



Implementation of the Outcome-Based Education Curriculum in the Educational Statistics Course

A Qualitative Study in the English Language Teaching Study Program at IAIN Sorong

¹Mulyono, ¹Nurul Dwi Mutia

Corresponding author: *mulyonosmk@gmail.com

¹Institut Agama Islam Negeri Sorong, Papua Barat Daya, Indonesia

ARTICLE INFO

ABSTRACT

Article history

Received 16 Mei 2026

Revised 5 September 2026

Accepted 8 September 2026

Outcome-Based Education (OBE) positions intended learning outcomes as the reference point for curriculum planning, teaching, and assessment in higher education. This study describes how the OBE curriculum is enacted in the Educational Statistics course of the English Language Teaching Study Program at Institut Agama Islam Negeri (IAIN) Sorong and how students, the course lecturer, and the study programme coordinator perceive its contribution to learning. A descriptive qualitative design with a single instrumental case orientation was employed. Data were generated through analysis of curriculum documents, including graduate learning outcomes, the CPL–CPMK mapping matrix, the semester learning plan, and assessment rubrics; non-participant classroom observation; and semi-structured interviews with purposively selected participants. Data were analysed using Braun and Clarke's six-phase reflexive thematic analysis. Trustworthiness was strengthened through methodological and source triangulation, member checking, peer debriefing, reflexive memos, and an audit trail. Six themes were constructed: outcome-referenced planning and documented alignment; student-centred learning; contextualisation of statistical content within English language teaching and Islamic education; continuous, outcome-referenced assessment; perceived learning and a shift from grades to competence; and heterogeneous prior mathematical preparation as the principal implementation challenge. Because the design generated no pre-test, post-test, or achievement data, no measurable or causal improvement is claimed. The study contributes contextualised constructive alignment principles for quantitative service courses in Islamic higher education and distinguishes documented alignment from enacted

alignment as an object of curriculum evaluation. These findings offer practical implications for curriculum design, assessment, and course-level OBE evaluation.

Keywords

Constructive Alignment
Educational Statistics
English Language Teacher
Outcome-Based Education
Qualitative Case Study

This is an open-access article under the [CC-BY-SA](#) license.



Introduction

Higher education in the twenty-first century is expected to produce graduates who master disciplinary content and who can also think critically, analyse information, and make decisions based on evidence [1]. Curriculum reform in this period has shifted the reference point of quality from the coverage of material to the attainment of measurable learning outcomes [2]. In Indonesia, this shift is visible in the Merdeka Belajar policy, which opens space for flexible learning pathways, interest-driven projects, and outcome-focused evaluation [3]. Outcome-Based Education (OBE) supplies the curricular logic for this reorientation, treating intended learning outcomes as the starting point for designing teaching and assessment rather than as a by-product of instruction [4].

The foundational formulation of OBE was articulated by Spady, who defined it as organising an entire educational system around what learners should be able to do successfully at the end of a learning experience, and who set out four operating principles: clarity of focus, designing back, high expectations, and expanded opportunity [5]. Biggs and Tang translated this logic into the principle of constructive alignment, in which intended learning outcomes, teaching and learning activities, and assessment tasks are deliberately made to reinforce one another [6]. Harden further distinguished learning outcomes from conventional instructional objectives, arguing that outcomes describe demonstrable capability rather than teacher intention [7]. This body of work is not uncontested. Morcke, Dornan and Eika have shown that the empirical evidence supporting outcome-based approaches is considerably more limited than their policy popularity suggests, and that much of the reported success rests on perception rather than on measured attainment [8]. Rao similarly observes that OBE is frequently adopted at the level of documentation while classroom practice remains largely unchanged [9]. These critiques matter for the present study because they identify the distance between the *documented* curriculum and the *enacted* curriculum as the central empirical question in OBE research [10].

In Indonesia, OBE has been institutionalised through the Indonesian National Qualifications Framework (KKNI) and the National Standards for Higher Education (SN-Dikti), which require study programmes to formulate graduate learning outcomes (*capaian pembelajaran lulusan*, CPL) covering attitudes, knowledge, and general and specific skills [11]. SN-Dikti also requires alignment between programme objectives, the learning process, and the assessment system, so that attainment can be judged against explicit criteria [12]. The Merdeka Belajar–Kampus Merdeka (MBKM) policy adds curricular flexibility through off-campus learning, internships, and research activities [13]. Taken together, these regulations position OBE not merely as an administrative requirement but as an instrument of quality assurance and graduate relevance [14].

Within Islamic higher education, the adoption of OBE carries an additional demand: intended outcomes must accommodate disciplinary competence alongside the integration of Islamic values [15]. In the English Language Teaching Study Program (TBI), Educational Statistics functions as a service course. It supports the research and assessment competences that prospective English teachers need in order to analyse learning achievement, evaluate educational programmes, and conduct undergraduate research [16]. Statistical literacy in this sense involves the capacity to interpret and critically evaluate statistical information in context, not merely to compute [17]. Service statistics courses in humanities programmes nevertheless face a well-documented obstacle: students frequently report statistics anxiety and low mathematical self-efficacy, a pattern associated with procedural instruction that privileges formulas over interpretation [18]. Reform recommendations in statistics education accordingly emphasise conceptual understanding, the use of real data, and active learning [19]. Educational Statistics is therefore an informative site for examining whether an outcome-based curriculum changes teaching practice in precisely the course where the distance between student background and disciplinary demand is greatest.

