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# Accounting students' satisfaction with learning outcome assessment activities according to output standards

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**Abstract:** This research aims to investigate the satisfaction levels of accounting students with learning outcome assessment activities, specifically in relation to output standards during their training at various universities in Vietnam. The study employed both qualitative and quantitative methods, utilizing multivariate regression techniques to identify key determinants influencing student satisfaction according to the research model. The findings indicate that 72.7% of these determinants positively impact student satisfaction with the assessment of learning outcomes aligned with output standards in the accounting industry, with a statistical significance level exceeding 95%. The magnitude of influence, measured by the coefficient β, follows this order: conditions supporting learning outcome assessment activities, assessment methods for learning outcomes, and processing of assessment results. Based on these results, several recommendations are proposed to enhance the quality of assessments and improve student satisfaction with learning outcome evaluations according to output standards, particularly within the context of universities in emerging countries like Vietnam and other similar settings.

***Keywords:*** *Accounting industry, Assessment activities, Assessment of learning outcomes, Output standards, Training programs.*

## 1. Introduction

According to Circular No. 17/2021 issued by the Ministry of Education and Training (MoET) [1] it is stipulated that assessment of learners' learning outcomes should be based on the learning outcomes, clarifying the level of achievement of learners according to the thinking level specified in the learning outcomes of each subject; assessment of learners' outcomes must be based on process assessment and final assessment as a basis for timely adjustment of teaching and learning activities. The practical process of implementing this content of the circular raises the following core issues: How to effectively assess learners' learning outcomes based on the issued output standards?. To answer these questions, we conducted the case study on assessing learning outcomes basing on the output standards of the accounting industry to see the characteristics of the industry and the application of scientific research methods, ensuring reliability to answer the raised questions.

Currently, accounting is viewed as one of the industries that changes rapidly under the impact of the 4.0 industrial revolution. The industry's training products require increased application of professional practice skills, as well as the ability to apply financial policies and information technology to work. Therefore, evaluating students' learning outcomes according to output standards will not only be based on knowledge but also include accounting skills and professional attitudes that are also required of training institutions in this field. To meet the human resource requirements of employers under the impact of Industry 4.0, the output standards of the training program are also set for learners based on practical needs. In recent years, the assessment of learners' learning outcomes according to output standards has been focused on by training institutions in Vietnam in general and in the field of


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accounting training in particular, creating positive changes in terms of objectives, content, forms, and implementation methods towards an approach based on learners' capacity. After the process of universities implementing improvements and innovations in training programs towards enhancing quality and meeting social requirements through training according to output standards, it is necessary to publicly and objectively evaluate the satisfaction of accounting students with the assessment of training results according to output standards of universities.

This research employed appropriate methods to determine the impact levels of determinants on students' satisfaction with the assessment of learning outcomes according to output standards. The results aim to evaluate the suitability of practical application of assessment methods, support activities and ways of handling results of assessment activities according to current output standards at accounting training institutions from the perspective of learners.

The study is designed as the structure as following: Section 2 present literature review. Section present the methodology of the research. Results and discussion are presented in Section 4. Section 5 gives several conclusions.

## 2. Literature Review

The role of learning outcome assessment is stated by Tyler [2] that learning outcome assessment of learners is the focus of the teaching and learning process. Learning outcomes provide feedback on the extent to which students have achieved the objectives of the training program. Wiggins and McTighe [3] also argued that output standards are determined from the concretization of previously stated training program objectives and the assessment of learning outcomes is placed in a purposeful correlation between teaching activities and output standards. This relationship is clearly demonstrated through the stages of implementing the training program and course outline. According to Fink [4] learning outcome assessment is integrated into the process of designing and implementing training programs to ensure program objectives and is the basis for feedback when reviewing training programs. Nicol [5] assessed learning outcomes using the stakeholder feedback model involves Lecturers setting learning tasks for students, including stakeholders in the model participating in assessing students' ability to perform assigned learning tasks. From there, training institutions can receive feedback from stakeholders on the limitations that need to be overcome so that students can achieve their learning goals.

Through review of literature, it has been shown that determinants influencing the assessment of students' learning outcomes according to output standards include objectives, content, form, methods, tools and processing of assessment results, and conditions supporting the assessment of learning outcomes.

