# EFFECTIVE CLASS DESIGN

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## Abstract

There are numerous approaches to teaching process. Thinking about the goals of the lesson you're about to teach is a fundamental skill for a teacher, and it influences the decisions you make as the lesson progresses.

A lesson plan is a written outline of what skills students are going to learn in a lesson, how the educator intends to teach it and how they will measure students' understanding of the content at the end of a lesson

This work emphasizes the importance of effective class design in promoting student engagement and achievement. It provides step-by-step guidance, practical strategies, and valuable insights to support educators in creating impactful and engaging lessons.

It highlights the significance of lesson planning and its direct correlation with student outcomes. It explores the essential components of a lesson plan, including clear learning objectives, aligned curriculum standards, effective instructional strategies, and comprehensive assessment methods.

It also covers various aspects of lesson planning, such as understanding student needs and interests, adapting to diverse learners, incorporating technology and multimedia resources, designing engaging learning experiences, and fostering critical thinking and problem-solving skills.

## 1. Introduction

Teaching is an activity that requires careful preparation, planning objectives and activities on an hourly, daily, and weekly basis. In teaching-learning process planning of instructional activities enhances students' performance. Planning can give both teachers and students a sense of direction. It helps them to become aware of the goals that are implicit in the learning task they are asked to perform. Learning objectives, thus, have a focusing effect on students[1].

A lesson plan is a road map that teachers use to organize daily activities in their classrooms. It specifies what students will learn during each class period, how the lesson will be delivered, and how student progress will be assessed. It is typically a one or two-page document divided into sections that describe what will happen in the classroom on each day. While no two plans are identical – the specifics vary depending on the subject being taught, grade level, teacher, students, and school. Effective plans share the following key components: Lesson objectives, Time requirements, Evaluation and reflection [2].

## 2. Methodology

This work is accomplished by reviewing different manuals, books, journals and papers related to the title of this study.

## 3. Narrative review

The narrative review consists of 3 sections which can be seen below:

### 3.1. Components and process of planning a class session

Planning a class session involves several components and a systematic process to ensure effective teaching and learning.

### 3.1. 1.Define learning Objectives

A lesson objective can be one of the most important components of a lesson plan. Objectives define what students are going to learn during the lesson and explain how the learning is going to be assessed. After you write the objective in the lesson plan, you can write it on the board the day of the lesson. Teachers usually update objectives every day and review them with students so they know what goal they are striving to achieve. There are a few different formats you can use to write objectives. Some explain the goal the student hopes to achieve from the teacher's perspective and others explain the objective from the student's perspective. An effective objective includes a goal and a measurable form of assessment at the end of the lesson [3].

Here are a few examples for different subjects:

History: Students will show an understanding of the geographic influence on historical issues and events during World War II by creating an objective summary of the events and how the geography of the events affected the war.

Math: By the end of the lesson, students will use addition and multiplication to complete four of the five sample problems correctly.

Science: Today I will take notes on the scientific method so that I can apply them to an experiment. I'll know I've got it when I can list and explain each step as it applies to a provided experiment [4].

### 3.1. 2. Prepare Teaching Materials

Gather or create the necessary teaching materials to support your class session. This may include lecture notes, PowerPoint slides, handouts, readings, multimedia resources, or interactive tools. Ensure that the materials are clear, organized, and accessible to students. If you prepare the materials ahead of the lesson, you may have more time to focus on teaching. You may choose to format the material component of a lesson plan by creating bullet points for each material you and the students might need during the lesson. Here are some materials typically used during a lesson

that you can consider adding to your list: textbook, pen or pencil, lined paper, printed copies of worksheets, markers, scissors, calculators, tablets, laptops etc [1].

### 3.1.3. Select Instructional Strategies

Direct instruction includes the portion of the lesson you use to instruct the class on the skills they are going to learn. This can include explaining the objective, activating students' prior knowledge, having students take notes on the new material, reading from the textbook or modeling how to complete the work before moving on to guided practice [3].

You can plan to teach using direct instruction for anywhere from five to 30 minutes, depending on your teaching style or the style preferred by your school's administration. Because direct instruction is a more teacher-based approach, many educators choose to have shorter mini-lessons that instruct students on the new material. They then use the remaining time in the class to let students practice the skill in groups or on their own [2].

### 3.1.4. Aligning lesson content with curriculum standards

Aligning lesson content with curriculum standards is essential to ensure that instruction addresses the required knowledge and skills set forth by educational authorities. Here are some steps to effectively align your lesson content with curriculum standards:

1) Familiarize Yourself with the Standards: Begin by thoroughly reviewing the curriculum standards or learning objectives relevant to your subject and grade level. Understand the specific knowledge, concepts, and skills that students are expected to acquire. These standards might be set by educational boards, state or national authorities, or specific educational frameworks.

2) Analyze the Standards: Break down the standards into key components and identify the core concepts, skills, and content areas that need to be addressed. Pay attention to any specific guidelines or performance indicators mentioned within the standards.