Empirical studies of OBE implementation in Indonesian higher education report broadly convergent findings. Hamid reported that a descriptive statistics module developed with an OBE approach improved students' motivation and ability [20]. Hasibuan et al. found that OBE supports curricular alignment through case methods and project-based learning in a business education programme [21]. Halim identified lecturer competence as a determining factor in OBE-based learning management [22]. Yorman argued conceptually that OBE strengthens the relationship between theory and practice and builds twenty-first-century competences [23]. Salim et al. reported gains in critical thinking, collaboration, and communication in higher education more generally [24], and a meta-analysis by Rizki and Gea concluded that OBE is associated with improved competence attainment [25]. Three limitations recur across this literature. First, most studies are located in science, health,

vocational, or business programmes, in which quantitative reasoning already forms part of students' disciplinary identity. Second, the majority rely on single-source perception data, usually student questionnaires, without examining curriculum documents or observing classroom enactment. Third, they treat OBE as a uniform treatment whose outcome is reported as improvement, without describing the mechanisms through which alignment is actually accomplished in a particular course. Consequently, little is known about how OBE is enacted in a quantitative service course delivered to humanities students in an Islamic higher education institution, or about how lecturers reconcile fixed outcome statements with markedly heterogeneous student preparation.

This study therefore describes the enactment of the OBE curriculum in the Educational Statistics course in the TBI Study Program at IAIN Sorong, and the ways in which students, the course lecturer, and the study programme coordinator perceive its contribution to their learning. It addresses four questions. (1) How are intended learning outcomes formulated and aligned in course documents? (2) How is outcome-based learning enacted in classroom practice? (3) How are assessment practices organised in relation to intended outcomes? (4) What do participants perceive as the contributions of, and the obstacles to, this implementation? Consistent with its descriptive qualitative design, the study does not test the effectiveness of OBE and advances no claim of causal or statistically significant improvement in learning outcomes. Its intended contribution lies in curriculum implementation and pedagogy rather than in general OBE theory: it specifies how constructive alignment is contextualised when a quantitative service course is taught to language education students, and it synthesises the findings into a set of transferable implementation principles.

Materials and Methods

A. Research design and rationale

This study used a descriptive qualitative design with a single instrumental case study orientation [26]. The design was selected because the research questions concern how a curriculum policy is interpreted and enacted by the actors involved, which requires access to meaning and practice rather than to measurable effect [27]. The design carries a deliberate limitation: it can describe practices and perceptions, but it cannot establish that OBE caused a change in learning attainment. Every claim in this article is therefore framed either as enacted practice evidenced by documents and observation, or as participants' reported perceptions.

B. Research setting

The study was conducted in the English Language Teaching Study Program (TBI), Faculty of Tarbiyah, Institut Agama Islam Negeri (IAIN) Sorong, Southwest Papua, Indonesia. The TBI programme implements a curriculum aligned with an Outcome-Based Education (OBE) approach. Educational Statistics is a compulsory course offered as part of the TBI curriculum

during the 2025/2026 academic year. The study focused on students enrolled in the course during the 2025/2026 academic year. Fieldwork was conducted over three months, from January 2026 to March 2026.

C. Participants and sampling

Participants were selected purposively from the English Language Teaching Study Program (TBI), Faculty of Tarbiyah, Institut Agama Islam Negeri (IAIN) Sorong. The student participants were selected based on their involvement in the Educational Statistics course under the OBE-oriented curriculum and their willingness to participate after receiving information about the study. To obtain diverse perspectives, the three student participants represented different levels of academic achievement. The final sample consisted of three students, one lecturer teaching the Educational Statistics course, and the TBI Study Programme Coordinator, giving a total of five participants. Recruitment was conducted based on the relevance of participants to the research objectives. Participants are identified throughout the study using codes to maintain confidentiality: S1–S3 for students, L1 for the lecturer, and KP for the TBI Study Programme Coordinator. Table 1 summarises the participants' characteristics and the data generated from each participant.

Table 1. Participant characteristics and data generated

Code	Role	Sex	Status/ semester	Data generated	Interview duration (min)
S1	Student	P	III	Interview; classroom observation	9
S2	Student	L	III	Interview; classroom observation	6
S3	Student	P	III	Interview; classroom observation	9
S4	Student	L	III	Interview; classroom observation	6
S5	Student	P	III	Interview; classroom observation	9
L1	Course lecturer	L	2 years' teaching experience	Interview; RPS and rubrics; observation	22
KP	Study programme coordinator	L	1 year in post	Interview; CPL and CPL–CPMK mapping	20

Note. Codes are pseudonymous. Fields marked in brackets are to be completed by the authors from the study records.

D. Data generation

Three data collection techniques were used, each addressing a different aspect of the implementation of the Outcome-Based Education (OBE) curriculum in the Educational Statistics course.

1. Document analysis.

Documents were included when they provided direct evidence of curricular alignment and course implementation. The document corpus comprised the TBI Study Programme's Graduate Learning Outcomes (Capaian Pembelajaran Lulusan/CPL), the CPL–Course Learning Outcomes (CPL–CPMK) mapping for Educational Statistics, the Semester

Learning Plan (Rencana Pembelajaran Semester, RPS) for the 2025/2026 academic year, assessment rubrics and assessment instruments, samples of student assignments and mini-project reports, and the course assessment recapitulation. The documents were examined using an alignment checklist covering outcome specification, the cognitive level of outcome verbs based on Bloom's taxonomy of cognitive objectives [28], activity–outcome correspondence, assessment–outcome correspondence, and the transparency of assessment criteria.