### *2.1. The Goal of Assessing Learning Results According to Output Standards*

Nga [6] pointed the important goals of learning outcome assessment activities are to determine the level of knowledge, skills and attitudes achieved by learners; compare and contrast the level of knowledge, skills and attitudes that have been formed in learners with the specified requirements of teaching and training objectives. On that basis, propose teaching and learning measures, adjust goals and management to change the current status of training activities and contribute to improving the effectiveness of training program implementation. At the same time, explain to society, competent authorities and learners about training quality.

According to Nghia, et al. [7] the goal of evaluating training outcomes according to the CDIO (Conceive – Design – Implement – Operate) approach is to form ideas, design ideas, implement and operate to provide timely, reliable and valuable information on the level of students meeting the output standards of the training program. Assessment of learning outcomes helps lecturers and students adjust teaching and learning activities accordingly to achieve the output standards of each subject, thereby achieving the output standards of the training program. At the same time, students will be more proactive in achieving the necessary competencies for professional activities. Through that,

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comprehensively assess the learners' competencies in knowledge, skills and attitudes, motivate students to make efforts in learning, confirm the students' level of competency achievement, and rank their achievements.

Thus, the goal of the learning assessment activity is to assess the level of knowledge, skills, and attitudes of learners towards achieving output standards and achieving the goals of the training program.

*2.2. Content of Learning Outcome Assessment According to Output Standards*

The content of learning outcome assessment according to the output standard approach of Tho [8] pointed out that it is necessary to determine the content of learning outcome assessment on three aspects of knowledge, skills and attitudes. Knowledge assessment includes general knowledge and specialized industry knowledge; skills assessment includes communication skills, teamwork skills, management skills, professional skills; Assess attitudes and moral qualities such as spirit, learning attitude, professional ethics and commitment to perform responsibly.

According to Lan [9] the content of learning outcome assessment based on the approach to the nature of output standards must measure the main content corresponding to output standards including knowledge; attitudes, personal and professional skills, communication and teamwork skills; idea generation, design, implementation and operation to meet practical requirements.

*2.3. Form of Assessment of Learning Outcomes According to Output Standards*

According to Shute and Kim [10] assessment of learning outcomes based on output standards focuses on process assessment and summative assessment, in which the focus is on process assessment because assessing learners' learning while it is taking place will focus on assessing the level of student achievement more accurately. Trumbull and Lash [11], Babo, et al. [12] and Dunn and Sean [13] also concluded that assessment throughout the learning process of learners is used to improve teaching methods, providing feedback to help learners improve their learning outcomes.

Fisher and Frey [14] and Basta [15] also commented on learning outcome assessment to measure and determine what students achieve after completing a module, course or training program. Of these, the most important is still formative assessment to help lecturers and students answer questions after each class session or after the end of the course.

*2.4. Methods and Tools for Evaluating Learning Outcomes According to Output Standards:*

According to Nhan [16] the method of evaluating learning outcomes is a combination of ways of using different types of tools and testing and measurement techniques to collect, analyze and process information demonstrating learning outcomes.

Dung and Thuy [17] offered three approaches of assessing learning outcomes as written test, oral test, and practical test. Loc, et al. [18] employed CDIO-based assessment methods such as: Weekly homework, computer simulation exercises, final exams; essays, major assignments; harvest reports; group activities, etc. Trinh, et al. [19] pointed out the advantages and disadvantages of several assessment methods since written questions have advantages and are effective in assessing conceptual understanding, assessing many students at the same time and the assessment results are recorded.

However, the limitation is that it is very difficult to build good questions and does not help assess the source of misunderstanding of concepts from students. Meanwhile, the question and answer method helps lecturers solve the above problem, students will answer unprepared questions, demonstrate their level of proficiency, fluency and can clarify the problem asked so that lecturers can evaluate more accurately. Thus, there are many assessment methods, each method has certain advantages and disadvantages, so in the assessment process, it is necessary to select the suitable approach for the characteristics of each course in order to evaluate the output standards of that course.

Assessment tools: Lecturers can apply several assessment tools to determine the level of completion of learning tasks of learners, thereby assessing students' abilities, thereby having measures to help and

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promote learners to study well, achieve the standard threshold to meet learning objectives (Fisher and Frey [14]).

