**Design & Development Project Information for the IPT Website**

The Design & Development project is intended to help the student apply information acquired through coursework and reading to the actual design and development of an instructional product. In order to complete and earn credit for a design & development project, a student must have first completed IP&T 564, Instructional Design, and earned a passing grade (B- or higher). The Design & Development project should demonstrate the analysis, design, development, implementation and evaluation of this product. The purpose of the design & development report is to expose and clearly communicate the thinking of the designer throughout the project. The design & development report should be written and submitted together as one document. Projects should represent a defensible effort. The report must be presented and formatted in a professional, consistent, and appropriate way. The final report should include the following headings:

* Introduction and Project Origination (10 points)
* Design Process (15 points)
* Design Document (15 points)
* Design Rationale (10 points)
* Development/Implementation/Evaluation plan (10 points)
* Project Outcomes (10 points)
* Evolution of the design (10 points)
* Design Critique (10 points)

An additional *10 points* will be earned for presentation, organization, and formatting.

The remainder of this document details what each of these points consists of. It is expected that an exemplary project will specifically include the first two levels of information (e.g., section 4a, 9d, and 8e). Additional levels of detail (e.g., 4.a.i, 8.e.iv, etc.) are provided as guidance and should be used on an individual basis as it pertains to the student’s unique design and development process.

**An Annotated Outline for Reporting Design Projects:**

**How to use this document**

This annotated outline of a design report should be followed by IP&T students in documenting design projects for MS and PhD design & development projects. The purpose of writing a report is for the assessment of a student’s design skill and judgment so that appropriate credit can be awarded.

Design & development reports are intended to contain: (1) a detailed expression of the design, (2) a detailed narrative history of the design project and its processes, (3) a clear expression of the rationale behind the designer’s decisions at every stage, and (4) a description of new theoretical and design process learnings accumulated during the project. A major purpose of doing design projects is to learn something new and contribute to the general knowledge of our field. Projects should be planned with this goal in mind.

Assume that the audience for your report is another instructional designer who is seeking to learn something new from your experience and gain insights from your report of the project. Assume that this designer is at least as good a designer as you or perhaps even a better one who has confidence in your design judgment. Consider the many different areas in which your project has led you to new insight: design process, product properties, design theory, instructional theory, practical design and development principles, or the manner in which repeated cycles of design, development, trial, and revision have led to new understandings. You report should be much more than simply a reporting of your project. This outline and its organization is designed as a stimulus to your own thinking about what you have learned and is intended to be helpful to you by asking you to think through every aspect of your design experience, from the very surface and practical concerns through several levels of design reasoning down to the abstract and theory or principle-related concerns.

Report headings are named and annotated below. Exact headings used by individual students in report writing may vary so long as variations are approved by the faculty member supervising the student project, but all of the issues identified in this outline should be addressed in the report. The order of the headings below was chosen to give a narrative flavor to the report document. In general the order is context-to-product, general-to-detailed, global-to-local, and concrete-to-abstract. A scan of the top-level report headings reveals this narrative line.

