2020

Instructional and Institutional Planning Guide for Online and Blended Instruction

Stephanie L. Moore PhD
University of New Mexico - Main Campus, stephaniemoore@unm.edu

Follow this and additional works at: https://digitalrepository.unm.edu/ulls_fsp

Part of the Educational Technology Commons, Online and Distance Education Commons, and the Scholarly Communication Commons

Recommended Citation
Moore, S. (2020). Online Instruction Planning & Development Job Aid. Available through the University of New Mexico Digital Repository. CC BY-NC-ND 4.0 International License.

This Handout is brought to you for free and open access by the Academic Department Resources at UNM Digital Repository. It has been accepted for inclusion in University Libraries & Learning Sciences Faculty and Staff Publications by an authorized administrator of UNM Digital Repository. For more information, please contact amywinter@unm.edu, lsloane@salud.unm.edu, sarahrk@unm.edu.
Instructional Planning and Coordination Guide for Online and Blended Instruction

This job aid is designed to support programs, universities, and schools in online planning, both at the institutional or system level as well as the instructional level, and connect the needs at the instructional level to the planning at the institutional level. It is based both in twenty years of experience developing, designing, and delivering online programs and courses and is anchored in research-grounded practices (quick references provided at the end). It is organized into the following three sections:

Part 1 – Program and Institutional / District Planning Guide with Rapid Front-end Analysis
The first worksheet focuses on program or institutional / district level planning process. It is designed to walk you through hallmarks of quality online and blended programs and institutional planning that are grounded in both research and practice.

Part 2 – Worksheet: Instructional Decisions
This section is focused on the course / module level in supporting the design of effective instruction in online, blended, and tech-enabled learning environments. It is designed to step you through a rapid front-end analysis for some considerations that should cascade down into your decision making, then quickly get you to identifying effective strategies and assessments for each of your course objectives. There are also sections on teamwork and collaboration, interaction and engagement, materials, technology selection, assessment, and a development checklist and implementation checklist to facilitate you through the process of design and development and on into implementation.

Part 3 – Coordination Guide Between Instructional Decisions & Planning for Online and Blended Instruction
This section is designed to support the coordination between program and institutional planning and instructional design and development. The left and right sides of the table are the same as in Parts 1 and 2 with some additional tips and prompts for coordinating across the two layers of planning and development.
### Best Practices

- **Established strategic objectives and school / district / organizational vision**
- **Adopt / adapt / Establish Clear Standards for Online and Blended Instruction**
  - Addresses both design as well as delivery / implementation
- **Integrate Instructional Needs into Technology Evaluation and Procurement Criteria**
  - Develop a matrix for educational technology procurement that includes instructional needs as well as other factors like integration, accessibility, etc.
- **Student Orientation: Develop and provide an introduction or orientation to prepare students for success in online courses / programs**
- **Create a sandbox and/or communication process to help test and communicate out new possibilities to instructors**

### Performance Support System

**Resources / Support Tools:** What information, job aids, and resources do the following stakeholder groups need?

- **Instructors:**
- **Students:**
- **Parents:**
- **Staff:**
| **Skills & Knowledge Development:** | What training or PD do the following groups need for teaching / supporting online or blended instruction?

Instructors:
Staff:
Administrators:
Others:

<table>
<thead>
<tr>
<th><strong>Feedback Loops and Consequences:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>How will you communicate information out to students, parents, and teachers?</td>
</tr>
<tr>
<td>How will you build a (hard and soft) data cycle to inform your process and how things are going?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Rewards and Incentives:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Are there any possible disincentives? If so, how can you address those?</td>
</tr>
<tr>
<td>How will you recognize innovation and outstanding work? How will you nurture interested teachers and students?</td>
</tr>
<tr>
<td>Are there any ways in which innovative practices can hurt a teacher that you will account for? (e.g., student evaluations often dip in early stages of new practices – how can you support iteration and “learning from failures”)?</td>
</tr>
<tr>
<td><strong>Job / Task Expectations:</strong></td>
</tr>
<tr>
<td>----------------------------</td>
</tr>
<tr>
<td>Should any job requirements or definitions be rewritten?</td>
</tr>
<tr>
<td>Are there any new roles and responsibilities that will require new positions? How can you incorporate instructional needs and system support needs into those job descriptions?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Policies:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Are there specific policy implications that should be discussed and tended to?</td>
</tr>
<tr>
<td><em>For example:</em></td>
</tr>
<tr>
<td>• Tenure and promotion policies</td>
</tr>
<tr>
<td>• Student privacy and data policies</td>
</tr>
<tr>
<td>• Load policies</td>
</tr>
<tr>
<td>• Establishment of quality standards</td>
</tr>
<tr>
<td>What process(es) will you use for revising / creating / updating policies?</td>
</tr>
</tbody>
</table>
Organizational Structure and Alignment

Vision & Mission

Performance Interventions:
Barriers to or Supports for Organizational Processes

- Job/Task Expectations & Clarifications
- Rewards & Incentives
- Resources / Support Tools
- Skills & Knowledge
- Consequences & Feedback

Policy

Products

Desired Impact & Results

Adapted from Watkins (2007) and Kaufman (2000)
Job/Task Expectations and Clarifications define what's expected of the members of the system, to include any employees, managers / leaders, vendors, faculty, administrators and other support staff. Depending on how jobs and expectations are defined, people will either perform or not perform. If a job or task is either poorly defined or that definition does not include certain features, then the persons employed in those jobs are unlikely to do it.