- Checklist tool: Stevens and Levi [20] and Fisher and Frey [14] adopted the checklist tool, which is understood as a list of assessment criteria that must be present in the learner's work to check the completion of the criteria. This tool is used to record comments from an individual, a group or the whole class. Assessment of learning outcomes according to the checklist tool is used as evidence of the learner's learning outcomes. Through the checklist tool, the lecturer lists specifically and in detail the work items and implementation progress that the learner needs to complete in the subject/program to meet the output standards. Based on the checklist, the lecturer and students can control or adjust the learning tasks accordingly to achieve the learning objectives.
- Rubrics tool: Rubrics are a popular outcome-based assessment tool. This tool is based on a set of clear criteria to incorporate expectations about the learning objectives of a specific learning activity in a course. According to Stevens and Levi [20], rubrics are an assessment tool that saves grading time, conveys effective feedback, and promotes learning. This tool creates opportunities for both teachers and students to know what to do and what to complete to achieve high results. Using rubrics for assessment helps describe in detail the levels of achievement required of learners after completing a lesson/subject. Thereby, lecturers can control and objectively evaluate learners' progress, learners can proactively perform learning tasks and self-evaluate learning results. Using this tool can describe each criterion specifically, helping lecturers and students know which content, activities, and products have not met expectations in order to overcome and improve.
- Tests: These are familiar tools in assessing learning outcomes. Tests before, during and after completing a course are used as useful tools to measure the level of students' learning ability.
- Objective multiple choice questions: This is a popular assessment tool and is often used in process assessment. This tool helps lecturers quickly assess the level of learners' achievement of competencies related to knowledge, skills, and attitudes about the content of the subject.
- Essay questions: This is an assessment tool to measure learning outcomes at the analytical and synthetic levels. Therefore, this tool is often used by lecturers in final assessment, creating conditions for students to demonstrate their learning abilities based on their personal experiences in the process of accumulating knowledge.

In addition, in assessing learning outcomes, lecturers also have other tools such as group discussions, presentations, reports, reports, seminars, and others.

The above literature review reveals that the system of methods and tools for assessing learning outcomes is quite rich and diverse. To comprehensively and effectively assess learners' capacity, it is necessary to combine assessment approaches and tools to suit the objectives, requirements and levels of achievement of the learning outcomes of each subject in the training program.

*2.5. Processing Learning Outcome Assessment Results According to Output Standards*

According to Phuong [21], testing and evaluation activities are a structural element of training activities. Through the assessment of learning outcomes, lecturers and universities determine the level of achievement of training goals and evaluate the suitability of training goals, the success of lecturers' teaching and the effectiveness of students' learning activities. Therefore, assessment, in addition to its function as a tool to verify training quality and help classify students, is also a motivation to encourage lecturers to teach better and students to learn better. In order for assessment to fulfill its roles and functions well, it is necessary to process qualitative and quantitative information about students' attitudes, abilities and skills with many levels and clear criteria, which are made public in accordance with the promulgated assessment regulations.

Assessment of learning outcomes requires diverse and rich information and data collected and is

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often presented in two basic forms of data, i.e. qualitative and quantitative. In particular, qualitative information is collected throughout the teaching process, including comment sheets, observation sheets, self-assessments of individuals, groups, etc. Lecturers create a descriptive table with criteria to compare with the objectives, assessment standards and make decisions to recognize students as meeting or not meeting the requirements. Quantitative data is often collected through regular and periodic tests according to training regulations and course requirements. Lecturers calculate the average score of each student, on that basis, combine both qualitative and quantitative data, compare and contrast the results of students with the output standards of the subject to determine the level of achievement of the subject and training program. When processing the assessment results of students at each stage, lecturers will need to provide feedback information to help students adjust and improve their learning outcomes in a timely manner. Lecturers base on the criteria of the level of competence that students must achieve with related evidence to propose solutions to help students progress in the next stages of learning. Through this, teaching and learning plans and training programs can be improved by analyzing the assessment results.

*2.6. Conditions to Support Assessment of Learning Outcomes*

Loc and Hien [22] investigated the practice at the University of Science and Technology and pointed out five conditions to support the assessment of learning outcomes, i.e. consensus and determination of school leaders; knowledge of assessment methods; working space such as: facilities, machinery, equipment, laboratories, etc.; experience in implementing teaching and assessment; comprehensive change.

