

Well-Designed Learning Outcomes

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LIFE PACIFIC UNIVERSITY

CHRIST CENTERED, SPIRIT FILLED

Well-Designed Learning Outcomes

- The importance of learning outcomes
- Using Bloom's Revised Taxonomy to help construct learning outcomes
- Examples of well-written outcomes

The importance of learning outcomes

- What is important for students to learn? (the learning question)
- How does one plan and deliver instruction that will result in high levels of learning? (the instruction question)
- How does one design assessment instruments and procedures that provide accurate information about how well students are learning? (the assessment question)
- How does one ensure that objectives, instruction, and assessment are consistent with one another? (the alignment question)



The importance of learning outcomes

- Identify what the program/course is intended to help students accomplish/achieve
- Provide the structure for program/course design – comes before topics and textbooks
- A promise to the student and external constituents (parents, employers, accreditors, etc.) of what the student will be able to do upon completion

The importance of learning outcomes: Alignment

Exemplary course design must begin with the Program Learning Outcomes

- What PLOs is this course responsible to help students achieve?
- Make use of the Curriculum Alignment Matrix
 - Assigns PLOs to specific courses to show how the program curriculum helps students achieve the PLOs
 - Need a high level of confidence in their currency and accuracy

The importance of learning outcomes: Alignment

- Every PLO should be assigned to 3-6 courses
- Every course should address 1-5 PLOs
- There should be 1-3 CSLOs per unit of credit
- If a PLO is assigned to a course, a specific CSLO and signature assignment must be identified
- There must be at least one course where students demonstrate proficiency of each PLO

The importance of learning outcomes: Alignment

1. Identify the Program Learning Outcomes (PLOs) the course is responsible to help students achieve.
2. Derive the Course Outcomes (CSLOs) from the assigned PLOs
3. Identify/Develop quality course material and create significant learning activities that will help students achieve the CSLO (and consequently, the PLO)

The importance of learning outcomes: CSLOs

CSLOs are specific, measurable statements that refer to the knowledge, skills, and attitudes learners will gain at the completion of a course.

Outcomes are written with a verb phrase and declare a demonstrable action

Using Bloom's Revised Taxonomy

- Systematic process of thinking & learning
- Identifies simple to most difficult cognitive skills
- Incorporates knowledge to be learned and cognitive process to learn
- Assists in the development and writing of goals, objectives, & learning activities
- Assists assessment efforts
- Facilitates questioning to help students gain knowledge & critical thinking skills
- Adds precision to our thinking
- Promotes understanding as we develop a common language of learning

Using Bloom's Revised Taxonomy

- Systematic process of thinking & learning
Provides an organized and methodical approach to identifying targeted knowledge, skills, & attitudes (no guesswork)
- Identifies simple to most difficult cognitive skills
Categorizes levels of thinking and learning based on complexity (hierarchy)

Using Bloom's Revised Taxonomy

- Incorporates knowledge to be learned and cognitive process to learn
Promotes “integrative learning” by connecting concepts and theories to real applications
- Assists in the development and writing of goals, objectives, & learning activities
Serves as a guide to creating specific & measurable CSLOs & course requirements

Using Bloom's Revised Taxonomy

- Assists assessment efforts

Ensures that assessments are measurable & directly aligned with CSLOs.

- Facilitates questioning to help students gain knowledge & critical thinking skills

Prompts educators to ask detailed and probing questions

- Adds precision to our thinking

Uses laser-focused goals >> helps develop appropriate course activities & requirements (for assessments)

Using Bloom's Revised Taxonomy

- Promotes understanding as we develop a common language of learning
Ensures that professors, administrators, and students have a clear and consistent understanding of key concepts and expectations, resulting in a more streamlined and straightforward assessment process.

Using Bloom's Revised Taxonomy

You can structure each learning outcome using two parts, a verb and an object, where the verb describes the cognitive process, and the noun describes the knowledge students are expected to acquire or construct.

VERB

Cognitive Process

Remember, Understand, Apply,
Analyze, Evaluate, and Create



OBJECT

Knowledge

Factual, Conceptual, Procedural,
Metacognitive

COGNITIVE PROCESS DIMENSION



Creating

Generating new ideas, products, or ways of viewing things
Designing, constructing, planning, producing, inventing.