**Project Report Outline**

1. **Project Origination** – This section gives a brief overview of how the project originated. Sub-sections supply additional detail.
   1. **Introduction** - This section summarizes briefly what this document contains. It is a brief roadmap for the rest of the document. It acts as an abstract for the entire project, giving an account of what was designed, how it was used, and what results were obtained in terms of project goals and new learnings from carrying out the project.
      1. Product category – Describe what category of instructional product your product will exemplify. For example, you might use Krippendorff’s (2006) “trajectory of artificiality” (p. 5-13) to describe what you thought you were designing. Describe and changes in that category of what you thought you were designing that took place over the course of the project. What was it that caused you to think differently about what you were designing?
   2. **Sponsor/client** – If an organization sponsored this project, identify the organization briefly and the circumstances that brought you into contact with them and the project. How did the project originate? Identify your role and responsibilities with respect to the project. State whether others worked with you on the project and in what capacities. When did the project begin? When did it end?
   3. **Evidence of need for the project** – Describe the factors that first indicated there was a need for a project to be initiated whose goal was the development of instruction. Was a problem spotted? What data indicated the problem? Was additional data gathered to confirm the source of the problem? How was it determined that instruction and not some other remedy was needed? Or did the project appear as an opportunity rather than a problem? What were the indicators that an opportunity existed? What analyses were conducted to determine the extent of the opportunity and the possible pay-off for initiating a project?
   4. **Circumstance/Constraint** – Describe the environment of the project once it was decided there would be a project. How much time was allocated for the project? How many resources, and of what kinds (money, equipment, personnel, facilities)? Were any decisions made in advance of project kick-off regarding the nature of the final product or the approach to be taken during design? Where was the project to be located? What were the client’s expectations at the outset? Was it necessary to negotiate any of the constraints? What were the uncertainties surrounding the project at the outset? Were there any unsolved problems at that time?
   5. **Detailed preliminary analyses** – What more-detailed analyses were conducted at or just before the outset of the project to add precision to the search for a solution? If the analyses listed below were not conducted, why not? Were there additional analyses and data gathering steps conducted that helped set the stage for problem solving?
      1. Target population analysis – Did you perform a target population analysis? If not, why not? Summarize the results of any analysis that were performed in this section and attach a copy of the complete analysis results to this report. For each of the learner characteristic identified in the analysis, identify the design implications you drew out.
      2. Current training and resource analysis – Did you perform a current training and resource analysis? If not, why not? Summarize the results of any analysis that were performed in this section and attach a copy of the complete analysis results to this report. For each finding identified by the analysis, identify the design implications you drew out.
      3. Existing product/competition review – Was an existing product/competition review included in your current training and resource analysis? If not, why not? Summarize the results of any analysis that was performed and attach a copy of the completed analysis to this report. Were there any savings in time or development effort that came as a result of the analysis?
   6. **Design goals and design criteria** – Were any explicit design goals agreed upon at the outset of the project? What were they? How specific were they? Did you supply them as a designer, or were they imposed on the project by the client? Were the design criteria specific enough to provide measurability at the end of the project for determining whether the goals had been reached? Did you reach the goals? Which ones? Which ones did you not reach, and why do you feel you did not? Give an account of how goals changed across the duration of the project, if they did.

Points earned: \_\_\_\_\_\_\_\_\_\_\_\_\_ / 10 Rationale:

1. **Design Process** – Give a very brief summary statement describing the contents of the sub-sections that follow.
   1. **Design/development process** **and rationale** – Give an overview of the design processes that you used for the project. Defend your choice of design approach. Cite relevant literature. Identify alternatives that you considered and why they were not seen by you as the best choice. Did you change approaches during the project? Why?
   2. **Design and development process narrative -** Describe your original design and development plan. Give timelines, tasks, and expected major events. Then describe what actually happened. Provide a narrative describing how events unfolded during both design and development. Your designer’s log should be a good source of material for this section. Describe analyses you performed, design processes, production processes, and formative evaluation processes. Were there surprises? Were there changes in constraints? Did the client change goals? Criteria? Resources? Did you have to adjust your original plan? How did you do that? Did you have to do it more than once? What did you learn during this project about the practical, hands-on part of design and development that you did not already know? What lessons can you pass on to other designers who will read your report?

Points earned: \_\_\_\_\_\_\_\_\_\_\_\_\_ / 15 Rationale:

1. **Design Document** – Give a high-level summary of the design that resulted from your design process. The sub-sections that follow will give the details of the design. Since you have already described the history of the project and your design process, that should not be the subject of this section. Describe the design itself. Here you should describe the design for the first testable version of your product. Subsequent evolutions of the design will be described in later sections of the report.
   1. **Physical description** – Give a brief summary of the product you originally designed, including the major components you designed and produced during the first round.
      1. Media elements –Give a detailed list of the media elements (workbooks, videos, lecture outlines, computer programs, etc.) designed and produced. This will look like a packing list for the client inventorying what is in the shipping box when the product is delivered. This information can be created as an attachment and referred to from this section of the report.
      2. Packaging – Describe how media elements are packaged, ready for use. Are manuals and software flies placed in a notebook? Are there different packages for instructors and learners? Is there a box? Is it delivered entirely on a CD or DVD? On the Internet?
         1. Learner materials– Describe materials seen or used by the learner.
         2. Instructor/tutor/mentor/facilitator materials- Describe materials seen or used by those who administer instructional experiences with the learner.
         3. Administrator materials- Describe materials seen or used by administrators. This includes directions for site, hardware, and software preparation personnel.
         4. Marketing/sample/demo materials - Describe materials used for promotion of your product.
      3. Site requirements – When your product is used it requires one or more instructional sites. Where are they, and how are they set up? Instructional sites include all places where instruction or practice events take place. Name and describe each of the sites your instruction requires. What size are they? How often are they needed? What are they used for? Do they have to be provided with services? Electrical hook-ups? Internet connections? How many? What kind?
      4. Implementation hardware - Each site can potentially require hardware that is used by students or instructors in executing the instructional plan. This hardware is not limited to compute hardware: it includes any kind of equipment or furnishing that is essential to the instructional plan. If you were designing gymnastics training, you might require parallel bars or a pommel horse as equipment. If the equipment is computer hardware, describe its minimum properties. How powerful does it have to be? How big its memory? Terminal screen?
      5. Hardware configuration - If the equipment is computer equipment, then describe its specifications. Include enough information to describe its minimum configuration.
      6. Networking – If networking connections are required for the use of your product, describe the level of service and any other necessary specifications, such as number of hook-ups, bandwidth, etc.. Describe any local networks that are normally set up to support your product’s operation.
      7. Implementation software configuration - If software is used in any part of your instructional product, or if your management system is going to be computerized, you need to describe here what software (including version information) will be hosted and whether there is client software that must be installed on a workstation. If that software has to be in some way connected or used in conjunction with other software (say a net), you need to briefly describe how they are intended to interoperate.
         1. Sensitivity to new software releases - If you are using commercial or custom software, it will at some point become obsolete (software versions, digital camera models, etc.). Make a statement about what version of software your instructional product depends on. Indicate how often version turn-over tends to occur for the software products you are relying upon.
         2. Configuration control – Describe any markings placed on your media elements to identify their version vintage.
   2. **Structural/conceptual description –** Describe how your design brings together time, activity, and instructional goals using the non-physical, structural elements of your design.
      1. Goal structures – What are the instructional goals for your product? List them in an attachment. How are the goals related to each other? Are there goals at different levels of granularity? Are your goals subject-matter specific or metacognitive or both?
      2. Event structures – How have you mapped goal structures (instructional goals) onto specific instructional events which are defined by a particular time frame and one or more physical locations?
         1. Elements- Describe the different kinds of events that make up your course. What are the course divisions? Units? Modules? Lessons? Segments? Give a list of the kinds of instructional elements. How many instructional sessions are there? How many lessons, units, etc.? What are their names? Describe the different types. Are there some events which represent relatively small scope (of objectives) and others that are by comparison of larger scope? Describe these differences. In a later section you will describe the rationale for your choices.
         2. Micro-strategy types and use - Describe the instructional strategy employed within each type of instructional event. What happens first? What happens next? Can the order of strategic sub-events vary? Under what conditions? To what degree does the learner or the actions of the learner determine the course of sub-events? Describe this for each type of event.
         3. Macro-strategy - Macro-strategy is the strategy you use to create an order between instructional events. What is the organization of your syllabus? What patterns of organization did you use? You gave a list of your instructional events in another section of this document. Now describe the rules used to select and arrange them in an instructional order. Is the order the same for every learner? Is there a plan for remediation? Re-cycling? Counseling those who cannot remediate?