2. Non-participant classroom observation.

Classroom observations were conducted during the implementation of the Educational Statistics course using a structured observation protocol derived from the constructive alignment framework [6]. The protocol recorded whether the intended learning outcomes were explicitly communicated to students, the proportion of class time devoted to lecturer-led and student-led activities, the nature and source of learning tasks, the types of data used in learning activities, and the feedback practices employed by the lecturer. Field notes were taken during each observation session and expanded after the observation.

3. Semi-structured interviews.

Semi-structured interview guides were developed based on the OBE framework and the research questions, covering curriculum planning, classroom implementation, assessment practices, students' learning experiences, and implementation challenges. Interviews were conducted with five students (S1–S5), one lecturer teaching the Educational Statistics course (L1), and the TBI Study Programme Coordinator (KP). Interviews were conducted in Indonesian at a time and place agreed upon with each participant. With participants' consent, the interviews were audio-recorded and transcribed verbatim. The interview data were subsequently analysed together with the observation and document data to provide a comprehensive account of OBE implementation in the Educational Statistics course. Quotations reported in this article were translated into English while retaining the original meaning of participants' statements.

E. Data analysis

Data were analysed using Braun and Clarke's six-phase reflexive thematic analysis [29]: (1) familiarisation through repeated reading of interview transcripts, classroom observation notes, and relevant documents; (2) generation of initial codes across the entire data corpus; (3) collation of related codes into candidate themes; (4) review of candidate themes against the coded extracts and the complete data set; (5) definition and naming of themes; and (6) production of the analytical report.

The coding process began inductively, allowing patterns and meanings to emerge from the data, and was subsequently examined in relation to key OBE constructs, particularly clarity of focus, designing back, and constructive alignment. This resulted in a hybrid inductive–deductive analytical procedure. Data from the five student participants (S1–S5), the course lecturer (L1), and the TBI Study Programme Coordinator (KP) were analysed alongside classroom observation notes and curriculum-related documents to enable triangulation across data sources.

NVivo was used to support the organisation, coding, retrieval, and comparison of qualitative data. Interview transcripts, classroom observation notes, and relevant curriculum documents were imported into NVivo and coded systematically. An illustrative analytic pathway is as follows: the statement “the purpose of this course was explained from the beginning” was initially coded as outcomes communicated at course opening. This code was then grouped with related codes under the sub-theme transparency of intended outcomes and subsequently incorporated into the broader theme outcome-referenced planning. Similar procedures were applied to data concerning learning activities, assessment practices, feedback, and perceived implementation challenges.

NVivo-supported analysis was used to compare patterns across participants and data sources. Particular attention was given to convergence and divergence between students' accounts, the lecturer's perspective, the programme coordinator's explanation, classroom observations, and documentary evidence. This process facilitated systematic triangulation and enabled the study to identify both consistencies and gaps in the implementation of OBE in the Educational Statistics course.

F. Trustworthiness

Trustworthiness was addressed using Lincoln and Guba's criteria [30], operationalised for thematic analysis following Nowell et al. [31]. Credibility was pursued through methodological triangulation across document analysis, classroom observation, and semi-structured interviews, as well as source triangulation across the five student participants (S1–S5), the course lecturer (L1), and the TBI Study Programme Coordinator (KP). Member checking was conducted by returning summaries of the emerging themes and the quotations attributed to participants to the relevant participants for verification and clarification. Peer debriefing was also used to discuss the interpretation of the findings with a colleague not directly involved in the study.

Transferability was supported through thick description of the research setting, participants, course context, and data collection procedures. Dependability was strengthened through an audit trail containing the interview guides, interview transcripts, classroom observation notes, relevant curriculum documents, NVivo coding records, coding decisions,

and analytic memos. Confirmability was addressed through reflexive memos in which the researcher documented analytical decisions, interpretations, assumptions, and potential sources of researcher influence throughout the study.

Reflexivity was considered throughout the research process, particularly because the researcher had academic involvement in the TBI Study Programme. To minimise potential influence on participants' responses, interviews with students were conducted in a manner that emphasised voluntary participation, confidentiality, and the absence of academic consequences for participation or responses. Participants were informed that their responses would be used solely for research purposes and that individual identities would not be disclosed.

G. Ethical considerations

All participants received a written information sheet setting out the purpose of the study, the procedures involved, the expected duration, the voluntary nature of participation, and the right to withdraw at any point without consequence for their academic standing; all provided written informed consent before data collection began. Because the study involved students positioned within an institutional hierarchy, three safeguards were applied. First, participation was solicited by the author not involved in teaching the course, not by the teaching lecturer. Second, recruitment and interviews took place after final grades had been released, so that participation could not influence, and could not be perceived to influence, assessment. Third, no participant's decision to take part or to decline was disclosed to the teaching lecturer or to the study programme. Audio recordings, transcripts, and documents were stored in password-protected files accessible only to the authors. Personal identifiers were removed at the point of transcription and replaced with codes, and no personal or institutional detail that could identify an individual participant is reported. Permission to use programme documents was obtained in writing from the Head of the Study Program.

Results

Analysis produced six themes, summarised with their sub-themes and evidential basis in Table 2. Throughout this section, statements about learning are reported as participants' perceptions or as observed practice. No achievement, pre-test, or post-test data were collected, and the findings should not be read as evidence of measured improvement.

