers.

The overall learning service of the Teacher Professional Education Study Program is very high with an average score of 3.56, on a 4.00 scale. Also on a personal level, it has shown very good with a value of >3.00. Thus, it can be concluded that the learning services in the IAIN Pontianak PPG Study Program can be categorized as very good.

The weakest aspect is 3.46 in number 5, namely "Ease of understanding online material". Online learning organized by utilizing the Learning Management System (LMS) Space supported by Zoom Meeting,

Google Meet, Jitsi and other supporting devices is perceived by students not to have an impact on the ease of understanding learning material delivered by lecturers. Meanwhile, the highest point was obtained by number 6 at 3.65, namely "Lecturers' mastery of lecture material in general". IAIN Pontianak PPG lecturers have very good competence following the scientific field in the activity subjects taught.

## Discussion

*Development of a Web-Based Survey Instrument*

LimeSurvey is an open-source polling application, used in market investigation, educational assessment, and various other research fields. Using the interface, individuals or organizations can create and publish their surveys, collect data, and perform statistical analysis. The main pages of LimeSurvey include the Control Panel, Tool Bar, Survey List, User List, Home and Help. One important element is the login page which is specifically the starting point for users to access LimeSurvey functions. On the LimeSurvey login page, users will be prompted to enter a username and password.

In the journal article titled "Securing Web-Based Surveys", LimeSurvey shows a strong commitment to user data security. The use of HTTPS for data transmission between the user's browser and the LimeSurvey server is one of the security standards applied (Merrigan et al., 2023). This encryption system ensures that the data sent through the login page is completely confidential and secure. In another article entitled "Achieving Anonymity in Web Surveys Using Open-Source Software", it is emphasized that LimeSurvey provides options for users to use anonymity functions (Bohleber et al., 2016). This feature allows the respondent's identity to be stored separately from the survey data. Similarly, data collected through the login page is also protected to ensure user privacy. The LimeSurvey log-in page facilitates user access to the various survey-based research tools provided by the platform.

The survey statistics page is an important part of presenting information obtained from various surveys. Surveys are used as primary data collection tools by various entities, such as organizations, companies, governments, research institutions, and so on. The function of the survey results statistics page: Presenting information, the survey results statistics page processes raw data obtained from surveys into information that is easier for the reader to understand and handle (Groves et al., 2010). Monitoring the implementation of surveys, as a monitoring system, this page has an important role in tracking the progress of surveys and their status in terms of how often surveys are conducted, the level of respondent involvement, and ensuring the timeliness and accuracy of the information provided (Tourangeau, 2014). Providing easy access, another function of the survey results statistics page is to facilitate users in accessing and processing information obtained from survey results (Couper, 2000).

Benefits of the survey statistics website; Data transparency, the survey statistics website helps create data transparency by presenting survey results openly so that it is accessible to the public (Groves et al., 2010). Improved policy quality, and easy access to information provided by pages like this, policymakers have a better opportunity to use statistical data in developing or changing policies (Biemer, 2010). Benefit for researchers, the survey statistics page can be used as a reliable source of information to be used by researchers as reference material in preparing scientific research.

*Validation of the website-based PPG study program service instrument*

Validity of study program service instruments is an important quality of measuring instruments used in qualitative and quantitative research. This concept refers to the extent to which a research instrument can measure what it is intended to measure (Matondang, 2014). There are several important types of validity to consider in the development and testing of program service instruments, including content validity, construct validity, and empirical validity. Content validity relates to the extent to which the research instrument covers all relevant and important content for the concept being measured. Therefore, in the context of study program services, the instrument should cover all important aspects of the services offered by the study program, such as the quality of teaching, guidance, and facilities (Sidauruk, 2012).

Construct validity refers to the extent to which the instrument can measure the theoretical construct or concept in question (Ihsan, 2015). In the context of program services, this could refer to the extent to which the instrument can measure concepts such as student satisfaction, academic achievement, or commitment to the program (Akbar, 2019). Empirical validity refers to the extent to which the measurement scores reflect the concept or variable being measured (Matondang, 2014). For study program service instruments, empirical validity can be tested through empirical research, such as proving that the scores generated from the instrument are related to other variables that should be related (Yusup, 2018).