         4. Style and tone – If you have an image or personality that you want your product to project, describe that image and the specific things you have put into your design to create the style. Is your instruction planned to be: authoritative? Relaxed? Fast-paced? Electric? Academic and scholarly? Active? Participative? Social? Current? Trustworthy? What else?
   3. **Operational description** – Give a summary description of how the physical elements you described above are used during instruction.
      1. Modes of use– If your product operates in multiple modes (e.g., self-instructional, instructor-led, etc.) identify each mode and explain the conditions under which it is to be used.
      2. Social environment – Describe the social environment of instruction. Are learning groups used? When and how? What size? For what purpose? Are there times during instruction when the learner works alone? When?
      3. Use scenario (descriptive)– Describe each of the operating modes of the instruction as if you were observing over the shoulder of a user. What does the learner do? What is the experience like? Give a narrative of typical instructional encounters under each of the operating modes you have identified.
      4. Learner and instructor roles and responsibilities – Enumerate the different roles and responsibilities of the learner and the instructor (if there is one) when your product is used. Include a description of how roles and responsibilities change under different modes of use.
      5. Learner control– Describe the types of choices that are deliberately allocated to the learner during instruction. What things is the learner regularly asked to decide? What choices are withheld?
      6. Learner control dynamic –If control changes hands over time, describe the different degrees of control a student can be given over the course of instruction. Which choices become the learner’s? Which choices does the designer retain?
      7. Management- Describe here the management system you use. Is there a computerized management system? If so, which one? If you do not use a computer-based management, what kind of a system is used? Describe how learners move ahead through the instruction, especially if they move at different rates. Describe management choices a learner can make or is expected to make. Describe decisions made by the managements system and where the data comes from to make the decisions. Describe the granularity of decisions: is it at the lesson level or within the lesson?
      8. Navigation/sequence rules – Describe the paths by which the learner can navigate through the major events of instruction and the rules used to determine what paths are open at any given time during instruction.
         1. Movement between events – What signals the end of an instructional event or occasion? Who decides when it is ended? Who chooses the next event? How is that accomplished? What happens at the beginning of a new event? What is the role of the learner between events? What is the role of the instructor or management system?
         2. Movement within events – During an event, what are the sub-events a learner can move through? Who chooses their order? What rules govern movement among the sub-events?
         3. Entering and exiting events - What are the rules for entering and exiting an event before it is completed? Is there a bookmark system that allows a student to return to a particular spot in the instruction after leaving temporarily? How are momentary status variables recorded at exit? What happens if progress is based on demonstrated proficiency and a student does not show that basic proficiency after a certain period of time or a certain number of attempts?
   4. **Assessment** – Give an overview of the assessment plan used with your product. Is assessment formal or informal? Is it binding and consequential to the learner? How is assessment integrated with instruction?
      1. **Levels of assessment** - Where are the tests placed during instruction? When do they occur? How do they occur? Are they formal tests or just unobtrusive observations? How is judgment made about the outcome? Who makes the judgment? What are the possible outcomes of a test? What decisions are made on the basis of tests? Are tests gating points to forward progress or simply monitoring points?
         1. Types of assessment event and forms of assessment - What kinds of test instruments do you use? Describe one of each type used. Written? Performance? Portfolio?
         2. Assessment procedures – How are tests of each type carried out? Who administers tests? What are the basic rules and procedures for conducting testing? What supplies, materials, references, and tools are provided?
         3. Data recording - Who records what data following a test? How is data used in post-test decision making? Is data used in any way to guide the course of a test in progress? Is data used to influence the order or nature of instructional events? What are the criteria for successful completion of tests? How is test credit recorded?
         4. Data reporting (assessment-related) - What assessment data is recorded and reported? Describe what reports of data are made, to whom, and what the reports contain. Consider the data needs of all stakeholders. What is the purpose of each report?
         5. Data reporting (non-assessment) **-** What non-assessment-related data is recorded and reported? Describe what reports of data are made, to whom, and what the reports contain. Consider the data needs of all stakeholders. What is the purpose of each report?
         6. Data security – Where are tests conducted? Who is present? How is the testing situation controlled so that cheating is eliminated? Where are results stored? To whom are results reported? How are results protected from unauthorized access? (See <http://saas.byu.edu/registrar/records/ferpa.php> )
   5. **Design documentation** – Identify and give a brief description of the contents of any documentation created during the design process. Describe how the documentation resulted from design processes and was used by other design processes.