According to Phuong [21] the determinants and conditions to support the assessment of learning outcomes include human factors, team capacity in implementing approaches and related skills, financial resources, space, information technology infrastructure, quality culture.

Thus, the assessment of learning outcomes according to the above studies reveals that based on the objectives and assessment content based on the predetermined output standards of the training program, the elements of assessment activities include forms, methods, tools, conditions to support assessment activities, and processing of learning outcome assessment results.

In the study of satisfaction, Oliver [23] stated that customer satisfaction is the customer's evaluation of a particular transaction, which reflects the relationship between customer expectations and their actual feelings about the product or service they receive. Hasan, et al. [24] confirmed that there is a significant relationship between service quality and satisfaction, so improving the quality of educational services will also lead to increased student satisfaction, including satisfaction with the quality of assessment of learning outcomes.

Expectation-Confirmation Theory Oliver [23] suggests that students compare their initial expectations of the assessment system with their actual experiences to form a level of satisfaction. The SERVQUAL model by Parasuraman, et al. [25] suggests that service quality in education can influence student satisfaction with the assessment system. Parasuraman, et al. [25] synthesized five determinants of reliability, responsiveness, service competence, empathy and tangibles. These determinants can influence student satisfaction with the assessment of learning outcomes.

Assessing student satisfaction with learning outcome assessment activities according to output standards, Phuong [21] investigation showed that student satisfaction with this activity is demonstrated through aspects such as students are informed about training programs and output standards through many channels; students are informed about testing and assessment regulations; content, form, methods, and testing and assessment tools are used in accordance with the objectives of the subject and curriculum; assessment of theoretical knowledge and skills is in accordance with the output standards of each subject and the entire training program; students are informed of assessment results in a timely manner; students are satisfied with the process of testing and assessing learning outcomes.

Thus, through literature review, we synthesized concepts, scales and clarified the nature of the

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elements of learning outcome assessment activities in the training process as a basis for building a model and presenting the findings. On the other hand, in the face of current regulations on quality assessment of higher education, the assessment of learning outcomes according to output standards plays an important role in improving the quality of training. However, the level of satisfaction of accounting students with learning outcome assessment activities has not been much investigated in the prior studies.

## 3. Research Methodology

Based on the qualitative and quantitative methodologies, they help to determine the reliability of the scale and bring the impact level, impact and satisfaction of accounting students towards the evaluation of learning outcomes according to output standards in an objective, scientific manner, ensuring statistical significance.

The qualitative method was conducted through in-depth interviews with subjects related to accounting training, including 4th-year students, alumni; lecturers with over 10 years of teaching experience; heads and deputy heads of majors; heads and deputy heads of faculties; heads and deputy heads of training departments, departments, testing and quality assurance centers to collect opinions and insights on the evaluation of learning outcomes of accounting students. The results of in-depth interview helped confirm the suitability of observed variables in the determinants of learning outcome assessment activities and observed variables reflecting the satisfaction of accounting students with learning outcome assessment activities before conducting a large-scale survey for the quantitative research. We conducted interviews from July 2024 to December 2024, collecting 37 interview responses representing the accounting major of 29 universities in Vietnam. The synthesis of interview results illustrates on average, over 90% of respondents agreed with the proposed variables from literature review as the basis for designing a survey to estimate learners' satisfaction with the assessment of learning outcomes of the accounting major at universities in Vietnam.

Quantitative research approach is carried out through two stages of preliminary research and extensive research as follows:

*For preliminary research*: Learners were surveyed to give their opinions based on the objectives, output standards of the training program and the objectives and assessment content determined according to the issued mission and vision of the university. The survey questionnaire collected opinions with four parts including 22 questions: 7 questions on methods of assessing learning outcomes; 5 questions on conditions supporting learning outcome assessment activities; 5 questions on processing learning outcomes; 5 questions on satisfaction with learning outcome assessment activities during the training process. The survey questions used a Likert scale from 1-5 for assessment levels. The pilot survey was conducted in August 2024. The results of the pilot survey collected 100 questionnaires. The study employed SPSS 26 software to test the reliability of the scale, giving the result of Cronbach'Alpha >0.7 and the observed variables had a variable-total correlation (Corrected Item - Total Correlation) greater than 0.3. Thus, the scale achieved reliability, the observed variables had good explanatory meaning for the determinants, and no observed variables were eliminated.