Review job tasks and expectations for all employees. In the space provided below, address these questions by detailing the current state, the desired state, and a plan of action for modifying job/task expectations to support desired performance in your context.

- Do roles or jobs for any employees lack a definition related to the desired performance you're seeking?
- What should change in those descriptions to support or encourage the desired performance?
- What tasks should be added for all or key individuals to promote the desired performance?
Here we are focused on actual gaps in knowledge and skills around the desired performance. Note, this is different from having the knowledge and skills but not meeting desired performance objectives because of other barriers. Lack of knowledge and skills is a root cause 10-20% of the time. This is higher for new innovations but dissipates as a barrier in the early stages of implementation.

Planning questions:

- Do your instructors know how to teach online? What training or classes might they take to learn? How can you create a community of practice in your institution or across institutions?

- Do any support staff or administrators who will be involved have knowledge and skills to support online learning? What training or support might they need?

Detailed planning:

- How many people (employees, teachers, principals, faculty, etc.) have received some form of training related to the performance gap?
- What entity can you partner with (internal or external) to develop or provide training relative to the performance gap?
- Who will receive the training? How much training will they receive, and what will be your expected outcomes of such training?
- How will you know if people are putting those new skills and knowledge to work?
Resources, and lack thereof, can be both physical and abstract. For example, when it comes to teaching online, the most commonly cited barrier to quality is a lack of time. Online teaching is often more work, and more time (grading, feedback, interactions, responding to emails, etc.). How will instructors have time? Where will they do this or where can they host live sessions and talk freely with online students?

Generally, lack of resources or support is one of the most commonly cited barriers to performance.

Planning questions:

 What resources/tools do you currently have that would support online teaching and learning?

 What tools do you have in your online ecosystem to support different types of interaction, different types of assessment, and different content delivery formats? What should happen for you to have an effective technology infrastructure? How can you engage both faculty and students in helping to identify needs and gaps?

 What resources/tools should you procure to better support effective online learning?

 How can you create more time for faculty developing and teaching online?
Often, faculty or students may perceive there are negative consequences for teaching online. This could take the form of concerns about extra time that won’t count for tenure & promotion, increased revenue that doesn’t go to the department or school / college, or general perceptions that what they are doing is somehow “less than” and won’t count as much. Students may also perceive negative consequences of getting an online degree or taking an online class.

Feedback Loops are also a critical part of this – how is information feeding back into the system for on-going improvement. Is it timely enough, is it the right feedback, etc.?

Planning questions:

- If a staff member, faculty member, administrator, etc. does not change his or her behavior or performance, are there any positive or negative consequences?
- If they DO change their behavior or performance, are there any positive or negative consequences?
- What are desirable consequences for someone who improves their desired performance?
- What are desirable consequences for someone who does not improve their desired performance?
- What other parts of the system should be modified to support newly-defined consequences?
- How will you communicate information out to students, faculty, staff, administrators? How will you build a data cycle to inform your process and how things are going?
We can take a highly skilled and knowledgeable worker with a clear job definition working in a place with lots of resources, and he or she still may not perform optimally because there are no **rewards or incentives** (or even the presence of disincentives). For example, creating awards that recognize online teaching or showcasing online teaching in faculty work and newsletters can create incentives / rewards for the work being done.

**Planning questions:**

- Are there any possible disincentives for teaching online? If so, how can you address those?

- Could a faculty member be penalized for teaching online, however inadvertent? If so, how can you address that?

- How will you recognize innovation and outstanding work? How will you nurture interested and innovative faculty and students?

- Are there any ways in which innovative practices can hurt a teacher? (e.g. student evaluation dips; support “learning from failures”) How can you adapt policies, etc., to address that?
**Policies** can potentially pose the largest barriers. We may articulate a vision, invest in a technology, say we want to do something, and then we bump up against a policy or set of policies that motivate performance differently. A very common set of policies that heavily drive performance in higher ed, for example, are tenure and promotion policies. Identify policies that may run contrary to the desired performance or inadvertently disincentivize the desired performance and make modifications as you can with stakeholder involvement.

**Planning questions:**

- What are some policies that limit the desired performance? (e.g. tenure and promotion policies)
- How could those policies be adapted?
- By not adapting those, what could the potential costs be to your school or work?
- What policies should be developed to support desired performance in your context? What other parts of the system should be modified to support these new policies?
- Who should you involve in developing these policies?
Institutional Excellence

- **Governance Structure**
  - Intentional shared decision making related to online education; on-going review for continuous improvement

- **Community Definition**
  - Underscore that online students are equal members of your university community / family

- **Vision & Mission for Online**
  - Clearly articulated rationale for why online and what the strategic value is of that for the institution and stakeholders
  - Online learning is positioned strategically within the institution’s overall organizational structure and clearly tied to its mission, values, and strategic plan

- **Supports Institution’s Mission, Values, and Strategic Plan**
  - New policies that may be necessary to support online are developed in collaboration with stakeholders; existing policies are revised jointly with stakeholders to better support new expectations

- **Aligned Policies**
  - Established and clear process for planning and resource allocation for online programs, including financial planning; sufficient resources to effectively support online programs and activities critical for success (e.g. marketing)

- **Sufficiently Resourced**
  - Opportunities for faculty and students to share ideas, test ideas together (e.g. a sandbox), and collaborate