A. Outcome-referenced planning and documented alignment

Document analysis showed that the Semester Learning Plan (RPS) for Educational Statistics was derived from the programme's Graduate Learning Outcomes (CPL) through Course Learning Outcomes (CPMK) and sub-CPMK.

Table 2. Themes, sub-themes, and evidential basis

Theme	Sub-themes	Principal evidential basis
1. Outcome-referenced planning and documented alignment	Derivation of CPMK from CPL; session-level mapping; transparency of intended outcomes at course opening	RPS; CPL–CPMK matrix; interviews (L1, KP, students)
2. Enactment of student-centred learning	Restatement of session outcomes; group work on data sets; task–outcome linkage articulated in class	Classroom observation; interviews (L1, students)
3. Contextualisation of statistical content	Use of educational and ELT data; statistics framed as an instrument of evaluation and research	Observation; student assignments; interviews (KP, students)
4. Continuous, outcome-referenced assessment	Multiple assessment forms mapped to CPMK; criterion-referenced rubrics; assessment of process as well as product	Rubrics; assessment recapitulation; interviews (L1, students)
5. Perceived learning and reorientation from grades to competence	Perceived clarity of purpose; perceived confidence in interpreting data; attention shifted to competence	Interviews (students, L1, KP)
6. Heterogeneous prior preparation as implementation challenge	Varied mathematical readiness; need for supplementary guidance; fixed outcomes within a fixed calendar	Interviews (KP, L1); observation

Note. CPL = graduate learning outcomes; CPMK = course learning outcomes; RPS = semester learning plan; ELT = English language teaching.

Each weekly session in the plan was mapped to a sub-CPMK and to a designated form of assessment, making the intended chain from graduate learning outcomes to weekly learning activities and assessment tasks traceable in the documentation. However, the analysis also identified several areas of partial misalignment. In particular, some learning outcomes were formulated using verbs corresponding to the *understanding* level of Bloom's taxonomy, while the associated learning activities and assessment tasks required students to perform higher-order cognitive processes, such as analysing and interpreting statistical data. This indicates that although the overall curricular structure demonstrated alignment, the relationship between the cognitive level specified in some outcomes and the demands of the corresponding assessment tasks was not fully consistent. These findings suggest that the implementation of OBE was generally aligned at the structural level, but some aspects of cognitive-level alignment required further refinement.

The lecturer described planning as beginning from outcomes rather than from content coverage:

"Since the beginning of lectures I have designed statistics learning based on learning outcomes. Students are not only targeted to understand theory, but to be able to process and analyse data related to English language teaching research." (L1)

The study programme coordinator located the same practice at programme level, describing the semester learning plan as the instrument through which programme-level targets reach individual tasks:

"In the semester learning plan the learning achievement target has already been determined, so every piece of material and every assignment given needs to lead to that target, particularly students' ability to understand and use educational statistics." (KP)

Students reported that these outcomes were communicated to them explicitly at the opening of the course:

"The purpose of this course was explained from the beginning, so we are not only required to understand statistical theory, but also to apply it to process and analyse data in the context of Islamic education." (S2 & S4)

Taken together, the documentary and interview evidence indicates that the principles of clarity of focus and designing back described by Spady [5] were present both in the planning documents and in participants' accounts of how the course opened.

B. Enactment of student-centred learning

Classroom observations indicated a recurring learning structure in the Educational Statistics course. At the beginning of the sessions, the lecturer explained or restated the intended learning outcomes and introduced the statistical concept through examples. Students were subsequently engaged in individual or small-group activities involving statistical data, problem-solving, discussion, and interpretation. The lecturer provided guidance and feedback throughout the activities, while students were observed asking both procedural and interpretive questions related to the statistical tasks. In several observed sessions, students were also given opportunities to explain or present the interpretation of their findings rather than merely reporting the computed results. These observations indicate that classroom activities generally reflected an OBE-oriented approach by connecting intended learning outcomes with learning activities that required students to apply, analyse, and interpret statistical information.

The lecturer connected each activity explicitly to a course learning outcome:

"I always associate every learning activity with the CPMK. So students understand the purpose of each assignment given, and learning becomes more directed rather than simply completing the material." (L1)

Students' accounts corresponded with this observation, describing lecture activity as purposeful rather than incidental:

"In my opinion, every activity in lectures is always connected to the learning outcomes of the course. So we know the purpose of each assignment and activity given, and the learning process feels more directed." (S1)

C. Contextualisation of statistical content in English language teaching and Islamic education

A distinctive feature of the enacted course was the origin of the data used. Observed tasks and the sampled student assignments drew on educational data that students could plausibly encounter in their own field: records of student learning achievement, programme evaluation data, and data sets from Islamic education research. The coordinator framed this as a deliberate programme-level expectation rather than an individual teaching preference:

"Statistics should be linked to educational cases, so that TBI students can not only calculate but also understand its usefulness in learning evaluation." (KP)

Students attributed their sense of the subject's accessibility to this contextualisation rather than to the statistical content itself:

"The data processing exercises and case study assignments made it easier for me to understand Educational Statistics because the material immediately felt applicable." (S4 & S5).

This theme is analytically distinct from student-centred learning. The activities were not only student-led; they were populated with content drawn from the students' prospective professional practice, and it was this proximity that participants identified as the source of meaning.