Evaluating

Justifying a decision or course of action
Checking, hypothesising, critiquing, experimenting, judging

Analysing

Breaking information into parts to explore understandings and relationships
Comparing, organising, deconstructing, interrogating, finding

Applying

Using information in another familiar situation
Implementing, carrying out, using, executing

Understanding

Explaining ideas or concepts
Interpreting, summarising, paraphrasing, classifying, explaining

Remembering

Recalling information
Recognising, listing, describing, retrieving, naming, finding

Using Bloom's Revised Taxonomy

SAMPLE VERBS

Remembering - Recalling, identifying, listing, describing, retrieving, naming, locating

Understanding – Explaining, interpreting, summarizing, paraphrasing, classifying, comparing, inferring

Applying - Implementing, carrying out, using, executing

Analyzing - Comparing, organizing, deconstructing, interrogating, finding, attributing, outlining

Evaluating - Checking, hypothesizing, critiquing, experimenting, judging, testing

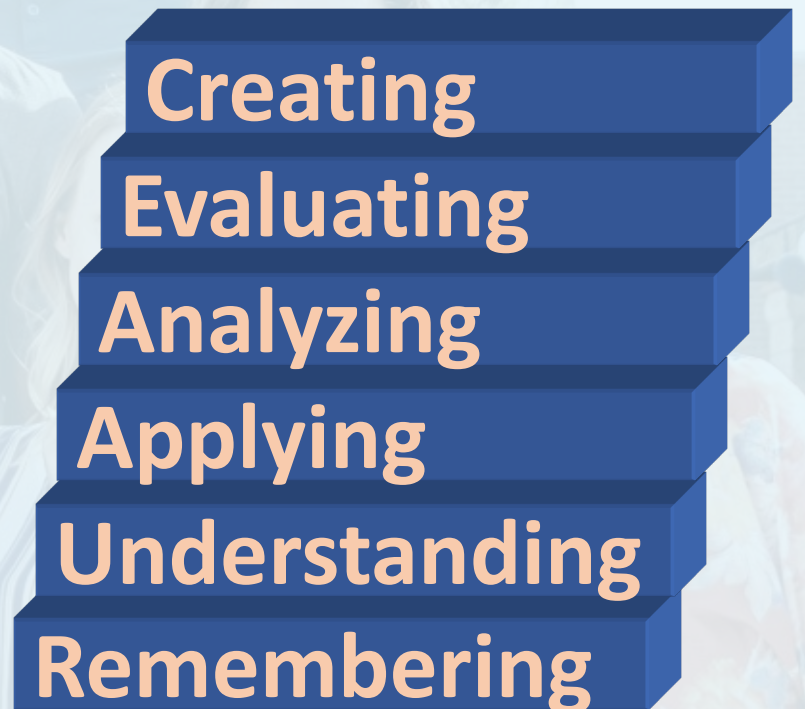
Creating - Designing, constructing, planning, producing, inventing, making, devising



Using Bloom's Revised Taxonomy

Bloom's taxonomy may be depicted as a set of stairs that students climb from one level to the next

- Pre-requisite learning
- Suggests that a student cannot effectively or ought not to try to address higher levels until those below them have been covered
- Each level is subsumed by the higher level



Using Bloom's Revised Taxonomy

Each CSLO must be aligned with an assignment that allows the instructor to assess achievement

Remembering	Quizzes and Exams – multiple choice, matching, lists, short answer
Understanding	Quizzes and Exams – essays, short answer; Book Reports, Presentations
Applying	Essays, Reflection Papers, Projects, Discussion
Analyzing	Exams, Book Reports, Research Papers, Projects, Discussion
Evaluating	Research Papers, Projects, Discussion
Creating	Projects, Presentations



Using Bloom's Revised Taxonomy: Example

Level	Possible Outcome Statements
Remembering	Recall the steps of the IMBS; Identify the various genres of biblical literature; List the letters of the Hebrew alphabet
Understanding	Explain the purpose of each step of the IMBS; Summarize the characteristics of each genre of biblical literature
Applying	Apply the IMBS to a particular genre of literature; Use a Hebrew concordance;
Analyzing	Outline the IMBS; Compare the characteristics of various genres of biblical literature; Determine the original intended meaning of a passage of scripture;
Evaluating	Detect inconsistencies in someone's use of the IMBS; Judge which of two commentators most effectively applies literary criticism;
Creating	Create a method for personal Bible study; Design a lesson on how to study the Bible



Recommendations for Writing Outcomes

Do not state what's going on inside the student's brain (*learn, think about, consider, reflect, recognize*) but what they produce to demonstrate learning

Avoid the use of “Demonstrate” (also “show” “express” “exhibit” “display”). These words can almost always be replaced with a more specific verb that identifies what they should produce (identify, list, explain, summarize, evaluate, compare, plan

Wordiness is not your friend, the more straightforward the better.