- **Community of Practice**
  - S. MOORE, 2020 - US SPEAKERS PRESENTATION
Online Instruction Planning & Development

Developed by Stephanie L. Moore, Ph.D.

with

Rapid Front-end Analysis

Developed by Charles Hodges, Stephanie Moore, Barb Lockee, and Aaron Bond (2020)

Anchored in systematic instructional design process with specific emphasis on meeting learner needs in an emergency or crisis. Frameworks and concepts from research are integrated in to support the planning and design process.
<table>
<thead>
<tr>
<th><strong>Rapid Front-end Analysis</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Needs Analysis:</strong></td>
</tr>
<tr>
<td>What are the critical instructional needs</td>
</tr>
<tr>
<td>What are critical non-instructional needs? (e.g. health, safety, security)</td>
</tr>
<tr>
<td><strong>Learner Analysis:</strong></td>
</tr>
<tr>
<td>What are important personal and social characteristics you need to take into account?</td>
</tr>
<tr>
<td>How many of your learners are food- or housing-insecure?</td>
</tr>
<tr>
<td>How many learners will experience accessibility barriers, and what are those barriers I can anticipate?</td>
</tr>
<tr>
<td>What types of stress will my learners be experiencing, and how can I adjust plans and expectations accordingly?</td>
</tr>
<tr>
<td><strong>Contextual Analysis:</strong></td>
</tr>
<tr>
<td>What are the major changes in learning context that are occurring?</td>
</tr>
<tr>
<td>How many of your learners do and do not have reliable internet, phone / mobile service, or other means of connecting?</td>
</tr>
<tr>
<td>How many and who will have difficulty completing work or operating safely if they have to leave the school or campus?</td>
</tr>
</tbody>
</table>
What assumptions am I making that I can question about learners living environments to inform my expectations on availability, schedule, willingness to share video, etc.?

**Environmental Scan - Infrastructure Analysis:**

What infrastructure am I assuming all students will have access to?

What are backup systems and infrastructure I could use?

Whom might we partner with to tap into various communication infrastructures?

**Content and Task Analysis:**

What are the essential objectives?

How can I focus on learning and performance instead of content coverage?

How can I adjust the content to be responsive to the emergency? And are there ways in which I can meaningfully incorporate the emergency itself into course in a way that helps students manage their stress or concerns?
### Design

#### Strategies

For selecting strategies, we start not just with the objectives but what *type* of objectives. You may have multiple that fall under one type. That's fine – just sort them accordingly and then use this to help you identify strategies that help accomplish those objectives. The types are using the cognitive domain (Bloom’s), the affective domain, and collaboration / teamwork.

<table>
<thead>
<tr>
<th>Type of Objective:</th>
<th>List objective(s) and strategies you'll use along with any assessment ideas you generate.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remember / Understand</td>
<td></td>
</tr>
<tr>
<td><strong>Presentation strategy:</strong></td>
<td>explanation, examples</td>
</tr>
<tr>
<td><strong>Presentation needs and tools:</strong></td>
<td>ability to record explanations that include visuals with audio narration; examples that include pictures, visuals, and/or videos</td>
</tr>
<tr>
<td><strong>Assessment Ideas:</strong></td>
<td>Knowledge checks (quizzes and tests) – recognition, retention, and near transfer items Drag and drop activities Activities to generate lists and sort / re-sort or examples (e.g. Wiki / GoogleDoc)</td>
</tr>
<tr>
<td>Apply / Analyze / Evaluate / Create</td>
<td></td>
</tr>
<tr>
<td><strong>Type of Objective:</strong></td>
<td>List objective(s) and strategies you'll use along with any assessment ideas you generate.</td>
</tr>
<tr>
<td>Apply / Analyze / Evaluate / Create</td>
<td></td>
</tr>
</tbody>
</table>
**Presentation strategy:** explain procedures, provide a range of examples across contexts; in some cases, a simulation may be useful (e.g. application of principles in STEM)

**Cognitive procedures – generative strategies:**
Opportunities for the students to practice the procedure and submit their product or effort
Simulations which students can test and/or manipulate

**Assessment Ideas:**
Instructor feedback can be used for both formative assessment and as an instructional strategy (e.g. students submit and revise based on feedback)
Peer feedback can be used to support the application process

Have students explain back to you their understanding of the procedure; some examples: describe the steps; create a concept map or visual model; write a brief explaining what principles where applied where and how; create a video doing a narrated tour or explanation of work

**Psychomotor procedures – generative strategies:**
*For online PE education or science/engineering labs, for example*
Demonstrate the procedure or application (e.g. create a video and submit it or perform it live)
Explain the steps (could also ask students to explain steps while they demonstrate performance in a video – i.e. a talk-aloud)
Generate examples and/or instances in which the methods or procedures being used are applicable (and not)

**Assessment Ideas:**
Authentic assessment – students produce the very sort of product, do the process themselves, etc., that they are learning about; record themselves doing it and submit a video or connect on live video to demonstrate their work
Construct a portfolio of work (or add to one) that demonstrates a student’s competencies

**Type of Objective: Affective**
Seeing examples, role-playing, case studies, simulations, and diverse teams are all possible strategies (that can be used independently or in conjunction with each other) for affective learning objectives. Select ones here you think make sense then elaborate in the space provided on what you will do (or if one exists already, like a simulation, what you’ll select):

- Examples (worked examples, demonstrations, talk-aloud on how you solved a problem, etc.)
- Role-playing
- Case studies or scenarios
- Simulation

List objective(s) and strategies you’ll use along with any assessment ideas you generate.
- Diverse teams (consider what sort of diversity is central to your objective – disciplinary, cultural, skills / capabilities, racial, geographic, etc.)

<table>
<thead>
<tr>
<th>Type of Objective: Collaboration / Teamwork</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specify the nature of the teamwork (this may be the same as what you indicate under Student-Student interaction)</td>
</tr>
<tr>
<td>Type of collaboration / teamwork:</td>
</tr>
<tr>
<td>- Group work on single product</td>
</tr>
<tr>
<td>- Individual work that is peer reviewed</td>
</tr>
<tr>
<td>- Other: _________________________________</td>
</tr>
</tbody>
</table>

- How will the group work happen:
  - Synchronous meetings for work required? |
  - Asynchronous sharing and discussion required? |
  - Real-time messaging to peers desired? |
  - Other: _________________________________ |

<table>
<thead>
<tr>
<th>Scaffolding for Team:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Team planning document (roles, responsibilities, etc.)</td>
</tr>
<tr>
<td>- Team member feedback (e.g. CATME)</td>
</tr>
<tr>
<td>- Designated collaboration space and communication tools</td>
</tr>
<tr>
<td>- Other: _________________________________</td>
</tr>
</tbody>
</table>

List objective(s) and strategies you’ll use along with any assessment ideas you generate.
### Types of Interaction – Student Engagement with You, Each Other, and the Class Material

In this section, you will map out your plan for engagement using these three types of interaction as a structure. You are well on your way based on the planning you just did. We’ll just wrap some more detail and finalize plans now to ensure your create presence, decrease the sense of distance, and make your class interactive.

**Student-Content**

*Student-content interaction is facilitated by the instructional strategies and methods that you select. So good news! Those are articulated above in strategies that align with different types of objectives.*

**Student-Instructor**

Select the desired types of student-instructor interaction (and add additional ideas). You can select multiple as makes sense based on your analysis and strategies. In the space provided, elaborate any notes for the interactions you plan.

- Virtual Office Hours
- Live synchronous sessions – optional
- Live synchronous sessions – required
- Asynchronous Forum / Discussion Board discussions
- One-on-one Q&A and support
- One-to-many message / information distribution
- Formative feedback on student work as they develop it
- Summative feedback on student work after they complete and submit it
- Other? ______________________

---

© 2020 by Stephanie L. Moore, Ph.D. Online Instruction Planning & Development Job Aid is licensed under a [Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License](https://creativecommons.org/licenses/by-nc-nd/4.0/). You may use and share, but adaptations and commercial uses are not allowed.
## Student-Student

Identify ways you can facilitate student-student interaction. You can select multiple as makes sense based on your analysis and strategies. In the space provided, elaborate any notes for the interactions you plan.

- [ ] Discussion on asynchronous Forum / Discussion Boards
- [ ] Construction of a single artifact / product by more than one individual
- [ ] Ability to share draft and final documents / products with each other
- [ ] Group work on joint project – synchronous
- [ ] Group work on joint project - asynchronous
- [ ] Peer review on individual work – synchronous
- [ ] Peer review on individual work – asynchronous
- [ ] Self-organized student meeting groups – asynchronous
- [ ] Self-organized student meeting groups – synchronous
- [ ] Real-time messaging to peers for Q&A
- [ ] Other? ______________________
### Assessment

You have probably already jotted down assessment ideas. Here, we will flesh out your assessment plan using types of assessment based on what exactly it is you want to assess. Quick descriptions and examples for each are provided. For each type of learning you will assess (as appropriate to your class and objectives), note what you will do, when, and what students will submit. This will aid you in selecting the right tools.

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>Reasoning</th>
<th>Skills</th>
<th>Products</th>
<th>Dispositions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Facts and concepts we want students to know</strong></td>
<td><strong>Students use what they know to reason and solve problems</strong></td>
<td><strong>Students use their knowledge and reasoning to perform a task skillfully</strong></td>
<td><strong>Students use their knowledge, reasoning, and skills to create a concrete product</strong></td>
<td><strong>Students’ attitudes and beliefs about a given domain or expectations</strong></td>
</tr>
</tbody>
</table>

**Selected Response (multiple choice, T/F, etc.)**

- **Examples for online:**
  - Quiz or test tools (objective items)
  - Audio voice threads (e.g. language instruction)
  - Recitations (record something that has to be memorized)

- **Examples for online:**
  - Open-ended quizzes or tests
  - Sorting activities
  - Record solving a problem and submit that recording
  - Paper on a topic
  - Presentation on a topic (record and submit as assignment or share in a discussion forum)
  - Case studies requiring students to apply course

- **Examples for online:**
  - Students record themselves performing a skill (e.g. a lab, an exercise routine, a talk-aloud on their design process for a product) (assess using a rubric)
  - Students perform a skill during a live video session (e.g. labs) (assess using a rubric)
  - Simulation or role playing

- **Examples for online:**
  - Students complete a project – individually or as a group – and submit (assess using a rubric)
  - Students construct a writing sample – individually or together – on a wiki or GoogleDoc (e.g. mimic a writer’s style or revise an essay with issues that you load for them)

- **Examples for online:**
  - Students maintain a reflection journal throughout class with prompts that focus on beliefs and attitudes
  - Personal communications – open questions during instruction, oral exams, one-on-one feedback loops
<table>
<thead>
<tr>
<th>What are any knowledge objectives I have:</th>
<th>What are any knowledge objectives I have:</th>
<th>What are any knowledge objectives I have:</th>
<th>What are any knowledge objectives I have:</th>
<th>What are any knowledge objectives I have:</th>
</tr>
</thead>
<tbody>
<tr>
<td>What assessment method will I use:</td>
<td>What assessment method will I use:</td>
<td>What assessment method will I use:</td>
<td>What assessment method will I use:</td>
<td>What assessment method will I use:</td>
</tr>
<tr>
<td>What tool(s) will I use:</td>
<td>What tool(s) will I use:</td>
<td>What tool(s) will I use:</td>
<td>What tool(s) will I use:</td>
<td>What tool(s) will I use:</td>
</tr>
</tbody>
</table>
### Technology Selection

Normally, after we have done all the planning above, *then* we select the tools. The guides above may have already helped you identify these. If you have not done so yet, use this space to map out which tools you will use for each.

<table>
<thead>
<tr>
<th>Representational</th>
<th>Asynchronous (e.g. recorded talk, readings)</th>
<th>You should be able to refer back to your Student-Content Interaction plan for this</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Synchronous (e.g. live talk, activities working through examples)</td>
<td>You should be able to refer back to your Student-Content Interaction plan for this</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dialogic</th>
<th>Asynchronous (see examples under Types of Interaction)</th>
<th>You should be able to refer back to your Types of Interaction plan for this</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Synchronous (see examples under Types of Interaction)</td>
<td>You should be able to refer back to your Types of Interaction plan for this</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Productive</th>
<th>Asynchronous (see examples under Types of Interaction)</th>
<th>You should be able to refer back to your Student-Content Interaction plan for this</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Synchronous (see examples under Types of Interaction)</td>
<td>You should be able to refer back to your Student-Content Interaction plan for this</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Assessments</th>
<th>Objectively / Automatically Scored or Graded</th>
<th>You should be able to refer back to your Assessment plan for this</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Subjectively Graded (e.g. with rubrics)</td>
<td>You should be able to refer back to your Assessment plan for this</td>
</tr>
</tbody>
</table>
## Instructional Materials – Selection and/or Production

You may feel like this is a bridge too far right now, and that is fine! Your course does not have to be perfect the first time through. Be patient with yourself. You can spread out improvements across multiple iterations. Tending to improvements around materials will take time, so map out a multi-semester plan. The good news is that any materials you use for online you can use for the classroom, too.

### Selecting Existing Materials – Questions for Evaluating:

For each existing material you are considering using, work through the following questions to help guide selection.

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the content accurate?</td>
<td></td>
</tr>
<tr>
<td>Is the content aligned with an instructional objective? (If yes, which one?)</td>
<td></td>
</tr>
<tr>
<td>Does the video / handout / product design reflect multimedia learning principles (how humans process information; Mayer et. al.) such that it will facilitate comprehension and retention?</td>
<td></td>
</tr>
<tr>
<td>What instruction, explanation, or guidance needs to be provided to situate this material in the appropriate instructional context?</td>
<td></td>
</tr>
<tr>
<td>Are there any misunderstandings that might arise? How will you know / assess for that?</td>
<td></td>
</tr>
<tr>
<td>Is there an additional cost for using the material?</td>
<td></td>
</tr>
<tr>
<td>Would use of it violate copyright or fair use?</td>
<td></td>
</tr>
<tr>
<td>Is it accessible for learners with disabilities? If not, how can you differentiate the materials or instruction to ensure full access to the learning?</td>
<td></td>
</tr>
</tbody>
</table>
Materials: New - Multimedia
(\(\text{where to invest multimedia development time and effort}\))

What are the 3-5 main concepts that, if students leave knowing anything from your instruction, these are the main things they understand:

1. ____________________
2. ____________________
3. ____________________
4. ____________________
5. ____________________

How can I apply the following multimedia learning principles for better comprehension and retention of material?

- **Multimedia Principle** – use words and pictures, not just words alone
- **Modality Principle** – use graphics and narrations rather than animation and on-screen text
- **Redundancy Principle** – graphics and narration (limited on-screen text, no text-heavy slides; closed-captioning is just fine)
- **Coherence Principle** – extraneous words, pictures and sounds are excluded rather than included
- **Signaling Principle** – cues that highlight the organization of the essential material are added
- **Spatial Contiguity Principle** – corresponding words and pictures are presented near rather than far from each other on the page or screen
- **Temporal Contiguity Principle** – corresponding words and pictures are presented simultaneously rather than successively
## Development Checklist – Quick Items to Help You Get You, Your Course, and Your Students Ready

### Organization

- Create a page with a table on it that quickly summarize for students each week -- what they’ll read, any assignments due, any recorded lectures and any live sessions -- with links as necessary to these things.
- Create a course site in your university’s or school’s LMS.
- Load any assignments that will be due into the assignments section (or have support staff help you with this).
  - For online, students require very clear instructions and prompt feedback, so make sure you provide students clarity on what to submit, how and any associated handouts for an assignment. In an LMS, you can set due dates, attach files and write a description for assignments to provide students guidance.
- Load any readings that students will need into resources/files (or have support staff help you).
- Create a discussion/forum section dedicated to student questions for you that you will check periodically (may want to set a meeting reminder to allocate time and remind you to do so).
- In the course site, create weekly modules / overview pages that map to the table you created. Within each of these weekly modules, provide a brief written overview and link to readings and assignments. Put this on one page so students have one place to go each week that quickly takes them to what they need.

### Communication

- Make sure your class roster is added to your class site -- typically support staff can help with this.
- Download your class roster with emails to have on hand for quick reference if necessary (usually, you can save your class roster in a spreadsheet format with this information -- it takes less than one minute to do).
- Create a class communication plan so students know where to go and what to expect; address questions like:
  - Where to send questions
  - How quickly will you respond to emails; how quickly will you respond to discussion posts
  - How to reach you with any urgent needs or questions
  - What sort of regular communications you will send out to the class (e.g. weekly reviews and/or updates)
  - Other plans you have for how you will be available to students and how you will send out regular information and updates
- Communicate your plan to your students:
  - Do a quick walk-through of your plan and the course site for students -- this can be done either in person if you still have some in-person sessions or can be done as a recorded video you share out with your class.
### Implementation – Keys to a Successful Course Experience

<table>
<thead>
<tr>
<th>Getting students oriented</th>
<th>Clear instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Create a video or link to an orientation that students can access before the first day of class</td>
<td>☐ Write an overview for each weekly module that includes clear instructions on what to do and when that week, along with links for where to submit anything due or quick access to a tool or discussion</td>
</tr>
<tr>
<td>☐ Send a welcome email one week in advance to give students time to prepare and gather what they need</td>
<td>☐ Write clear instructions for each assignment or assessment</td>
</tr>
<tr>
<td></td>
<td>☐ Provide written email updates and post announcements for your class as necessary</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Timely responsiveness</th>
<th>Timely feedback</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Set aside time on your calendar, like an appointment, to regularly check discussions and reply, respond to emails, and write and send weekly summary emails</td>
<td>☐ Put all assignment due dates on your calendar with a reminder to grade and time set aside for grading</td>
</tr>
</tbody>
</table>

**Be You!** Imagine you are talking to a student sitting in a chair right next to you as you write replies and emails. If you make jokes, use cues like emojis or indicators (e.g. {smile}) to communicate the subtle cues you would send in-person. Authenticity matters, so be you and don’t be afraid to be human and don’t worry about small mistakes while recording or talking.
### Coordination Guide Between Instructional Decisions & Planning for Online and Blended Instruction

<table>
<thead>
<tr>
<th>Instructional Decisions</th>
<th>Handshake</th>
<th>Planning &amp; Coordination</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategies and Methods for Instruction and Assessment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>What is the learning objective?</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type of Objective:</td>
<td>Presentation Needs and Tools (circle or add):</td>
<td>Established strategic objectives and school / district / organizational vision</td>
</tr>
<tr>
<td>- Knowledge / Comprehension</td>
<td>Ability to record explanations that include visuals with audio narration; Examples that include pictures, visuals, and/or videos</td>
<td>Adopt / adapt / Establish Clear Standards for Online and Blended Instruction</td>
</tr>
<tr>
<td>- Application</td>
<td>Other:</td>
<td>Addresses both design as well as delivery / implementation</td>
</tr>
<tr>
<td>- Analysis</td>
<td>Practice and Assessment Needs and Tools (circle or add): Knowledge checks (quizzes and tests); Drag and drop / sorting activities; Wiki / GoogleDoc</td>
<td>Integrate Instructional Needs into Technology Evaluation and Procurement Criteria</td>
</tr>
<tr>
<td>- Synthesis</td>
<td>Other:</td>
<td>- Develop a matrix for educational technology procurement that includes instructional needs as well as other factors like integration, accessibility, etc.</td>
</tr>
<tr>
<td>- Evaluation</td>
<td>Alignment with standards</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Review what resources are available that supports the desired instruction; identify gaps for potential procurement (or alternatives)</td>
<td>Student Orientation: Develop and provide an introduction or orientation to prepare students for success in online courses / programs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Create a sandbox and/or communication process to help test and communicate out new possibilities to instructors</td>
</tr>
<tr>
<td>What is the learning objective?</td>
<td>Presentation Needs and Tools:</td>
<td></td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Type of Objective:</strong></td>
<td>Practice and Assessment Needs and Tools:</td>
<td></td>
</tr>
<tr>
<td>- Knowledge / Comprehension</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Application</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Analysis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Synthesis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Evaluation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presentation Strategy:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Generative Strategies (Practice / Activities):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assessment:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Resources / Support Tools:** What information, job aids, and resources do the following stakeholder groups need?

- Instructors:
- Students:
- Parents:
- Staff:
- Administrators:
- Others:

**Skills & Knowledge Development:** What training or PD do the following groups need for teaching / supporting online or blended instruction?

- Instructors:
- Staff:
- Administrators:
- Others:

**Feedback Loops and Consequences:** How will you communicate information out to students, parents, and teachers? How will you build a (hard and soft) data cycle to inform your process and how things are going?
### Type of Objective: Affective

Seeing examples, role-playing, case studies, simulations, and diverse teams are all possible strategies (that can be used independently or in conjunction with each other) for affective learning objectives. Note your ideas here.

Examples (demonstrating the model):

- Role-playing:
- Case studies or scenarios:
- Simulation:
- Diverse teams (consider what sort of diversity is central to your objective – disciplinary, cultural, skills / capabilities, racial, geographic, etc.):

### Rewards and Incentives:
Are there any possible disincentives? If so, how can you address those?

How will you recognize innovation and outstanding work? How will you nurture interested teachers and students?

Are there any ways in which innovative practices can hurt a teacher that you will account for? (e.g. student evaluations often dip in early stages of new practices – how can you support iteration and “learning from failures”)

### Job / Task Expectations:
Should any job requirements or definitions be rewritten?

Are there any new roles and responsibilities that will require new positions? How can you incorporate instructional needs and system support needs into those job descriptions?

### Policies:
Are there specific policy implications that should be discussed and tended to?

**For example:**
- Tenure and promotion policies
- Student privacy and data policies
- Load policies
- Establishment of quality standards

---

### Type of Objective: Collaboration / Teamwork

Specify the nature of the teamwork (this may be the same as what you indicate under Student-Student interaction)

**Type of collaboration / teamwork:**
- Group work on single product
- Individual work that is peer reviewed
<table>
<thead>
<tr>
<th>Types of Interaction – Student Engagement with You, Each Other, and the Class Material</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Types of interaction identified in research:</strong> Student-Content, Student-Instructor, and Student-Student</td>
</tr>
<tr>
<td><strong>In this section, you will map out your plan for engagement using these three types of interaction as a structure.</strong></td>
</tr>
<tr>
<td><strong>Type of Interaction:</strong> Student-Content</td>
</tr>
<tr>
<td>Student-content interaction is facilitated by the instructional strategies and methods that you select. Those are articulated above in strategies that align with different types of objectives.</td>
</tr>
<tr>
<td><strong>Type of Interaction:</strong> Student-Instructor</td>
</tr>
<tr>
<td>Virtual Office Hours</td>
</tr>
<tr>
<td><strong>Students:</strong></td>
</tr>
</tbody>
</table>
- Live synchronous sessions – optional
- Live synchronous sessions – required
- Asynchronous Forum / Discussion Board discussions
- One-on-one Q&A and support
- One-to-many message / information distribution
- Formative feedback on student work as they develop it
- Summative feedback on student work after they complete and submit it

### Do all students have internet access? If not, can they access the content via a mobile device? If that’s not feasible, what are alternatives (phone, mail, radio, television) that may be more accessible for your learners? (Return to your rapid front-end analysis – ideally your decisions at this point are grounded in that rapid analysis.)

**Instructors:**

What tools do instructors need to interact with students? (e.g. discussion boards, listservs, live video conferences like Zoom, Connect, Skype, MS Teams, etc.)

What tools do instructors need to deliver content that will also allow for discussion and interaction on the content such as feedback and assessment? (e.g. an LMS like Canvas, Desire2Learn, Blackboard, Moodle, Google Classroom, or others)

**Support staff:**

Do support staff have access to the same resources?

**Related Skills & Knowledge:** do students, instructors, and staff require any training to learn the tools?

**Policies and Rewards / Incentives:**

Do any particular policies or rewards / incentives structures (such as tenure and promotion) incentivize instructors to spend less time on interactions? If so, how and where might these be adjusted?

Do any particular policies or incentive structures (such as grading policies or practices) incentivize students to focus solely

### Type of Interaction: Student-Student

Select the desired types of student-student interaction (and add additional ideas)

- Discussion on asynchronous Forum / Discussion Boards
- Construction of a single artifact / product by more than one individual
- Ability to share draft and final documents / products with each other
| Group work on joint project – synchronous | on grades rather than interactions with peers and/or interaction with instructors through feedback and continual improvement? If so, how and where might these be adjusted? |
| Group work on joint project - asynchronous |
| Peer review on individual work – synchronous |
| Peer review on individual work – asynchronous |
| Self-organized student meeting groups – asynchronous |
| Self-organized student meeting groups – synchronous |
| Real-time messaging to peers for Q&A |

### Instructional Materials – Selection and Production

**EMPHASIZE THAT “MULTIMEDIA” IS MAYER’S DEFINITION BASED ON HOW HUMANS PROCESS INFORMATION, NOT A TECHNOLOGICAL DEFINITION**

<table>
<thead>
<tr>
<th>Materials: New - Multimedia (where to invest multimedia development time and effort)</th>
<th>Align: Resources, Policies, and Rewards / Incentives</th>
<th>Resources:</th>
</tr>
</thead>
<tbody>
<tr>
<td>What are the 3-5 main concepts that, if students leave knowing anything from your instruction, these are the main things they understand:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Align: Resources, Policies, and Rewards / Incentives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resources:</td>
<td>Do instructors have resources to develop materials such as videos or other multimedia materials? If not, could that be procured? If so, how can you ensure they know the resources exist?</td>
<td></td>
</tr>
<tr>
<td>Policies:</td>
<td>Do instructors have access to existing material repositories? If so, do they know where and how to access these?</td>
<td></td>
</tr>
</tbody>
</table>
3. __________________________________________________________________________
   __________________________________________________________________________
4. __________________________________________________________________________
   __________________________________________________________________________
5. __________________________________________________________________________
   __________________________________________________________________________

Sequence these in order of most importance. If you need to wait until future iterations to develop one or some of these, which one(s) could wait?