D. Continuous, outcome-referenced assessment

The assessment documentation specified multiple forms of assessment aligned with the designated CPMKs. These included individual assignments, group tasks, a mini-project involving the analysis and interpretation of educational data, student presentations, and mid-semester and end-of-semester examinations. Each assessment component was designed to measure different aspects of students' achievement of the intended learning outcomes. The assessment rubrics specified performance criteria for the respective tasks, providing students with indicators of the expected level of performance. The lecturer described assessment as extending beyond written examinations, emphasising students' ability to apply statistical concepts, analyse educational data, interpret findings, and communicate their results. This pattern indicates that assessment practices were generally consistent with the OBE principle of assessing learning outcomes through multiple forms of evidence rather than relying solely on examination performance.

"Assessment of learning outcomes is not carried out only through written examinations, but also through data analysis tasks and mini research projects." (L1)

Students, in turn, identified transparency and the inclusion of process as the features that distinguished this system:

"The scoring system in Educational Statistics feels transparent and fair, because the assessment is not only from the final exam but also from the learning process and outcomes during lectures." (SS3)

Assessment thus operated as an interface between the intended outcomes and students' experience of the course: it was through the criteria that the outcomes became visible and consequential for students, which corresponds to the function of assessment for learning.

E. Perceived learning and reorientation from grades to competence

Participants consistently described a change in what they attended to during study. The coordinator characterised this as a shift in students' orientation:

"With OBE, students become aware of their learning targets, so they are more focused and do not only pursue grades but also competences." (KP)

Students reported greater confidence in interpreting simple data and a clearer sense of why particular procedures were being learned. The lecturer likewise reported a gradual improvement in students' ability to understand and apply statistical procedures over the semester. These accounts are consistent across the three participant groups; they nevertheless remain self-reported perceptions. The study generated no achievement data, and the convergence of perceptions cannot be treated as evidence that attainment improved.

F. Heterogeneous prior preparation as the principal implementation challenge

The most frequently reported obstacle was variation in students' prior mathematical preparation. The coordinator identified this as a structural feature of the programme's intake rather than an individual deficit:

"TBI students come from a variety of backgrounds, so there are some of them who still struggle with statistics and need more in-depth guidance." (KP)

This challenge exposes a tension internal to the OBE model as enacted within a fixed-semester structure. The model holds outcomes constant and expects time and support to vary, in accordance with Spady's principle of expanded opportunity [5]; the academic calendar, by contrast, holds time constant. Participants' accounts suggest that this tension was managed through supplementary guidance rather than resolved.

Discussion

A. From documented alignment to enacted alignment

The first contribution of this study is the distinction it draws between alignment that is documented and alignment that is enacted. Rao's concern that OBE is often adopted as documentation while teaching remains unchanged [9] is a question that cannot be answered by studies relying on questionnaires alone. Because this study combined document analysis with observation, it was possible to establish that the outcome, activity, assessment chain specified in the semester learning plan was also visible in classroom routines: outcomes were restated at the opening of sessions, and tasks were introduced by reference to the outcome they served. Alignment was nevertheless a matter of degree rather than a binary property. This suggests that programme-level curriculum audits, which in Indonesian quality assurance practice are typically conducted on documents, risk certifying documented rather than enacted alignment.

B. Contextualisation as the mechanism of alignment in a service course

The second contribution concerns the mechanism through which alignment was achieved. Constructive alignment as formulated by Biggs and Tang is a vertical relation among outcomes, activities, and assessment within a course [6]. The present findings suggest that in a service course a second, horizontal relation is equally consequential: the relation between the statistical content and the disciplinary identity of the students who take it. Participants did not

attribute the accessibility of the course primarily to its student-centred format; they attributed it to the fact that the data they handled came from their own professional field. This nuances studies reporting OBE effects in science, business, and vocational settings [21], [25], where horizontal alignment is less problematic because quantitative reasoning already belongs to students' disciplinary self-concept. The principle is not unfamiliar within English language teacher education, where content-based instruction similarly derives language learning tasks from subject-matter content [32], [33]; the present findings suggest that the same logic can be reversed and applied to a quantitative course delivered to language students. Contextualisation also carries a normative dimension in Islamic higher education, where the integration of knowledge and practice in the service of educational improvement is a constitutive rather than incidental aim [34]. Substantively, contextualisation offers a specific pedagogical response to the statistics anxiety documented in service courses [18], and it is consistent with reform recommendations in statistics education that place real data at the centre of instruction [19].

C. Assessment as the most visible carrier of the curriculum

Students' accounts identified assessment, rather than teaching method, as the point at which the outcome-based curriculum became perceptible to them. What they described as transparency and fairness was, in substance, criterion referencing: the availability of explicit criteria made the intended outcomes operational. This supports Harden's argument that outcomes differ from instructional objectives precisely in being statements of demonstrable capability [7], and it indicates that, from the student's position, assessment design is the primary carrier of an outcome-based curriculum.