The results of this preliminary study are the basis for the development of a comprehensive survey. Together with these results and from the overall study, the research model is proposed as below:

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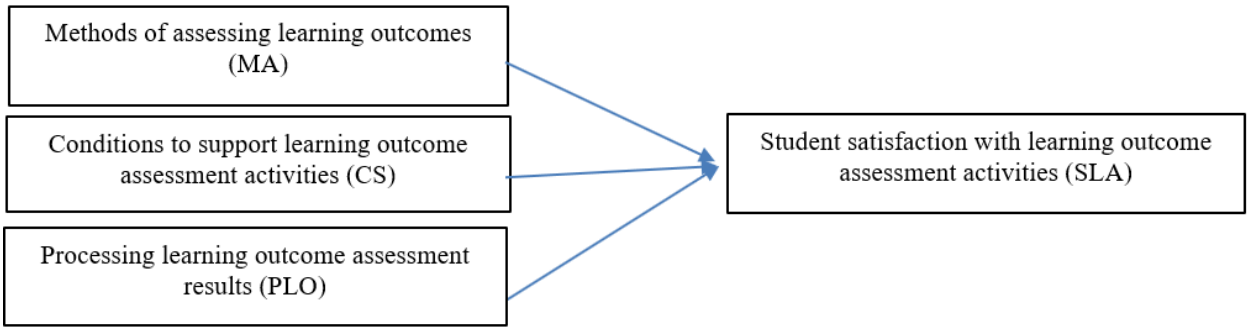


**Figure 1.**
Research model proposed

*Based on literature review research model, we design several hypotheses as:*

Hypothesis 1 (H1): Students are satisfied with the method used in assessing learning outcomes according to output standards.

Hypothesis 2 (H2): Students are satisfied with the conditions supporting learning outcome assessment activities according to output standards.

Hypothesis 3 (H3): Students are satisfied with the processing of learning outcome assessment according to output standards.

According to Figure 1, we built a questionnaire to survey accounting students with 22 indicators obtained from the preliminary study corresponding to 22 questions similar to the preliminary survey. This extensive survey phase collected 410 student responses from 15 universities training in accounting field in Vietnam. During the data cleaning process, 407 valid questionnaires were collected and coded into SPSS 26 software, three invalid questionnaires were eliminated. With 22 observed variables according to the model, according to Hair, et al. [26] to ensure the representativeness of the sample when implementing the regression model, it is necessary to have at least five times the number of observed variables, which is 110 questionnaires. Therefore, the final sample has 407 survey questionnaires for running the data.

## 4. Results and Discussion

### *4.1. Results*

The results of the reliability test of the scale and the first EFA exploratory factor analysis aimed to eliminate observed variables with loading coefficients <0.5, the first EFA results obtained 3 convergent and separate factors. However, there were two observed variables MA4 - Assessment method through practice, simulation, MA7 - Assessment method through objective multiple choice testing loaded into the CS factor and the MA factor with a difference in loading coefficients <0.2, so according to Howard, et al. [27] we eliminated two observed variables MA4 and MA7.

After eliminating the above two observed variables, the study re-tested the reliability of the scale and re-ran EFA for the second time. The results obtained the Cronbach's Alpha coefficient of the 3 convergent and separate factors as follows:

**Table 1.**
Cronbach's Alpha coefficient and factor loadings of attributes.

| Codings | Attributes | Component | | | Cronbach's Alpha | No. of attributes | Variables |
|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | | | |
| CS2 | Working space | 0.855 | | | 0.926 | 5 | Conditions supporting learning outcome assessment activities according to output standards (CS) |
| CS5 | IT infrastructure | 0.848 | | | | | |
| CS4 | Stakeholder engagement | 0.799 | | | | | |
| CS3 | Financial resources | 0.797 | | | | | |
| CS1 | Teaching competence and practical skills | 0.712 | | | | | |
| PLO3 | Redesigning unsatisfactory teaching activities | | 0.808 | | 0.952 | 5 | Processing learning outcome assessment results according to output standards (PLO) |
| PLO4 | Discuss and receive feedback from students on assessment forms, methods and contents | | 0.798 | | | | |
| PLO5 | Students readjust their learning activities to achieve the goals and output standards of the training program. | | 0.780 | | | | |
| PLO2 | Student survey to review output standards with low overall results | | 0.766 | | | | |
| PLO1 | Students are informed and commented on their learning outcomes. | | 0.761 | | | | |
| MA6 | Assessment method through multiple choice and essay tests | | | 0.823 | 0.949 | 5 | Method for assessing learning outcomes according to output standards (MA) |
| MA1 | Assessment method through diligence | | | 0.805 | | | |
| MA3 | Assessment method through presentation, report, daily discussion | | | 0.735 | | | |
| MA2 | Assessment method through group work | | | 0.710 | | | |
| MA5 | Question and answer test method | | | 0.654 | | | |