3) Identify Essential Content: Identify the essential content or subject matter that aligns with the standards. Determine the key topics, themes, or concepts that need to be covered in your lesson. Consider both breadth and depth of coverage while ensuring that you stay focused on the most important aspects.

4) Modify or Supplement Existing Resources: Evaluate your existing instructional resources, such as textbooks, supplementary materials, and digital resources, to determine if they align with the

curriculum standards. Identify any gaps or areas that require modification or supplementation. Make necessary adjustments to ensure that the resources you use effectively address the standards.

5) Create Learning Experiences: Design learning experiences, activities, and assessments that specifically target the knowledge and skills outlined in the standards. Consider how you can incorporate the standards into various instructional strategies such as lectures, discussions, group work, hands-on activities, projects, and assessments.

6) Cross-Curricular Connections: Look for opportunities to create cross-curricular connections by integrating content from other subjects into your lessons. Identify common themes or concepts that can be explored across different disciplines, allowing students to make connections and see the relevance of the content in a broader context.

7) Depth and Complexity: Consider the depth and complexity of the standards when designing your lessons. Determine if the standards require students to merely recall information, apply concepts, analyze data, evaluate arguments, or engage in higher-order thinking. Design instructional activities that match the cognitive demands of the standards.

8) Document Alignment: Clearly document how your lesson aligns with the specific standards or learning objectives. Include the relevant standards or learning outcomes within your lesson plan, making it evident how each component of the lesson connects to those standards. This documentation will help you and other educators assess the effectiveness of your instruction and ensure accountability.

 9) Regularly Review and Reflect: Continuously review and reflect on your lesson plans to ensure that they remain aligned with current standards. Standards may evolve over time, so it's crucial to stay up to date with any changes and make necessary adjustments to your instruction [5].

### 3.1.4. Background knowledge

A helpful way to introduce most lessons is to activate your students' background knowledge on a topic. Background knowledge focuses on students' prior experiences or knowledge on a topic to help them make new connections with that topic during the lesson.

Here are a few strategies you can use in your lesson plan when deciding how to introduce background knowledge to your students:

KWL charts: Students can create KWL charts that help them identify the information they're learning. The K stands for information they already know and the W represents any information

they want to know about the lesson's topic. Students use the L after the lesson to write information they learned.

Multimedia: Sometimes using visuals such as video clips or pictures can help trigger a student's background knowledge about a topic [3].

Pretests: Teachers occasionally use pretests on that day's lesson to find out what students already know about the subject and to expand their understanding before beginning the lesson.

### 3.1.5. Develop a Lesson Plan

The lesson plan outlines the structure and flow of the class session. It includes timings for each activity, transitions, and any necessary instructions or prompts. The lesson plan serves as a roadmap for the session and helps you stay on track.

Before embarking on the process of creating a lesson plan, it is essential for educators to engage in thoughtful preparation. The pre-planning phase lays the foundation for effective lesson design and sets the stage for engaging and meaningful learning experiences.

It also explores the crucial steps and considerations involved in preparing for lesson planning, enabling educators to make informed decisions and tailor their lessons to meet the unique needs of their students [6].

It emphasizes the importance of understanding student needs and interests, leveraging prior knowledge, and embracing instructional strategies that cater to diverse learners. It also highlights the role of technology and multimedia in enhancing lesson delivery and explores how educators can integrate these tools effectively. By investing time in thoughtful preparation, teachers can design lessons that are engaging, relevant, and conducive to student success.

### 3.1.6. Closure and assessment

Closure is one of the last components of a lesson plan. It allows students to analyze and summarize what they learned in the lesson for the day, assess their understanding of what they learned and inform the teacher of whether they met the lesson's objective. Here are some different closure and assessment techniques you can use in your lesson plan:

Exit ticket: An exit ticket is a question or series of questions teachers ask students to complete before the end of class. Teachers can use exit tickets in a variety of ways depending on the time left in class, the age of their students and the subject they teach.

Discussion boards: Students often use technology in many classes. You can let them reflect on the day's lesson by writing a question online and letting them use their cell phones or classroom tablets to respond.

Online quiz games: Many educators create or use quiz games already created online to test their students' knowledge of the day's lesson. It can be an engaging way to assess the students' skills to get feedback on the effectiveness of the lesson [3].

### 3.1.7. Incorporate Active Learning

After completing direct instruction, teachers can use a guided teaching strategy known as gradual release, which scaffolds the learning process into smaller pieces so that it is easier for students to understand. Using this method, learners can see how to complete the skill, practice it in groups and finally complete the skill on their own. Teachers sometimes call this method the "I do, We do, You do" method. Here is an example of how the gradual release method works during a lesson**:** I do: After direct instruction, the teacher models the correct way to complete the skills learned during the lesson. Students can watch, write what the teacher is doing on their worksheets and ask questions.

We do: After the teacher models the strategies needed to complete the work on their own, they work as an entire class to do another problem or question on their worksheet. Teachers can also choose to let students work in table groups or pairs to continue the learning process [7].