D. Towards contextualised constructive alignment

Synthesising the six themes, the study proposes five implementation principles for quantitative service courses in humanities-oriented programmes, offered as a transferable framework rather than as a validated model. First, *dual alignment*: alignment must be pursued vertically, from CPL through CPMK to activity and assessment, and horizontally, between statistical content and the disciplinary identity of the students. Second, *outcome translation*: outcome statements are restated in the language of students' prospective professional practice at the opening of each session, rather than being stated once in the course documentation. Third, *data proximity*: every statistical procedure is introduced through data that students could plausibly generate in their own field, so that interpretation precedes computation. Fourth, *criterion transparency*: rubrics are distributed and discussed before the task is undertaken, making assessment the interface through which students encounter the intended outcomes. Fifth, *differentiated opportunity*: because a fixed semester cannot vary time, the expanded opportunity principle is operationalised through variation in support — structured

supplementary guidance, staged tasks, and formative feedback cycles — for students whose prior preparation is weakest. This principle is consistent with a socio-cultural account of learning in which assisted performance precedes independent performance [35], and it addresses directly the tension identified in Section 3.6 between fixed outcomes and a fixed calendar.

E. Relation to previous findings

The findings confirm the broad pattern reported in previous Indonesian studies concerning engagement, perceived relevance, and the alignment of curriculum with learning objectives [20]–[24], including the argument that outcome orientation is realised through innovative, competence-focused teaching methods rather than through curricular documentation alone [36]. They extend that work in two respects: by specifying the mechanisms through which alignment was accomplished in a particular course, and by grounding the account in three data sources rather than in perception alone. They also depart from the prevailing reporting practice in this literature. Several studies infer improvement in learning outcomes from perception data, thereby conflating perceived and measured attainment — a conflation identified more generally by Morcke, Dornan and Eika in their review of the evidential basis of outcome-based education [8]. The present study deliberately withholds such an inference. Its evidence supports statements about how the curriculum was enacted and how participants experienced it, and does not support statements about effectiveness.

Conclusion

This study described the enactment of the Outcome-Based Education curriculum in the Educational Statistics course in the English Language Teaching Study Program at IAIN Sorong. The curriculum was enacted through outcome-referenced planning traceable from graduate learning outcomes to weekly tasks, through student-centred classroom activity, through the contextualisation of statistical content in English language teaching and Islamic education, and through continuous, criterion-referenced assessment. Students, the lecturer, and the study programme coordinator perceived the course to be clearer in purpose, more applicable to their field, and more transparent in assessment; they also identified heterogeneous prior mathematical preparation as the principal obstacle to implementation. Because the study collected no achievement data, these findings describe enacted practice and perceived learning and do not establish that the curriculum improved learning attainment. The study's contribution is a specification of how constructive alignment is contextualised in a quantitative service course taught to humanities students, expressed as five implementation principles, together with the analytic distinction between documented and enacted alignment. Mixed-

methods and longitudinal designs are needed to establish whether the practices described here are associated with measurable gains in statistical competence.

Implications

For lecturers of service statistics courses, the findings suggest designing assessment criteria before teaching materials, sourcing data sets from the students' own field of practice, and restating the relevant outcome at each session. The mini-project format observed here is consistent with evidence that research-based learning tasks develop students' data-analysis competence [37]. For study programmes, they suggest that internal curriculum audits should include classroom observation, since document review alone cannot distinguish documented from enacted alignment. For quality assurance policy under KKNi and SN-Dikti, they suggest that compliance instruments would be strengthened by evidence of enactment alongside evidence of documentation.

Limitation and Suggestions

This study has several limitations. First, it was conducted in only one school, so the results cannot be generalized to all educational institutions. Second, the process of internalizing values is a long-term process, and this study was conducted over a limited period of time, so changes in student behavior could not be observed in depth over the long term. Furthermore, this study used a qualitative approach, so measurements of student behavior changes were not analyzed quantitatively.

Based on the research findings, schools are advised to strengthen the implementation of the 5R culture based on the concept of decluttering through consistent and ongoing habituation. Teachers and homeroom teachers are expected to continue to provide role models and guidance in implementing the 5R culture so that the process of internalizing Islamic educational values can proceed optimally.

For future researchers, research on the 5R culture based on the concept of decluttering can be developed using quantitative or mixed-methods approaches to provide a broader perspective.

Acknowledgment

The Coordinator of the English Language Teaching Study Programme (TBI), Faculty of Tarbiyah, Institut Agama Islam Negeri (IAIN) Sorong, for their participation and support during the study.

Conflict of Interest

The authors declare no conflict of interest.