Points earned: \_\_\_\_\_\_\_\_\_\_\_\_\_ / 15 Rationale:

1. **Design Rationale** – In the sections below describe how abstract design ideas and theoretical principles were applied, resulting in the details of the design described above. Describe how those ideas and principles relate to elements or qualities of your design, making clearer the linkage between abstract design concepts and theories and the details of your product and its operation.
   1. **Content plan –** Give an overview of the nature of the learnables (content) associated with your project. Are there multiple kinds of content the product promotes to the learner? What are they? Describe each kind of knowledge and the extent and depth of detail of each body of content that falls within the scope of your project. Describe both cognitive (subject-matter) bodies of knowledge and meta-cognitive bodies of knowledge within your project’s scope.
      1. Content analysis and capture – Was a formal process used during your project to capture content of the different kinds? What was/were the process(es)? Who performed the analysis? Did you use subject-matter experts (SMEs)? What kind? From where did you get them? How did the SME participate in the analysis process? Describe a typical analysis session. What other sources of content were used? How adequate were they? How did you record the different kinds of content? In what form, graphic, textual, diagrammatic, lists, tables, or a combination? How adequate was your collection of the content? Was the content collected in stages? All at once? At the first of the project? During design? During production?
      2. Content theories– Were there any theories or assumptions about content or content structure that guided the analysis process described above? Which ones? Describe them. Give references to the literature. How well did they serve your purpose? What special skills did they require? Did you invent any specialized approaches of your own? What did you learn about content capture and content structures from performing the analysis? Would you recommend the theory/theories you used to other designers?
      3. Content application with other layers– How did the content you captured become integrated with strategy and linked with message elements and representations presented to learners? How did content map onto all of the different design elements?
      4. Epitome analysis – (Optional, refer to Reigeluth’s Elaboration Theory) Did you analyze the content beyond the form you received from the SME to identify deeper patterns of subject-matter structure? How did you do this? What structures did you find? How did you apply them in the design?
   2. **Strategic plan –** Give an overview of the high-level strategic patterns incorporated into your design. Summarize the patterns by describing and defending your choices in each of the areas below. Describe the influence of the strategic layer of your design on other layers during design. How significant were strategy decisions relative to decisions at other layers? Which layer took precedence? Describe the relationship of the strategy layer on other layers during the operation of instruction.
      1. Strategic use of learning goals – How did you use learning goals strategically to enhance learning? Were goals used explicitly to inform the learner? What form were they given? Was there a research or theoretical basis for doing this? Describe your design reasoning. Cite any literature sources that influenced your decisions.
      2. Strategic use of assessments – How did you use assessments strategically to enhance learning? Was there a research or theoretical basis for doing this? Describe your design reasoning. Cite any literature sources that influenced your decisions.
      3. Strategic use of setting and siting – Did you select and arrange the instructional setting or the plan for siting to influence the effectiveness of the instruction? Was there a research or theoretical basis for doing this? Describe your design reasoning. Cite any literature sources that influenced your decisions.
      4. Strategic choice of social context(s) – Was your plan for assigning the roles and responsibilities of participants during instruction strategic? What principle did you use? Why did you assign roles and responsibilities the way you did? Was there a research or theoretical basis for doing this? Describe your design reasoning. Cite any literature sources that influenced your decisions.
      5. Strategic initiative-sharing – What was the principle of your strategic plan for the sharing of initiative during instruction and shifting initiative patterns? Was there a research or theoretical basis for doing this? Describe your design reasoning. Cite any literature sources that influenced your decisions.
      6. Strategic use of content or performance scope variation – Was the scoping of content and performance for instructional events uniform and consistent across all events, or was there some plan for systematic variation of scope for different events? Were there trends in your scoping plan? Was there a research or theoretical basis for varying scope? Describe your design reasoning. Cite any literature sources that influenced your decisions.
      7. Strategic selection of instructional task/activity – What principles guided your selection of instructional tasks and activities in which to engage the learner with the subject-matter or the performances you hoped the learner would acquire? Was there a research or theoretical basis for doing this? Describe your design reasoning. Cite any literature sources that influenced your decisions.