According to Table 1, the loading coefficient ensures the standard >0.5 (from 0.654-0.855). At the same time, we tested the reliability of the scale in the above factors and the results met the standard of Cronbach's Alpha coefficient >0.7 (from 0.926-0.952). Therefore, the three determinants ensure the standard of implementing the regression model to evaluate the impact of accounting students' satisfaction with the assessment of learning outcomes according to output standards.

**Table 2.**
KMO and Bartlett's Test coefficient.

| KMO and Bartlett's Test | | |
|---|---|---|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | 0.950 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 6734.670 |
| | df | 105 |
| | Sig. | 0.000 |

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In the Table 2, the KMO coefficient = 0.950, so the factor analysis model is suitable, with Bartlett's test having Sig<0.000 ensuring statistical reliability.

Data in Table 3 illustrate that the extracted variance Total Variance Explained is 82.4%>50% (according to the standard), this proves that 82.4% of the data variation is explained by the above 3 factors, reaching a fairly high level of explanation.

**Table 3.**
Total variance explained.

| | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | | Rotation Sums of Squared Loadings | | |
|---|---|---|---|---|---|---|---|---|---|
| Component | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1 | 10.127 | 67.512 | 67.512 | 10.127 | 67.512 | 67.512 | 4.536 | 30.242 | 30.242 |
| 2 | 1.199 | 7.991 | 75.502 | 1.199 | 7.991 | 75.502 | 4.094 | 27.291 | 57.533 |
| 3 | 1.041 | 6.941 | 82.443 | 1.041 | 6.941 | 82.443 | 3.737 | 24.910 | 82.443 |
| 4 | .455 | 3.032 | 85.475 | | | | | | |

**Note:** Extraction method: Principal component analysis.

Testing the reliability of the scale and the convergence of the dependent variable (SLA) - Students are satisfied with the assessment of learning outcomes according to the output standards as follows:

**Table 4.**
Cronbach's Alpha coefficient and factor loading of dependent variable.

| Codings | Attribute names | Load factor | Cronbach's Alpha | No. of attributes | Variables |
|---|---|---|---|---|---|
| SLA1 | Students know the regulations on testing and evaluating learning outcomes | 0.865 | 0.920 | 5 | Student satisfaction with learning outcome assessment activities (SLA) |
| SLA 2 | Appropriate testing and assessment process for learning outcomes | 0.831 | | | |
| SLA 3 | Test content and assessment of learning outcomes are consistent with the objectives and output standards. | 0.899 | | | |
| SLA 4 | Students have their assessment results announced promptly | 0.902 | | | |
| SLA 5 | Students are informed about training programs and output standards through many information channels. | 0.867 | | | |

Data in Table 4 reveal that testing the reliability of 5 scales measuring dependent variables has Cronbach's Alpha is 0.920>0.7, thus ensuring the reliability of the scales measuring dependent variables. We ran EFA on dependent variables for the results: KMO coefficient = 0.850, factor analysis is appropriate, with Bartlett's test having Sig<0.000 ensuring statistical reliability. The coefficient of variance extracted Total Variance Explained extracted 1 factor reached 76%>50%, this proves that 76% of the variation in measurement data for dependent variables is explained by the five observed variables above, the level of explanation is quite high.

The results of running the linear regression model on SPSS26 software using the Enter method give the results in Tables 5, 6, 7.

**Table 5.**
Model Summary

| Model Summary[b] | | | | | |
|---|---|---|---|---|---|
| Model | R | R Square | Adjusted R2 | Std. Error of the Estimate | Durbin-Watson |
| 1 | 0.853[a] | 0.727 | 0.725 | 0.36068 | 1.781 |

**Note: a**. Predictors: (Constant), MA, CS, PLO.
b. Dependent Variable: SLA.

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Table 5 illustrates that the regression results have coefficient R2 = 0.727, which means 72.7% of the change in the dependent variable SLA is explained by 3 independent variables according to the proposed model including MA, CS, PLO.

**Table 6.**
ANOVA[a].

| ANOVA[a] | | | | | | |
|---|---|---|---|---|---|---|
| **Model** | | **Sum of Squares** | **df** | **Mean Square** | **F** | **Sig.** |
| 1 | Regression | 139.714 | 3 | 46.571 | 357.996 | 0.000[b] |
| | Residual | 52.426 | 403 | 0.130 | | |
| | Total | 192.140 | 406 | | | |

**Note:** a. Dependent Variable: SLA; b. Predictors: (Constant), MA, CS, PLO

In Table 6, ANOVA coefficient has sig coefficient <0.000, proving that there is a difference between the independent variables and the dependent variable, once again confirming that the regression model is appropriate.

**Table 7.**
Regression results of research model.

| Coefficients[a] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Model** | | **Unstandardized Coefficients** | | **Standardized Coefficients** | **t** | **Sig.** | **Collinearity Statistics** | |
| | | **B** | **Std. Error** | **Beta** | | | **Tolerance** | **VIF** |
| 1 | (Constant) | 0.719 | 0.107 | | 6.709 | 0.000 | | |
| | CS | 0.316 | 0.036 | 0.371 | 8.748 | 0.000 | 0.377 | 2.652 |
| | PLO | 0.255 | 0.041 | 0.272 | 6.287 | 0.000 | 0.360 | 2.775 |
| | MA | 0.282 | 0.041 | 0.294 | 6.931 | 0.000 | 0.376 | 2.662 |

**Note:** a. Dependent Variable: SLA.

Data in Table 7 reveal that the dependent variable SLA - Student satisfaction with learning outcomes assessment activities according to output standards is determined:

$$SLA = 0.719 + 0.371*CS + 0.272*PLO + 0.294*MA$$

The regression results have a VIP coefficient <3, so the regression equation does not have multicollinearity between independent variables, the regression model is of good quality. In Table 7, the independent variables in the model have coefficients $\beta > 0$ and $Sig < 0.05$. Therefore, these determinants have a positive impact on Student Satisfaction with Learning Outcome Assessment, the coefficient $sig < 0.05$ corresponds to a statistical significance level with a confidence level > 95%.

The positive impact of determinants on students' satisfaction with learning outcome assessment activities according to output standards is arranged in descending order as follows: Conditions supporting assessment activities, Assessment methods, Assessment result processing. In which, Conditions supporting assessment activities has the highest coefficient $\beta = 0.371$ compared to the other determinants, meaning the greatest impact and the most important role. Assessment result processing has the lowest impact among the other determinants with coefficient $\beta$ of 0.272.

The conclusions of testing the research hypotheses are as follows:

**Table 8.**
Summary of conclusions for research hypotheses.

| Factors | β | Sig | Findings |
|---|---|---|---|
| MA | 0.294 | 0.000 | There is a positive nexus between Learning Outcome Assessment Method and Student Satisfaction with Learning Outcome Assessment according to the Accounting Industry Output Standards, with a statistical significance level of >95%. Therefore, hypothesis (H1) is accepted. |
| CS | 0.371 | 0.000 | There is a positive association between Supporting conditions for assessment activities and Student satisfaction with assessment activities of learning outcomes according to output standards, with a statistical significance level of >95%. Thus, hypothesis (H2) is accepted. |
| PLO | 0.272 | 0.000 | There is a positive relationship between Processing assessment results and students' satisfaction with the assessment of learning outcomes according to output standards, with a statistical significance level of >95%. Therefore, hypothesis (H3) is accepted. |

*4.2. Discussion*

The synthesis of the findings above reveals that In the three determinants of the research model, all three determinants ensure statistical significance >95% meaning that the assessment activities including Assessment method, Support conditions, Processing assessment results have a positive impact on Student satisfaction with the assessment of learning outcomes according to the output standards of the accounting industry. The above research model explained 72.7%, meaning that the above three factors have an impact on 72.7% of the satisfaction of accounting students with the current assessment of learning outcomes at accounting training universities. The results reveal that the level of explanation is quite high from the three determinants designed in the model, thereby showing the suitability of the proposed research model.

*4.2.1. The Conditions Supporting Learning Outcome Assessment Activities*

The results also show that Conditions supporting learning outcome assessment activities has the largest coefficient $\beta = 0.371$ among the three factors. This finding illustrate that in order to increase learners' satisfaction with assessment activities, it is necessary to strengthen support for assessment activities through promoting aspects such as creating the best conditions for classroom space and practice rooms when conducting assessment; enhancing the capacity to teach theory and practical skills so that learners can achieve the goals and content of learning outcome assessment activities according to output standards; increasing financial investment in assessment activities; increasing information technology infrastructure applied to assessment activities and enhancing coordination and support of relevant parties such as lecturers, functional departments, and other support departments serving assessment activities.

*4.2.2. Processing Learning Outcomes Assessment*

The processing of learning outcome assessment aims to inform learners of assessment results and analyze the results to promote both teachers and learners to increase awareness of improving teaching and learning activities. From there, improve results for the next assessments.

This factor has the second highest coefficient $\beta = 0.294>0$ among the factors in the model, showing the positive influence of the factor on student satisfaction with assessment activities such as: Students are satisfied with the way of announcing the summary of results, commenting on the advantages and disadvantages of the content of student learning outcome assessment.

In contrast, handling assessment activities through exchanging and recording students' feedback on the form, method and content of assessment after students receive their learning results and comments has helped the assessor and the assessed see the objectivity, transparency, reasonableness and compliance with regulations in the assessment, thereby creating overall satisfaction in the assessment activities.

Based on the findings and student feedback, lecturers compare the results with the course objectives

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and expected output standards to make appropriate adjustments and redesign teaching activities that students have not yet achieved in the assessment to increase support for students in their learning, and motivate learners to improve and achieve the output standards of the training program.

*4.2.3. Methods of Assessing Learning Outcomes*

This factor was rated by most accounting students from agree to strongly agree with the current methods used in the accounting training process. The regression results show that this factor has a positive impact with a statistical significance level of sig = 0.000 ensuring reliability. Although this factor has the 3rd highest coefficient $\beta = 0.272>0$ of the 3 factors, the difference in the $\beta$ coefficients of the 3 factors is not too large, showing that the difference in the role of each factor in student satisfaction with the assessment of learning is not much.

Therefore, to enhance student satisfaction with learning outcome assessment activities, in addition to promoting solutions for the above two factors, universities need to pay attention to the learning outcome assessment method, which is an equally important factor through continuing to effectively and appropriately use learning outcome assessment methods, applying them appropriately according to the characteristics of each subject in the training program to achieve the assessment goals with each assessment method: Observation method through diligence assessment, assessment through group work; question and answer method; written test method: Assessment through multiple choice tests, essays, through major assignments, essays, writing topics... to promote the advantages and overcome the limitations of each method, so that the assessment methods are used appropriately for each subject to meet the output standards according to the characteristics of each subject in the training program of the industry.

## 5. Conclusion

Thus, by using both qualitative and quantitative methods, we have determined students' satisfaction with learning outcome assessment activities based on the level of influence of assessment determinants. The results illustrate that there are three determinants that have a positive impact with statistical significance >95% in the research model in order of decreasing impact as Conditions supporting assessment activities, Processing assessment results and Assessment methods.

However, the study has several limitations. First, Vietnamese universities have two basic training orientations of research-oriented and application-oriented training, so there will be certain differences in output standards. Therefore, to evaluate the level of output standards according to the difference in goals, there will be different methods, support conditions and assessment tools. In this study, the difference in research results between the two training orientations of universities in Vietnam has not been shown. Second, currently most universities training in accounting in Vietnam have not issued regulations or guidelines on measurement tools to assess the output standards of training programs in a reliable and objective manner as a basis for assessing the output standards declared to society. Therefore, the survey data on the satisfaction of accounting students with the assessment of learning outcomes according to output standards in this study may still be based on the feelings of the assessors. The research findings may change if in the coming period, schools issue measurement tools to assess the output standards of the training program.

## Transparency:

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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