References

- [1] U. A. D. H. Dwiyantri and I. Ismail, "Pandangan filsafat Ki Hajar Dewantara sebagai landasan pendidikan di era Kurikulum Merdeka dalam menghadapi abad 21," *JIIIP: Jurnal Ilmiah Ilmu Pendidikan*, vol. 8, no. 1, pp. 1105–1112, 2025, doi: 10.54371/jiip.v8i1.6424.
- [2] W. Nurfadillah, A. Saptono, and F. D. Lestari, "Analisis implementasi Kurikulum Merdeka Belajar dalam meningkatkan keterampilan abad-21 pada SMA Negeri 36 Jakarta," *European Journal of Higher Education and Academic Advancement*, vol. 1, no. 7, pp. 25–30, 2024, doi: 10.61796/ejheaa.v1i7.719.
- [3] M. Latif, Yenizar, H. Zulbasri, and A. Ardaini, "Transformasi kurikulum pendidikan Islam: Studi perbandingan KBK, KTSP, K13, Full Day School, dan Merdeka Belajar," *QOSIM: Jurnal Pendidikan Sosial & Humaniora*, vol. 3, no. 3, pp. 1314–1323, 2025, doi: 10.61104/jq.v3i3.2025.
- [4] M. I. Muzakir and Susanto, "Implementasi kurikulum Outcome-Based Education (OBE) dalam sistem pendidikan tinggi di era Revolusi Industri 4.0," *Edukasiana: Journal of Islamic Education*, vol. 2, no. 1, pp. 118–139, 2023, doi: 10.61159/edukasiana.v2i1.86.
- [5] W. G. Spady, *Outcome-Based Education: Critical Issues and Answers*. Arlington, VA, USA: American Association of School Administrators, 1994.
- [6] J. Biggs and C. Tang, *Teaching for Quality Learning at University*, 4th ed. Maidenhead, U.K.: Open University Press/McGraw-Hill Education, 2011.
- [7] R. M. Harden, "Learning outcomes and instructional objectives: Is there a difference?," *Medical Teacher*, vol. 24, no. 2, pp. 151–155, 2002, doi: 10.1080/0142159022020687.
- [8] A. M. Morcke, T. Dornan, and B. Eika, "Outcome (competency) based education: An exploration of its origins, theoretical basis, and empirical evidence," *Advances in Health Sciences Education*, vol. 18, no. 4, pp. 851–863, 2013, doi: 10.1007/s10459-012-9405-9.
- [9] N. J. Rao, "Outcome-based education: An outline," *Higher Education for the Future*, vol. 7, no. 1, pp. 5–21, 2020, doi: 10.1177/2347631119886418.
- [10] T. Satria, J. Batubara, and N. Deliani, "The factors affecting the learning process and outcomes," *TOFEDU: The Future of Education Journal*, vol. 4, no. 8, pp. 4358–4365, 2025, doi: 10.61445/tofedu.v4i8.1183.
- [11] S. Khalimah, D. Ratnasari, A. Intan, and R. Zahroh, "Pengembangan kurikulum PAI UIN Sunan Kalijaga Yogyakarta mengacu pada KKNi dan SN-DIKTI," *JIIIP: Jurnal Ilmiah Ilmu Pendidikan*, vol. 7, no. 12, pp. 14198–14210, 2024, doi: 10.54371/jiip.v7i12.6535.
- [12] E. Hidayanti, M. Kibtyah, N. C. Fajri, and T. Febriyanti, "Urgency of implementing the OBE curriculum in BPI department based on user satisfaction," *Inovasi Kurikulum*, vol. 22, no. 3, pp. 1417–1430, 2025, doi: 10.64014/jik.v22i3.124.
- [13] N. R. I. Husnul, "Manajemen pembelajaran inovatif untuk mendukung program MBKM: Pendekatan praktis dan teoritis," *Jurnal Akuntabilitas Manajemen Pendidikan*, vol. 13, no. 1, pp. 1–11, 2025, doi: 10.21831/jamp.v13i1.78513.
- [14] F. L. Ridwanullah, G. Pratama, and M. Zulfikar, "Manajemen satuan pendidikan berbasis Outcome-Based Education dalam menghasilkan lulusan berkualitas," *Didaktik: Jurnal Ilmiah PGSD STKIP Subang*, vol. 12, no. 1, pp. 66–85, 2026, doi: 10.36989/didaktik.v12i01.11319.
- [15] V. I. Wulandari, L. F. Santosa, R. I. Sholihah, B. Rahman, and K. G. R. Atmadja, "Perancangan kurikulum program studi ilmu lingkungan berbasis Outcome-Based Education terintegrasi nilai Islam di UIN Antasari Banjarmasin," *Jurnal Pendidikan Indonesia: Teori, Penelitian, dan Inovasi*, vol. 5, no. 6, 2026, doi: 10.59818/jpi.v5i6.2506.
- [16] Z. R. Habibie and P. W. Hidayat, "Analisis peningkatan literasi statistik mahasiswa pada mata kuliah statistika pendidikan berbasis *the statistical process*," *Jurnal Muara Pendidikan*, vol. 7, no. 1, pp. 156–164, 2022, doi: 10.52060/mp.v7i1.788.
- [17] Gal, "Adults' statistical literacy: Meanings, components, responsibilities," *International Statistical Review*, vol. 70, no. 1, pp. 1–25, 2002, doi: 10.1111/j.1751-5823.2002.tb00336.x.
- [18] A. J. Onwuegbuzie and V. A. Wilson, "Statistics anxiety: Nature, etiology, antecedents, effects, and treatments—A comprehensive review of the literature," *Teaching in Higher Education*, vol. 8, no. 2, pp. 195–209, 2003, doi: 10.1080/1356251032000052447.
- [19] GAISE College Report ASA Revision Committee, *Guidelines for Assessment and Instruction in Statistics Education (GAISE) College Report 2016*. Alexandria, VA, USA: American Statistical Association, 2016.
- [20] A. Hamid, "Penerapan metode pembelajaran OBE terhadap motivasi belajar mahasiswa," *EQUALS: Jurnal Ilmiah Pendidikan Matematika*, vol. 8, no. 2, pp. 172–182, 2025, doi: 10.46918/equals.v8i2.3011.