<table>
<thead>
<tr>
<th><strong>Materials: Existing</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Materials Selection Guide:</strong></td>
</tr>
<tr>
<td>For each existing material you are considering using, work through the following questions to help guide selection.</td>
</tr>
<tr>
<td>Is the content accurate?</td>
</tr>
<tr>
<td>Is the content aligned with an instructional objective? (If yes, which one?)</td>
</tr>
<tr>
<td>Does the video / handout / product design reflect multimedia learning principles (how humans process information; Mayer et. al.) such that it will facilitate comprehension and retention?</td>
</tr>
<tr>
<td>What instruction, explanation, or guidance needs to be provided to situate this material in the appropriate instructional context?</td>
</tr>
<tr>
<td>Are there any misunderstandings that might arise? How will you know / assess for that?</td>
</tr>
<tr>
<td>Is there an additional cost for using the material?</td>
</tr>
<tr>
<td>Would use of it violate copyright or fair use?</td>
</tr>
</tbody>
</table>

**What policies might interfere with instructors’ ability to create or select materials?** For example, should they be allocated more time, even if temporarily, to create or identify sources?

**Are instructors aware of any institutional policies on copyright?**
Is it accessible for learners with disabilities? If not, how can you differentiate the materials or instruction to ensure full access to the learning?

**Assessment – Methods and Tools**

Assessment is one of the major drivers in every educational system, so you are likely to run into significant areas where instructional decisions around assessment need to be aligned with programmatic / institutional resources, policies, and other barriers or supports. Continue asking similar questions about alignment of Resources, Policies, and Rewards / Incentives in particular throughout the remaining technology selection, development, and implementation process. You may also continue to run into needs around Skills / Knowledge, Job / Task Definitions and Clarification, and Feedback Loops / Communications needs.

For example, what are the possible negative impacts of online / remote proctoring tools? Have students been consulted about the use and data policies? You may need to develop a policy as a community around student data rights and privacy, and then fold that policy into the procurement requirements and process.

For instructors, how will you handle access to end-of-course assessment data, and how will that data be used? What policies and procedures may need to be in place to ensure you foster a culture of trust? What sort of supports to instructors need to better understand how to assess different learning outcomes differently, and what tools (resources) do they need to implement higher-order and authentic assessments that go beyond tests and quizzes?

**Technology Selection & Procurement**

Procurement is perhaps one of the best levers you have for delivering your desired results. This goes beyond just what you procure to how you fold your needs and policies (constraints and affordances) into the procurement process. As you identify the various needs, translate these into procurement parameters. Having a committee or working group help with this can ensure that multiple stakeholders are involved in the process (e.g. instructors, staff, students, administration).

Continue asking similar questions about alignment of Resources, Policies, and Rewards / Incentives in particular throughout the remaining technology selection, development, and implementation process. You may also continue to run into needs around Skills / Knowledge, Job / Task Definitions and Clarification, and Feedback Loops / Communications needs.

For example, once you’ve selected technologies, how will you help everyone come up to speed on the necessary skills / knowledge. What feedback loops will be helpful to have, such as are the tools working / suitable to the tasks? How will you evaluate your technology infrastructure on an on-going basis?

**Development**

By this point, much of the planning and procurement should be as well-aligned as it can be. Primarily at this stage, instructors need the support of development staff to help them get everything into the LMS and get it organized, set dates, setup the gradebook, etc. Creating a development checklist can help staff and instructors communicate and make sure no details are forgotten. If you have not done so already at the beginning of the planning process, you...
may need to adjust Job / Task Definitions for staff so they now support instructors in online development or develop new jobs and job descriptions for these roles and/or ensure that staff receive adequate training to help them develop any new skills or knowledge they may need for an adjusted job description.

### Implementation & Evaluation

Although most of the planning and development process is complete by this point, this is just the beginning for instructors and students. Continue asking similar questions about alignment of Resources, Policies, and Rewards / Incentives in particular throughout the remaining technology selection, development, and implementation process. You may also continue to run into needs around Skills / Knowledge, Job / Task Definitions and Clarification, and Feedback Loops / Communications needs.

One common question that arises is around Rewards / Incentives and Policies. Instructors who are implementing something new or innovative often experience a dip in their end-of-course evaluations. This can be a serious disincentive for instructors, especially tenure-track faculty, to try new things. What policies might be helpful in encouraging innovation and experimentation rather than discouraging it? How will you handle any possible dips in student evaluations? If an instructor appears to struggle online, what will be your support infrastructure and communications / feedback loops? How can you focus those on support and improvement rather than punishment?
Research Anchors and References

What I Am Pulling From:

**Instructional Design:**
- Types of Interaction
- Multimedia Learning (Mayer)
- Bloom’s Taxonomy
- Instructional Design process (Morrison, Ross, Kalman & Kemp)

**Planning & Coordination:**
- Performance Improvement
- Educational Change
- Systems Thinking & Planning
- Management Sciences

KEY References:

- Morrison, Ross, Kalman & Kemp – Designing Effective Instruction
- Moore & Kearsley – A Systems View of Online Learning
- Clark – Building Expertise
- Mayer – Multimedia Learning
- Clark & Mayer – eLearning & the science of instruction
- Means, Bakia, and Murphy - Learning Online
- Watkins – Performance by Design
- Ellsworth – Surviving Change
- Bandura – Social Learning Theory
- Brown, Collins, & Duguid – Situated cognition
- Collins, Brown, & Newman – Cognitive Apprenticeship
- McLellan – Situated learning