You do: After practicing with peers, the teacher can give students the opportunity to complete some of the work on their own to measure their understanding of the content learned during the lesson.

### 3.1.8. Anticipate Student Challenges

Reflect on potential challenges or misconceptions that students may encounter during the class session. Prepare strategies to address these issues proactively, such as providing clarifications, examples, or additional practice opportunities. Anticipating and addressing student challenges can enhance the effectiveness of your teaching.

### 3.1.9. Reflect and Revise

After the class session, take time to reflect on its effectiveness. Consider what worked well and areas that could be improved. Use student feedback, your observations, and assessment results to inform future planning and make necessary revisions to enhance student learning.

### 3.2. Writing instructional objectives

A learning objective is a statement of what the learner will know, understand, or be able to do as a result of engaging in a learning activity. Well-written learning objectives are essential to building a strong foundation in the development of training materials.

Effective learning objectives are SMART: Specific, Measurable, Action-oriented, Reasonable, and Timebound. Rather than trying to develop learning objectives based on these criteria, use SMART as a checklist to help ensure that you have considered each item in formulating learning objectives [1].

**Specific** means that the learning objective describes the knowledge, attitudes, or skills that a learner should be able to demonstrate following exposure to a teaching strategy or learning activity.

**Measurable** means that achievement of learning objectives can be measured by test items, observation, problem-solving exercises, or other evaluation methods during or after the session.

**Action-oriented** means that the objective includes an action verb that demonstrates change or acquisition of knowledge, attitudes, or behaviors.

**Reasonable/Ensure achievability:** means that the objective reflects realistic expectations of knowledge, attitude, or behavior acquisition/change given the conditions for instruction (e.g., time and size of group, scope of training).

**Time-bound means** that the objective specifies a time frame in which learners are expected to achieve the learning objective(s)—usually by the end of the session.

Moreover, it is essential to **Identify the desired outcomes**: Start by identifying what you want your students to achieve by the end of the class session. Consider the subject matter, skills, or knowledge you want them to acquire.

### 3.3. Criteria guiding when and how pedagogical strategies are selected and implemented

When selecting and implementing pedagogical strategies, educators consider several criteria to ensure effective teaching and learning. Here are some common criteria that guide the selection and implementation of pedagogical strategies:

**1.Learning outcomes:** Pedagogical strategies should align with the desired learning outcomes for students. Educators need to identify the knowledge, skills, and attitudes they want students to acquire and choose strategies that facilitate those outcomes.

**2.Student characteristics:** Consideration of students' age, developmental stage, prior knowledge, learning styles, and cultural backgrounds is crucial. Pedagogical strategies should be selected to accommodate and engage diverse learners, taking into account their individual needs and preferences.

**3.Content and context:** The nature of the content being taught and the learning context should influence the choice of pedagogical strategies. Some subjects may require hands-on activities, while others may be better suited to discussions, project-based learning, or direct instruction.

**4.Teaching goals and preferences:** Educators' goals, teaching philosophies, and preferences play a role in strategy selection. Some teachers may prioritize student-centered approaches, while others may prefer more structured methods. It's important to choose strategies that align with the teacher's style and goals.

**5.Evidence-based practices:** Pedagogical strategies that have been proven effective through research and evidence should be given priority. Educators should stay informed about current educational research and use evidence-based practices to guide their selection and implementation of strategies.

**6.Assessment and feedback:** Consider how the chosen strategies align with the assessment and feedback methods used in the classroom. The strategies should provide opportunities for ongoing assessment, both formative and summative, and support the provision of constructive feedback to students.

**7.Resources and constraints:** Available resources, such as time, materials, technology, and support, can influence the selection of pedagogical strategies. Educators need to consider the practicality and feasibility of implementing certain strategies within the given constraints.

**8.Continuous improvement:** Pedagogical strategies should be adaptable and open to improvement. Educators should be willing to reflect on their practices, collect feedback from students, and make adjustments to optimize the effectiveness of the strategies over time.

By considering these criteria, educators and instructional designers can make informed decisions about the selection and implementation of pedagogical strategies that promote effective teaching and meaningful learning experiences [9].

## 4. Conclusions

To be effective, the lesson plan should provide a general outline of teaching goals, learning objectives, means to accomplish them and can help in planning for future classes.

Planning ahead for class by asking yourself a few key questions will ultimately provide not only a more positive learning experience for your students but also a more positive teaching experience for you.

Evaluation activities can be conducted at any time during the learning experience. By observing class discussions or question-and-answer sessions during the course, instructors can see whether participants seem to be on track. This kind of ongoing assessment enables trainers to clarify any incorrect information with which participants are operating. It can also provide trainers with an opportunity to encourage participants to advance into more complex and sophisticated learning processes.

## 5. Recommendations

Teachers should leave space at the end of their session plans for comments written after class on how the session went and how they would modify the plan if they were teaching the session again.

This is also a good place to note key questions from students and points that need to be reviewed at the start of the next session.

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