The importance of validating study program service instruments must also be emphasized. Through a valid instrument, researchers can be more confident that the results obtained from the measurement tool reflect the concept or variable they want to measure. In the context of study program services, where research often focuses on complex and multidimensional concepts such as student satisfaction or teaching quality (Akbar, 2019). Finally, instrument validation is a very important step in research in the field of program services.

*Lecturers' perceptions of PPG study program services*

As an important component in an educational institution, lecturers have an essential role in realizing the vision and mission. Thus, lecturers' perception of the vision and mission is very important to determine the success of the study program. The vision of a study program is a general description of the ideal state to be achieved. The vision usually includes goals within a certain time and becomes the basis for the study program in conducting strategic planning. In this context, lecturers have a key role in realizing the vision.

According to a study conducted by Kehinde et al entitled "Awareness and Perception of the Artificial Intelligence in the Management of University Libraries in Nigeria", lecturers' perception of vision is very important. The study showed that lecturers' perception and understanding of the vision is a key factor in achieving institutional goals (Abayomi et al., 2021).

Lecturers' perceptions may be influenced by various factors such as job satisfaction, decision-making process, and institutional environment (Lembaga Penjamin Mutu UNISNU Jepara, 2021). According to a survey report from UNISNU, lecturers' level of satisfaction with the HR management system as well as research activities at the university play a role in shaping their perceptions of study program management. In addition, research shows

that the implementation and execution of online learning can also affect lecturers' perceptions (Mitasari et al., 2021). In general, knowing and understanding lecturers' perceptions can help in decision-making considerations and strategic planning of study program management. Every educational institution should consider lecturers' perceptions as an important part of program management and control management.

### Student perceptions of PPG Study Program learning services

An evaluation of learning services is essential in any field of education, and the Professional Teacher Education Program (PPG) is certainly no exception. Through feedback and responses from students, educational institutions can understand how to improve the quality of the program offered. Most of the students feel that the curriculum in the PPG program is quite relevant to the needs in the workplace. However, some respondents expressed doubts regarding the balance between theory and practice. Although most students felt that the teaching methods applied by the lecturers were very good, some of them expressed the need for a variety of more modern and innovative methods.

Almost all respondents were happy with the facilities available in the PPG Program. However, some students noted that the library and education laboratory need improvement. The results of this study indicate that overall, students are satisfied with the Professional Teacher Education (PPG) Program. Nonetheless, there is a scope for improvement such as variation in teaching methods and improvement of library and laboratory facilities. While this study provides a broad overview of students' assessment of the PPG Program, further

research detailing each aspect of the program is needed to gain a more comprehensive and in-depth understanding.

### Conclusion

The development of web-based survey instruments can facilitate an efficient and time-effective data collection and analysis process using the LimeSurvey application and allow participants to complete surveys anytime and anywhere. Available components include the log-in page, survey list page, survey component editing page, respondent form page and survey result statistics page.

The validation process ensures the reliability and validity of the data collected. The developed Prodi service instrument received a score of $0.78 \geq 0.75$ with a reliability of $0.922 \geq 0.05$ and the learning service instrument received a score of $0.84 \geq 0.75$ with a reliability of $0.962 \geq 0.05$. Both instruments are declared valid and reliable so they are suitable for use.

PPG study program services at IAIN Pontianak are viewed very well by lecturers. Lecturers' perceptions of the vision and mission of the study program gave an average score of 3.72 on a scale of 4.00 and the management of study program services gave a score of 3.62 on a scale of 4.00 so that the vision and mission are relevant and the management of study program services is very good.

Students are satisfied with the learning services provided by the study program, but certain aspects need to be improved. In the small-scale trial, the score was 3.72 on a scale of 4.00 and in the large-scale trial, the score was 3.56 on a scale of 4.00 so the learning services in the IAIN Pontianak PPG Study Program were very good.

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