- [21] N. I. Hasibuan, D. A. Baskoro, N. A. E. Poluan, and R. Handriyani, "Evaluasi kebutuhan pengembangan kurikulum blok bertema berbasis OBE: Studi persepsi mahasiswa dan dosen di pendidikan bisnis," *Jurnal Manajemen Pendidikan*, vol. 10, no. 3, pp. 863–877, 2025, doi: 10.34125/jmp.v10i3.461.
- [22] M. Halim, "Peran kompetensi dosen dalam implementasi manajemen pembelajaran berbasis Outcome-Based Education (OBE) di UINSI Samarinda," *Jurnal Pendidikan Indonesia: Teori, Penelitian, dan Inovasi*, vol. 5, no. 4, 2025, doi: 10.59818/jpi.v5i4.1892.
- [23] H. S. Hadi and M. Q. Hidayat, "Integrasi creative thinking dalam kurikulum berbasis OBE untuk meningkatkan kompetensi mahasiswa," *ARMADA: Jurnal Penelitian Multidisiplin*, vol. 3, no. 8, pp. 274–281, 2025.
- [24] R. Salim, A. Adam, N. Silawane, R. R. Ali, Y. Mayabubun, and A. Dahlan, "Tingkat keberhasilan pembelajaran di perguruan tinggi: Analisis metode diskusi untuk meningkatkan keterampilan berpikir kritis," *JUANGA: Jurnal Agama dan Ilmu Pengetahuan*, vol. 9, no. 2, pp. 83–94, 2023, doi: 10.59115/juanga.v9i0.
- [25] F. R. D. Gea and S. F. Koto, "Efektivitas kurikulum Outcome-Based Education (OBE) dalam meningkatkan kompetensi siswa pada matakuliah bakery: Sebuah meta-analysis," *MODELING: Jurnal Program Studi PGMI*, vol. 11, no. 4, pp. 232–249, 2024, doi: 10.69896/modeling.v11i4.2656.
- [26] W. Creswell and C. N. Poth, *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*, 4th ed. Thousand Oaks, CA, USA: SAGE Publications, 2018.
- [27] M. B. Miles, A. M. Huberman, and J. Saldaña, *Qualitative Data Analysis: A Methods Sourcebook*, 3rd ed. Thousand Oaks, CA, USA: SAGE Publications, 2014.
- [28] S. Bloom, Ed., *Taxonomy of Educational Objectives: The Classification of Educational Goals, Handbook I: Cognitive Domain*. New York, NY, USA: David McKay Company, 1956.
- [29] V. Braun and V. Clarke, "Using thematic analysis in psychology," *Qualitative Research in Psychology*, vol. 3, no. 2, pp. 77–101, 2006, doi: 10.1191/1478088706qp063oa.
- [30] Y. S. Lincoln and E. G. Guba, *Naturalistic Inquiry*. Beverly Hills, CA, USA: SAGE Publications, 1985.
- [31] S. Nowell, J. M. Norris, D. E. White, and N. J. Moules, "Thematic analysis: Striving to meet the trustworthiness criteria," *International Journal of Qualitative Methods*, vol. 16, no. 1, pp. 1–13, 2017, doi: 10.1177/1609406917733847.
- [32] Mahsar, "Pembelajaran bahasa Inggris menggunakan Content-Based Instruction (CBI) dalam meningkatkan kemampuan berbahasa di Sekolah Tinggi Pariwisata Mataram," *Media Bina Ilmiah*, vol. 16, no. 12, pp. 7853–7868, 2022, doi: 10.33578/mbi.v16i12.67.
- [33] G. G. Metri, T. Arianto, Syamsudin, H. Mora, W. Putriana, S. G. Saptiany, E. Huan, and Zulhendri, *Pendidikan Bahasa Inggris: Teori, Metode, dan Aplikasi Pembelajaran*. Agam, Indonesia: Yayasan Tri Edukasi Ilmiah, 2025, ISBN 978-634-7313-08-9.
- [34] S. M. N. Al-Attas, *The Concept of Education in Islam: A Framework for an Islamic Philosophy of Education*. Kuala Lumpur, Malaysia: International Institute of Islamic Thought and Civilization, 1993.
- [35] S. Vygotsky, *Mind in Society: The Development of Higher Psychological Processes*. Cambridge, MA, USA: Harvard University Press, 1978.
- [36] E. Rosa, R. Destian, and A. Agustian, "Inovasi model dan strategi pembelajaran dalam implementasi Kurikulum Merdeka," *Journal of Education Research*, vol. 5, no. 3, pp. 2608–2617, 2024, doi: 10.37985/jer.v5i3.1153.
- [37] A. Rizki, "Penerapan Research-Based Learning (RBL) dalam pengembangan kompetensi analisis data mahasiswa," *Jurnal Inovasi Refleksi Profesi Guru*, vol. 2, no. 1, pp. 7–13, 2025, doi: 10.30872/jirpg.v2i1.5171.

Authors



Mulyono   is a lecturer at Sekolah Tinggi Agama Islam Negeri (STAIN) Sorong, Indonesia. His academic interests include Islamic education, instructional media, educational technology, environmental education, and student-centred learning. He has contributed to research and community-service activities addressing technology-enhanced learning, literacy and numeracy, quality assurance, and pro-environmental behaviour. His scholarly work reflects an interdisciplinary interest in improving educational practice through relevant learning strategies and contextual educational innovation. (email: mulyonosmk@gmail.com).



Nurul Dwi Mutia   is affiliated with Institut Agama Islam Negeri (IAIN) Sorong, Southwest Papua, Indonesia. Her academic interests include English language teaching, curriculum implementation, Outcome-Based Education, educational assessment, and quantitative learning in higher education. Her scholarly work focuses on improving teaching quality through curriculum alignment, student-centred learning, and contextually relevant instructional practices. She is also interested in curriculum evaluation and the integration of educational innovation within Islamic higher education. (email: dwimutia2465@gmail.com).