Recommendations for Writing Outcomes

- The verb describes what the student does (not what the student knows)

Wrong: **Learn** strategies that....

Correct: Identify strategies that ...

- Be careful about the use of “**and**” - Higher level assumes lower level, don’t need both
- Example: Explain the _____ **and** analyze their _____
- May be two separate outcomes
- Avoid the use of qualifiers such as adjectives and adverbs that state the quality of work (e.g. *persuasive, suitable, creative, sophisticated, effectively, thoroughly, extensive, appropriately*)
Example: Effectively demonstrate
- The verb must be measurable – **see next slide**



Types of Verbs **NOT** to Use

- **Verbs that are not measurable:** *Recognize, acquire, become familiar with, relate, consider, reflect, realize, anticipate, observe, review, extend, work, explore, interact with, exercise*
- **Abstract verbs** such as *appreciate, aware, understand*
- **Verbs that describe routine activities of teaching and learning.** For example: *ask, consider, practice, question, read, think, comply, consult, act, and discuss* are intermediary processes, not outcomes.
- **Verbs that are statements of fact, not competence,** *have/has, and possess.*
- **Verbs that describe forms of transfer** such as *communicate, report, persuade, refute,*

Examples of well-written outcomes

COURSE DESCRIPTION: In this course, students explore programs and policies that have been developed to meet the needs of children and families. The ideas, philosophies, politics, and economics affecting these programs and policies are studied in terms of choices to be made in policy and the practice of helping professions. Students will investigate child welfare in relation to the church and faith-based agencies. International and social justice issues related to child welfare will be examined.

Program Outcomes	Not Aligned	Aligned
Compare possible career paths within the helping professions.	Examine the role of professionalism in the field of child welfare.	Identify the different career paths and specializations for child welfare social workers .
Construct effective approaches and solutions to problems /opportunities	Analyze the effects of oppression, abuse, discrimination, poverty, and stigma upon the lives of children and families.	Compare and contrast the different services and initiatives that community-based organizations and agencies offer to prevent child abuse, maltreatment, and neglect .

Examples of well-written outcomes

COURSE DESCRIPTION: In this course students explore programs and policies that have been developed to meet the needs of children and families. The ideas, philosophies, politics, and economics affecting these programs and policies are studied in terms of choices to be made in policy and the practice of helping professions. Students will investigate child welfare in relation to the church and faith-based agencies. International and social justice issues related to child welfare will be examined.

Program Outcomes	Not Aligned	Aligned
Deliver effective written, oral, and interpersonal communication in various formats and for various purposes.	Apply critical thinking to inform and communicate professional judgments.	Explain the role of the church in supporting vulnerable children and their families. <i>(Note: Assignment can be in oral/written presentation)</i>
Justify appropriate behavior/decisions in the helping professions using Christian ethics and values	Critically examine personal beliefs and biases to the practice of child welfare and examine influences of Christian beliefs and values.	Examine the alignment of child welfare practices and policies with timeless biblical principles and values.

Examples of well-written outcomes: avoid use of “demonstrate, express, display, etc.”

Poor	Better
Demonstrate an understanding of the process of social-scientific research including literature review, the use of concepts and theories...	Explain the process of social-scientific research including literature review, the use of concepts and theories...
Demonstrate a working knowledge of Christian counseling in the context of counseling, the counseling relationship, and legal and ethical issues and skills	Apply the principles of Christian counseling in the context of counseling, the counseling relationship, and legal and ethical issues and skills
Express the ability to analyze, design, and write an effective (clear/specific) job description that fits the needs of an organization with the appropriate expectations of an employee	Design a job description that fits the needs of an organization with the appropriate expectations of an employee
Express your reflected belief in the power of the Gospel, and only the Gospel, to heal the world today.	Summarize your belief in the power of the Gospel, and only the Gospel, to heal the world.

Examples of well-written outcomes: avoid use of abstract verbs

Poor	Better
Demonstrate awareness of yourself as a counselor and the therapeutic process from a counselor's perspective.	Assess yourself as a counselor and the therapeutic process from a counselor's perspective.
Exercise basic understanding over common illegalities often practiced by not-for-profit organizations and how to employ solid management technique to avoid common organizational and moral management failures	Explain various internal control systems, risk assessment, and auditing best practices that organizations use to prevent accounting fraud and illegalities.