      8. Strategic augmentation of practice – What kinds of instructional support did you design for learners to benefit from during practice? Did you reduce performance expectations? Did you provide support for some aspect of performance? What was your plan for providing feedback? Did you provide adaptive measures for learners encountering difficulties? Did you provide performance models? Did you provide for practice to be given assistance during performance? Did you support articulation of learnings? What was your research or theoretical basis for doing this? Describe your design reasoning. Cite any literature sources that influenced your decisions.
      9. Strategic support for learning processes– What provisions did you make for the support of self-directed learning strategies? Did you provide occasions for self-assessment? Did you provide reflective time for or encourage reflection? What was your research or theoretical basis for doing this? Describe your design reasoning. Cite any literature sources that influenced your decisions.
      10. Dynamic variation over time– What dynamics of strategic support for learning did you design? What parameters changed, and why did you change them? Was there a research or theoretical basis for your choices? Describe your design reasoning. Cite any literature sources that influenced your decisions.
      11. Strategic selection of interaction products and environments – What physical objects or models did you design to support learning? What leaning/performance environments did you design? Was there a research or theoretical basis for your choices? Describe your design reasoning. Cite any literature sources that influenced your decisions.
      12. Strategic adaptations for multi-cultural fit – Did you make design decisions specifically aimed at outfitting your product for use by learners from across cultures? What provisions did you make for crossing cultural boundaries? Was there a research or theoretical basis for doing this? Describe your design reasoning. Cite any literature sources that influenced your decisions.
      13. Strategic features and qualities aimed at increasing engagement – What provisions did you make for increasing learner engagement? How did you style events, media representations, or other aspects of your design for the purpose of increasing the likelihood the learner would engage more readily and deeply with your product? Was there a research or theoretical basis for your choices? Describe your design reasoning. Cite any literature sources that influenced your decisions.
      14. Strategic use of narrative – Did you deliberately incorporate the technique of narrative into your design to enhance learning? Was there a research or theoretical basis for doing this? Describe your design reasoning. Cite any literature sources that influenced your decisions.
   3. **Control plan –** Summarize the control philosophy or set of control principles that you incorporated into your design.
      1. Language – As you designed the control systems learners would use for your product, were you deliberate in creating an interaction language? Describe your design reasoning. Cite any literature sources that influenced your decisions.
      2. Device – Identify the control devices (e.g., mouse, touch screen, tablet, microphone, physical motion, etc.) by which a learner could act and be recognized by the instruction. Was there a body of principle that guided your selection of learner control devices? Describe your design reasoning. Cite any literature sources that influenced your decisions.
      3. Control Operation – Describe the principles that guided how the controls worked which you included in your design. Describe modes of control use and the hiding of controls, control actions, and considerations of timing and responsiveness. Describe your design reasoning. Cite any literature sources that influenced your decisions.
      4. Layer-related controls – Describe how different sets of controls were made necessary by the functions supplied by other layers of the design. Consider controls over content, strategy, representation, data management or data reporting, and the provision of services to the learner by media-logic. Describe your design reasoning. Cite any literature sources that influenced your decisions.
   4. **Messaging plan –** Describe how your design made use of messaging to increase the conversationality of your instruction. Were you conscious as a designer of using types of messages for specific strategic purposes? Were you conscious of using patterns of messages, particularly in conversational exchanges? What were the rules you used to link messages with representations? Describe your design reasoning. Cite any literature sources that influenced your decisions.
   5. **Representation plan –** Describe how your design used representation channels to communicate your messages. What sensory modalities did you target? Why? What principles did you follow for coordinating and synchronizing the use of the different modalities? What design principles did you think most important within each modality? Describe your design reasoning. Cite any literature sources that influenced your decisions.
   6. **Media-logic plan –** Describe the rules in your design that govern how the events of instruction are administered. Did you depend on the traditional practices of instructors? Did you try to modify any traditional teaching practices by giving instructions or training to instructors? If software was involved in the delivery of instruction, how did you use the software? What was its architecture? How did you fit multiple pieces of software used in delivery together? Did you use patterns of software? How did the software patterns merge with your instructional plans? Did you have to adjust your instructional plans to accommodate what the software could do or what was affordable to program? Describe your design reasoning. Cite any literature sources that influenced your decisions.
   7. **Data management plan –** Describe the capture, analysis, storage, and use of data from instruction. Describe your design reasoning for using or not using data. Cite any literature sources that influenced your decisions.

