Systematic Alignment Overview

This brief document is intended to provide an overview of some of the theories related to systematic instructional design. As may be seen from the numerous checklists for which links are provided below, there are very real and practical implications for these systematic considerations. Of particular interest here is alignment that occurs among course elements ("horizontal" alignment) as well as across societal and course levels ("vertical" alignment). Both are considered to be important for course design and development and will therefore be briefly addressed here.

HORIZONTAL ALIGNMENT AMONG COURSE ELEMENTS:

Instructional design literature and numerous course development rubrics point to the importance of systematically designing and aligning course elements (click here to see a <u>list of references</u> [located at the bottom of the linked document] related to instructional design and educational literature as well as a <u>course rubric comparison table</u>). If one looks at this (and other educational and learning science) literature and these rubrics, there may be identified at least the following elements that are considered to be of central importance for course design and development:

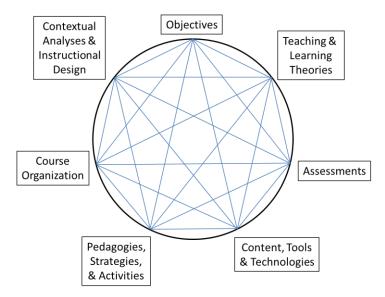
- Contextual Analyses
- Instructional & Evidence-Based Design Methods
- Teaching & Learning Theories
- Objectives
- Course Content & Instructional Materials
- Course Tools & Technologies
- Course Pedagogies, Teaching Strategies, and Activities
- Assessments
- Course Organization

For our purposes here, these elements have been combined into the following categories and checklists have been developed for each:

- Contextual Analysis & Instructional Design (<u>checklist</u>)
- Teaching & Learning Theories (<u>checklist</u>)

- Objectives (<u>checklist</u>)
- Content, Tools, & Technologies (checklist)
- Pedagogies, Strategies, and Activities (checklist)
- Assessments (<u>checklist</u>)
- Course Organization (<u>checklist</u>)

One of the main points that is emphasized in some of the rubrics and literature above is the need for each of these elements to be systematically aligned with one another. From the list above, these elements would inform and help the design and development of the others as shown below:



Overall, the primary goal is to design and develop a course whose components collectively work together to achieve the desired aims of the class. The more tightly connected each of these elements are to one another, the systematic theory goes, the more effective the course will likely be in fostering the kinds of deeper learning and formation that are the focus of the class. Whether such systematic alignment always and directly leads to more effective courses still seems to be a matter of research. However, it does seem to be advisable to work towards ensuring that these course elements more directly inform and support the development of one another. As a result, such systematic alignment is recommended as a standard to be pursued in course design and development.

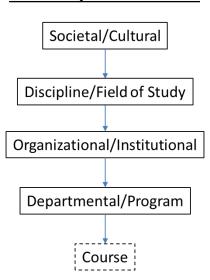
The checklists for each of these elements therefore includes a systematic alignment section to help guide you in the development of your course. As you read over these checklists, and the systematic alignment sections in particular, think about the extent to which the elements of your own class are working in concert together to help support your students to the fullest extent that they are able. If there are parts of your course that do not seem to fit harmoniously with the other elements, then you might consider changing this and/or other class components.

VERTICAL ALIGNMENT ACROSS LEVELS:

Just as systematic alignment among course elements is advisable, so too is alignment across societal, organizational, and course levels. When considering such vertical alignment, there are at least two sets of levels. Both of these sets can help to further guide and inform the design and development of one's course.

The first set are levels beyond the course itself. These would include societal/cultural, discipline-specific, institutional, and departmental levels as shown in the figure below:

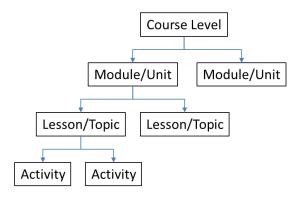
Levels Beyond the Course



When designing a course, one can and should give consideration to the resources, best practices, goals, et cetera that one or more of these levels might have to offer to your course. Doing so will not only help you to quickly narrow the range of materials and approaches that you might consider, but it will also help to ensure that you are keeping up with the latest trends and advice that each of these levels has to offer. While not all of these trends and advice might be applicable to your class, it is nonetheless a central part of the craft of education to be aware of and critically engaged with them.

The second set of vertical alignment levels to consider are those within the class itself. These would include the course as a whole as well as all of the sub-levels that make up the organization of the course (for more information and guidelines on course organization, see the checklist). Shown below is an example of what such a course organization might look like:

Levels Within the Course



Systematic alignment across these levels is also of particular importance. To gain a better sense of why this is, imagine that you have developed a set of high quality objectives for the course. Now let's assume that you have organized your course following the model depicted in the image above, with modules that have lessons that have activities. Systematic vertical alignment across course levels would mean that your module level objectives are not only directly linked to the course level objectives but also that the course level objectives are adequately and comprehensively addressed by the module level objectives. If this were not the case, then students would reach the end of the class not having fully achieved the course level objectives. As a result, it is considered to be very important that each of your course elements be aligned across these course levels.

SYSTEMATIC ALIGNMENT OVERALL

Stepping back, then, there is quite a bit to consider when it comes to designing for tighter systematic alignment of one's course. We need to work to ensure that each of the course elements (e.g., objectives, assessments, etc.) are closely aligned with one another. This means that there are no contradictions and that these elements work together towards the overall success of the class. But we also need to seek vertical alignment both within as well as beyond our class. Working in both alignment directions (horizontal and vertical) will, theoretically, give our class a better chance of being of a higher quality. So, as you peruse the checklists and work on your class, keep these systematic alignment considerations in mind.

For more information and to see the references used to develop this brief description, click here to view the <u>Course Design & Development Guidelines</u>.