Examples of well-written outcomes: Avoid use of verbs that describe routine activities of teaching and learning

Poor	Better
Learn etiological considerations, descriptions, and theories underlying diagnostic nosology of psychiatric disorders	Explain etiological considerations, descriptions, and theories underlying diagnostic nosology of psychiatric disorders
Think critically about vital theological, ministerial, and leadership issues.	Summarize vital theological, ministerial, and leadership issues.
Become familiar with financial transactions, vernacular and foundational concepts and learn how to interpret and categorize financial and adjusting entries	Identify the steps involved in an accounting cycle from adjusting journal entries to interpreting financial statements.

Examples of well-written outcomes: avoid use of verbs that describe routine activities of teaching and learning

Poor	Better
Recognize the dynamics and obstacles of individual pathology.	Identify the dynamics and obstacles of individual pathology.
Review current research findings and trends relative to the development and description of maladaptive behavior, as well as gender and demographic influences on the prevalence of psychiatric illness	Evaluate current research findings and trends relative to the development and description of maladaptive behavior, as well as gender and demographic influences on the prevalence of psychiatric illness
Explore one's social environment, looking beyond the individual to understand society.	Identify the different behaviors that individuals and societies exhibit in a social environment.

Examples of well-written outcomes: avoid use of “and”

Poor	Better
Explain and identify what it means to be an emotionally healthy leader	Explain the qualities, skills, and values of an emotionally healthy leader.
Identify their personality temperaments and explain how this affects their abilities as leaders	Explain how personality temperaments influence how leaders perform.
Students will appreciate the need and purpose of closing entries in the financial process, interact with financial statements to develop an understanding and an ability to communicate with accounting staff and other managers.	Students will develop a plan to disseminate a firm's financial performance report, budget adjustments, financial achievements as well as financial challenges to key stakeholders.

Examples of well-written outcomes: avoid use of verbs that are statements of fact

Poor	Better
Have a knowledge of the spiritual gifts	Identify the spiritual gifts
Possess the skills necessary to display quantitative data relevant to a critical issue within their chosen field	Utilize the skills necessary to display quantitative data relevant to a critical issue within their chosen field

Examples of well-written outcomes: avoid use of verbs that describe forms of transfer

Poor	Better
Communicate quantitative data verbally, graphically, symbolically and numerically	Interpret quantitative data verbally, graphically, symbolically and numerically
Elaborate on effective approaches and solutions to problems/opportunities within a selected community.	Summarize effective approaches and solutions to problems/opportunities within a selected community.
Effectively communicate spiritual concepts in several styles	Illustrate spiritual concepts in several styles

Examples of well-written outcomes: avoid wordiness

Poor	Better
<p>Students will be able to describe the different liabilities; describe the payroll process and determine the employer’s liabilities; describe the techniques used to analyze the financial statements and, illustrate the basic use case for the above in the student’s work and/or church setting</p>	<p>Students will analyze the financial data of a non-profit, faith-based organization, including balance sheets, income statements, statements of cash flow, asset valuation, and payroll management solutions.</p>
<p>Students will be able to interact with a statement of cash flows, P&L and balance sheet enabling intelligible conversation with managers and preparers and develop understanding of how these instruments feed management decisions in for-profit and not-for-profit sectors</p>	<p>Students will evaluate the different tools used to determine the financial health of firms in both for-profit and non-profit sectors</p>

Examples of well-written outcomes: Value/Attitude outcomes

Poor	Better
Uphold the belief in the intrinsic worth of every human being.	Apply a value for the belief in the intrinsic worth of every human being to your...
Commit to changing your life in light of the example and teachings of Christ as displayed in the Gospels.	Develop a plan to change your life in light of the example and teachings of Christ as displayed in the Gospels.
Model themselves with Christ-like character as they engage the helping professions	Revise behavior to align with a growing understanding of Christ-like character
Value science instead of seeing it as something evil, or in opposition to your faith	Defend the importance of science as a support rather than opponent of faith

Next Steps

- 1. Academic committee to meet and review course outlines**
 - a) Check for misaligned PLOs and CSLOs**
 - b) Check for incorrectly written CSLOs**
 - c) Revise poorly written CSLOs**
- 2. Submit course outlines with revised CSLOs to the dean.**
- 3. Acquire APCR/Provost approvals**



Resources

Adelman, C. (2015). *To imagine a verb: The language and syntax of learning outcome statements*. National Institute for Learning Outcomes Assessment. ERIC. <https://files.eric.ed.gov/fulltext/ED555528.pdf>

Anderson, L. W., & Krathwohl, D. R. (Eds.). (2001). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives*. Longman.

Heer, R. (n.d.). *A model of learning objectives – based on a taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives*. Center for Excellence in Learning and Teaching, Iowa State University. <https://www.celt.iastate.edu/teaching/effective-teaching-practices/revised-blooms-taxonomy/>