Points earned: \_\_\_\_\_\_\_\_\_\_\_\_\_ / 10 Rationale:

1. **Production/Implementation/Evaluation plan –** Describe the production plan for the first version of your product.
   1. **Production plan/schedule** – Describe the plan for producing the first version of your product. Identify the physical units that were scheduled for production. Describe the steps in the production process for each class of media element. Show the production schedule, and describe the team of co-workers (if there was any) who participated with you and their roles and responsibilities.
   2. **Implementation plan** – Describe the plan for the implementation of your product in its normal usage. Describe how an instructional site is prepared so that instruction can take place. Identify the number of people it takes to set up and run your instruction. Give job titles and (briefly) the responsibilities they are assigned. If training of instructional personnel must take place before instruction is implemented, describe the training briefly.
   3. **Formative evaluation plan (production)** – Describe the formative evaluation of the instructional product to the point it will be ready for everyday use in normal situations. Identify the questions asked that drive the evaluation. Identify data to be collected and how it is collected. Describe reporting and use of the data.
   4. **Formative evaluation plan (implementation)** – Describe the formative evaluation of the instructional product from the point it is ready for everyday use in normal situations. Identify the questions asked that drive the evaluation. Identify data to be collected and how it is collected. Describe reporting and use of the data.
   5. **Projections** – Describe the plan as originally projected for cost of creating your product in terms of cost, specialized skill, and resources consumed. Describe why you expected that the product would be easily maintained and sustained I use over a period of time. What was the expected lifetime of service of this product? If it had to be changed in any way, how easy or hard was that expected to be? How was it expected that the product could be supplied with necessary operating and maintenance costs over the lifetime, making it sustainable? Where were the necessary money, skill, and resources expected to come from?

Points earned: \_\_\_\_\_\_\_\_\_\_\_\_\_ / 10 Rationale:

1. **Project outcomes** – In the sections that follow describe the unfolding of events beyond design and initial development, from the initial production and try-out of your product, through the different versions which evolved as a result of data-based revisions.
   1. **Production** – Provide an overview of all periods of production, either for the expansion of the original product or for modification.
      1. Production actuals – Give the actual costs incurred during initial production of your product. Did the production cost more or less than expected? Were the necessary skills available in the necessary quantities when they were needed? Was the amount of resources planned for sufficient? How accurate were your original estimates of the time, personnel, and resources that would be needed? What did you learn about making projections for production?
      2. Design changes during initial production – Describe changes to the original design that became necessary during the production of the initial version of your product due to resource shortages, unexpected discoveries, overestimation of the capability of a medium, or other causes.
      3. Production issues/learnings – What lessons did you learn during the initial production of your product that you think may be useful to other designers?
   2. **Implementation** – Describe briefly how well the original implementation plan worked.
      1. Implementation history – Give a brief history of the main events in the first implementation of your product in everyday settings with everyday users. Describe deviations that had to be made from the original implementation plan and the reason for them.
      2. Implementation issues/learnings – What did you learn from implementing your product in everyday use that might be of interest to other designers? Describe unexpected problems encountered and what you learned from them.
   3. **Formative evaluation (Production)** – Describe how well your formative evaluation plan worked during initial production of the product.
      1. Formative evaluation history during production– Give a brief history of the main events in the formative evaluation of your product during production. Describe deviations that had to be made from the original formative evaluation plan (production) and the reason for the deviation.
      2. Formative evaluation (production) issues/learnings– What did you learn from evaluating your product during production that might be of interest to other designers? Describe unexpected problems encountered and what you learned from them.
      3. Adjustments– What adjustments to the product’s design were made due to formative evaluation conducted during the production phase? What was the impact of your learnings on the theoretical base used during original design?
   4. **Formative evaluation (Implementation)** - Describe how well your formative evaluation plan worked during first implementation of the product.
      1. Formative evaluation history during implementation - Give a brief history of the main events in the formative evaluation of your product during the initial implementation. Describe deviations that had to be made from the original formative evaluation plan (implementation) and the reason for the deviation.
      2. Formative evaluation (implementation) issues/learnings - What did you learn from evaluating your product during implementation that might be useful to other designers? Describe unexpected problems encountered and what you learned from them.
      3. Adjustments – What adjustments to the product’s design were made during the implementation phase? What was the impact of that on the theoretical base used during original design?
   5. **Projection actuals** – Describe how well the sustainability factors (cost, skill, and resources) were supplied and how this added to or otherwise impacted the projected lifetime of your product. Were resources, skill, and money supplied In sufficient quantity? If not, what is the projected impact of this on the productive lifetime of your product?

Points earned: \_\_\_\_\_\_\_\_\_\_\_\_\_ / 10 Rationale:

1. **Evolution of the design** – Describe the number of evolutionary steps your product went through, both during formative try-outs and during implementation.
   1. **Design versions** – Describe the main versions used during the evolution of the design across all implementations (versions) of your product.
   2. **Design modifications and rationale** – For each version of your product, describe the changes made and the rationale behind them. Were they based on practical considerations? Theoretical ones?
   3. **Issues/Learnings –** Describe the learnings gleaned from each evolution of your product and its try-out that might be of interest to other designers.

Points earned: \_\_\_\_\_\_\_\_\_\_\_\_\_ / 10 Rationale:

1. **Critique**– Summarize what you have learned from the design-production-implementation-evaluation process.
   1. **Practical insights** – Give a summary of the practical insights you gained that may be useful to other designers (e.g., never yell at your client, don’t storm out of a meeting).
   2. **Design & Development insights** — Give a summary of the design insights you gained that may be useful to other designers.

Analysis — How accurate and complete were your original analyses (e.g., learner, resource, competing products)? What accommodations did you have to make? What would you do differently? What did you learn about your learners?

*Design* — How useful was the process you used? Were the teaching or learning theories that guided your design helpful? How faithfully did you adhere to them? What accommodations did you make?

*Development* — What did you learn about the process of actually developing a product? What technical challenges did you encounter? How did you overcome them?

*Implementation* — How successful was the implementation? What did you learn about the process of evaluation? What would you change? What worked well?

*Evaluation* — How appropriate and complete was the process you used for evaluation for this project? What did you learn about evaluation? (for more complete guidance, read about meta-evaluation (e.g., Stufflebeam))

* 1. **Theoretical insights** - Give a summary of the theoretical insights you gained that may be useful to other designers.

Points earned: \_\_\_\_\_\_\_\_\_\_\_\_\_ / 10 Rationale:

IX: **Presentation**

Document is free of grammatical and orthographic errors, is well-organized, labeled and flows from one section to the next.

Points earned: \_\_\_\_\_\_\_\_\_\_\_\_\_ / 10 Rationale: