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IMPROVING COURSE ASSESSMENTS THROUGH A PRODUCT ASSESSMENT PACKET

by

Catharine Verhaaren

A project submitted to the faculty of

Brigham Young University

In partial fulfillment of the requirement for the degree of

Master of Science

Department of Instructional Psychology & Technology

Brigham Young University

April 2008

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BRIGHAM YOUNG UNIVERSITY

GRADUATE COMMITTEE APPROVAL

Of a project by

Catharine Verhaaren

This project has been read by each member of the following graduate committee and by vote has been found to be satisfactory.

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BRIGHAM YOUNG UNIVERSITY

As chair of the candidate's graduate committee, I have read the thesis of Catharine Verhaaren in its final form and have found that (1) its format, citations, and bibliographical style are consistent and acceptable and fulfill university and department style requirements; (2) its illustrative materials including figures, tables, and charts are in place; and (3) the final manuscript is satisfactory to the graduate committee and is ready for submission to the university library.

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ABSTRACT

IMPROVING COURSE ASSESSMENTS THROUGH A PRODUCT ASSESSMENT PACKET

Catharine Verhaaren

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Master of Science

The purpose of this project was to develop an instructional packet designed to help instructors create effective product assessment projects for use in assessing students' understanding of course material. The specific audience for this packet was instructors of courses offered at Brigham Young University who rely on product assessment to evaluate students' understanding and skills in any content area. The packet I prepared explains the principles of effective product assessment as they are currently understood by assessment specialists and models how to implement these principles during the creation of a product assessment project. I assembled this packet based on the current thought on product assessment and created instructions to guide instructors in developing effective product assessment projects. This instructional packet was given to a few instructors to guide them as they created product assessment projects for their courses. The packet was then improved based on their feedback so

that it can best help instructors create effective product assessment projects as they assess their students.

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Over the course of my time here at BYU, I have been blessed by the support of so many people who helped to make this thesis possible either directly or indirectly. I would like to thank my chair Dr. Sudweeks who helped me through the process of choosing a project and who taught me about assessment and helped me find my interest in it. I would like to thank Dr. Graham who helped me find instructors to test out my instructional packet to see if it would impact their classes for good. I would like to thank Dr. Williams for his assistance with this project. Also I would like to thank Stephen Hulme, Andrea Velasquez, and Kimberly McCollum for their help in testing out my packet.

Most especially, I'd like to thank my friends and colleagues who helped me along the way as I struggled to create this project. I cannot name them all, but I'd like to especially mention Tonya Tripp, Stacey Hoopes, Robert Spencer, and John Gruver who each made this project possible in their own ways. Thank you for everything.

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Chapter 1: Introduction

The Need for Instructional Materials

Many of the instructors at Brigham Young University (BYU) have not been trained as teachers. Instead they are professionals or researchers in a specific field of study without formal training or experience in teaching in a classroom. Other instructors at BYU have been trained as teachers but have limited training in assessing student learning. In either case, these instructors teach their courses in addition to professional or research activities. They have limited background and resources for constructing effective assessment tools for their courses.

Though many instructors use traditional assessment methods that they have developed or have been developed by their departments and can be evaluated using statistical analyses with the help of testing specialists on campus, other teachers' specialty areas require different methods of student assessment. These other methods may include performance assessment and product assessment. Instructors use these alternative assessment methods in an attempt to assess significant student learning outcomes that cannot be displayed using multiple-choice or essay tests. These instructors often create their own product assessments without the benefit of formal training in how to develop valid, reliable assessment procedures. This can lead to instructors relying on ineffective assessments in order to evaluate their students' understandings and skills.

Product assessment can be difficult for trained professionals to perform well and even more difficult for untrained instructors. These instructors would benefit from a product assessment instructional packet, which would explain the key concepts of effective product assessments and model how to use these concepts in developing

product assessment projects to be used in their courses. Instructors could use this packet to guide their attempts to develop and implement product assessment projects that fit their courses.

My project will clearly explain how to effectively assess student products as well as give examples of product assessments to guide instructors as they create their own product assessments. This will help instructors learn what the current standards for product assessments are and how to create good product assessment projects that take these standards into consideration.

Example Courses Where Product Assessment Is Used

An example of instructors who use product assessment with little formal training are the instructors in BYU's Computers for the Humanities (CHum) department. This department offers many courses where students learn to use computer software. For example, a variety of courses focus on *Dreamweaver*, *Adobe InDesign*, *QuarkXPress*, or *Visual Basic*. The instructors of these courses often evaluate students' skills and understanding through student products produced during the course. They require students to develop products using specific software to manifest what they have learned. Though the instructors of these classes may have a thorough knowledge of the software they teach, they often have little training as teachers because they work as professionals using the software and teach courses at BYU on the side. This means that the instructors develop projects that will help students use computer software in ways similar to working professionals, but the instructors do not always know the best way to present these projects to their students and help their students succeed in completing them.

The print design courses are an example of the kinds of courses offered by the CHum department which use product assessment. CHum offers two courses where students learn the principles of document layout and the computer programs used to create print documents. The first one, CHum 230, is a beginning print design course. It introduces students with little or no document design background to basic print design principles using computer layout programs like *QuarkXPress* and *Adobe InDesign*. This course is taught about six times a year by two or three different instructors. This course is required for Editing minors. For many students this course is the only course they ever take in print design.

The second course, CHum 330, is an intermediate print design course. Students are required to have taken CHum 230 before taking this class or have comparable experience with the computer software. Students should have basic document design knowledge and take this course to improve their understanding of design principles through producing print documents. Computer layout programs are used to create these projects. This course is offered once a year during winter semester. This course is not a required course, but allows students interested in print design to continue to develop a portfolio that they can use to apply for print design jobs. Other CHum courses have a similar structure with a beginning and intermediate level where students are evaluated based on their use of the software to produce specific products.

Another example of courses that use product assessments and are taught by instructors with little formal teaching training is a course in technology in the classroom offered by the Instructional Psychology and Technology (IP&T) department to secondary education students. This course helps students who are planning on teaching at a secondary level learn how to use technology in their future

classrooms. This course is usually taught by graduate students in the IP&T department at BYU who may or may not have teaching experience. These students have a faculty mentor to guide them as they teach the course and are required to assess their students using a product assessment project at the end of the course. The graduate students are able to use past product assessment projects or create their own, but neither the faculty mentor nor the graduate students necessarily have any training in product assessment creation or implementation.

These example courses show that many courses at BYU depend on product assessment to measure student achievement of the learning objectives of the course. No other assessment procedure would show instructors as clearly whether or not students have learned a certain skill set. These instructors need to use product assessments in their courses, but many of them do not know how to create effective product assessments. This can lead to frustration on the side of both teachers and students and can keep teachers from effectively assessing their students' skills.

Project Objectives

I created an instructional package designed to give CHum instructors and other instructors at BYU the necessary information, examples, and grading rubrics to help them create effective assessment projects that are consistent with the current standards for product assessments. This instructional package will enable the instructors to create their own projects to fit whatever courses they teach. It should help teachers to create product assessment projects that can be effectively administered and scored.

Project Audience

The audience for this project consists of instructors who use product assessment as the main form of student evaluation in their courses. These instructors would use the instructional materials developed through this project to improve their use of product assessment projects as a means to evaluate their students' knowledge and skills. I focus on CHum instructors and IP&T instructors specifically because I teach courses for the CHum department and am a graduate student in the IP&T program, but other instructors who use product assessments as a significant source of evidence for evaluating student performance could benefit from this project.

Although instructors are the primary audience for the instructional materials developed in this project, I believe that the students in the courses taught by these instructors will also benefit from this project. I hope the students will find that the product assessment projects created using this packet are understandable and achievable, and that the projects increase their learning. Students will be directly impacted by the quality of the product assessment projects their instructors develop. As instructors improve their product assessments, students should feel more able to understand and complete course projects and they should feel that the projects are meaningful to their learning.

Chapter 2: Literature Review

Assessment

Assessing students' ability to meet course objectives is one of every instructor's main responsibilities. But many instructors have not been taught good assessment techniques. Stiggins and Conklin (1992) explain that many "teachers have not been taught how to evaluate their test items, take necessary steps to improve quality, or accurately set criterion levels for student performance"(p. 16). Instructors often rely on their own experiences of being assessed and the assessments that their colleagues use to develop their own assessments. Some instructors intuitively design good assessments, but many instructors need training and materials to improve the assessments they administer to their students.

Training instructors to improve their assessments begins with identifying what qualities make an assessment good. Stiggins (2001) explains that "sound assessments satisfy five specific quality standards: (1) clear targets; (2) focused purpose; (3) proper method; (4) sound sampling; and (5) accurate and free from bias and distortion" (p. 19–20). When instructors understand what these quality standards are, they can start to develop assessments that effectively assess their students in the areas that the teachers want to assess them.

Beyond just understanding the qualities of good assessments, assessing students is complicated by the variety of assessment methods that can be used to perform an assessment. Choosing the best method to assess a particular skill or knowledge domain can be difficult for teachers who rely on their own experience to develop assessments. Even if these teachers do try to assess their students using methods they were not assessed with themselves, they often do not know how to use these methods effectively.

Product Assessment

One of the many assessment methods that teachers use to assess their students is product assessment. This method allows teachers to assess students based on their ability to create a product that meets certain standards. Teachers use this product as the basis for their assessment of students' abilities. Product assessment is a form of performance assessment. In performance assessment teachers base their assessment of students on the performance of a specific task. In product assessment the process of performing the task is not evaluated directly. Instead, the product or outcome of the task is the focus of the evaluation.

Product assessments and performance assessments are often seen as authentic assessments because they can mimic tasks that students would perform in everyday life or as part of a career. Taggart and Wood (1998) explain that "authentic assessment engages students in tasks that demonstrate knowledge and skills closely linked to real-life experiences" (p. 57). This creates meaningful assessment experiences where "students . . . respond to a small number of more significant tasks rather than respond to a large number of less significant tasks" (Burke, 1999, p. 77). Tasks that simulate life experiences are often more meaningful to the students who are asked to complete them. This makes product assessments an attractive assessment option for instructors.

Benefits of product assessment. Many teachers like to use product assessments because they feel that these assessments create experiences that are meaningful to students as well as helping teachers assess skills that are hard to assess using other assessment methods. Burke (1999) explains that performance assessments "provide a systematic way to evaluate skills and procedural knowledge that cannot be measured effectively with multiple-choice formats" (p. 81). Similarly, product assessments can

help teachers evaluate students' skills and knowledge used in creating specific kinds of products beyond knowledge of how a product would be created that is tested in a paper-pencil setting.

Challenges to using product assessment. Despite the advantages to using product assessments, product assessments present challenges as well. First, teachers have to carefully choose the types of products that students will create for their assessments. As with any kind of assessment, the tasks presented to students should be meaningful and require the student to display the depth of their understanding of the knowledge or skills being assessed. This is even more important than the specific tasks chosen for a multiple-choice test because there are significantly fewer products used to assess a student's ability than questions on a multiple-choice test. In other words, a product assessment task must allow teachers to assess students' abilities to create any products similar to the actual product assigned in the task.

One major concern for researchers of performance assessments is that the tasks students are asked to complete may not reliably predict students' performance on similar tasks. Jay Parkes (2001) explains that this variability in students performance across multiple tasks is due to a person-by-task interaction. This "occurs when several tasks rank the same participants in different orders based on performance. That is, each participant does not perform equally well across the set of tasks" (Parkes, 2001, p. 144). No clear solution to this problem has been identified, but teachers can help increase reliability of product assessments by giving their students multiple assessment tasks. Then teachers can average across task scores to discover students' actual abilities to complete certain tasks. But this can take too much time and other resources to be feasible for most teachers. Parkes (2001) recommends an alternative solution. He

believes that the unpredictability of students' performances comes from an inability to transfer knowledge. This occurs when "students . . . can do a set of problems and seemingly understand a principle, and yet they fail to employ that principle or solution in a novel situation" (p. 146). Parkes believes that teachers should include in their curriculum a focus on how students can use specific skills learned in one context in a new context. This will improve the reliability of a single product assessment to predict students' performances of general skills.

A second challenge to using product assessments is that teachers have to design assessment tasks that students can complete within a reasonable amount of time. Product assessment tasks tend to take longer than completing a multiple-choice test and that time must be scheduled so that students have enough time to complete the task well.

A third challenge is that teachers have to plan time to grade the products that students create. This often takes more time than grading written tests, especially if teachers use machines that grade written tests electronically.

Creating Appropriate Product Assessments

Brookhart (1993) explains that "all good performance assessments need four basic parts. The first is to have a clear purpose, stating what you want the students to be able to do, and why and how this goal fits with the instruction. . . . Second, . . . [is] an exercise or assignment that gives students an opportunity to demonstrate the performance. Third, . . . [is that the] criteria to be used for evaluation are clear and relevant to the purpose. Fourth, . . . [is to] provide understandable feedback to the student" (p. 40). These four aspects of performance assessment are some of the most complex aspects of creating good product assessments. Teachers must be able to show

students the purpose for creating the product and what the criteria for a good product are. Teachers must choose a product for students to create that allows students to display the knowledge and skills they have been taught. Teachers must evaluate student products based on the criteria they gave the students when they began the task. And teachers must give students feedback on their products in a way that helps students understand how close their product is to reaching the criteria for a good product.

Another aspect of good performance assessments is the teacher's presentation of the assessment task to the students. If the assessment is not clearly presented to the students, no matter how well-constructed the assessment is, it will not effectively assess students skills or teach students to assess the quality of their own work. Nancy Harman (1999) explains that "students must understand the rules of the game before they can successfully participate. . . . By explaining and showing exemplary learning, students can become focused upon successful outcomes" (p. 37). Product assessment task requirements can be especially difficult for students to understand. Clearly presenting what students need to do in order to successfully complete the task is an essential component to an effective product assessment.

In addition to quality standards designed specifically for product assessments, Stiggins (2001) adds the quality standards that apply to every assessment method. He reminds teachers that "you must begin assessment development with a clear purpose and focused vision of the achievement you are assessing. Then you must select a proper target, devise a proper sample of performance tasks, and control for all relevant sources of bias" (p. 186). These standards can be applied to every assessment method that teachers use to assess their students' knowledge and skills. When these general

assessment standards are combined with the standards for product assessments, we have eight standards for quality product assessments. These standards include: (a) "a clear purpose," (b) "a proper target," (c) appropriate assessment tasks, (d) clear and relevant evaluation criteria, (e) "a proper sample of . . . tasks," (f) controls for bias, (g) a clear presentation of the task to the students, and (h) an appropriate tool for giving students feedback (Brookhart, 1993; Harman, 1999; Stiggins, 2001).

The purpose of the assessment. The first step in developing a product assessment is to clearly specify the purpose for creating the assessment. Teachers can ask themselves if the results of the assessment will be used formatively or summatively. Stiggins (2001) explains "it is impossible to develop a quality assessment unless and until you know how you will use the results it produces" (p. 21). He suggests that teachers or other assessment developers ask the question: "Does the developer understand the intended uses and has the developer taken users' needs into account in developing and implementing the assessment?" (Stiggins, 2001, p.21).

Teachers need to identify how they will use the information provided by the assessment and also how students will be impacted by the assessment. Once teachers know if they will use the assessment as a formative or summative evaluation of a specific set of skills or knowledge and what impact the assessment will have on a student's standing in their class, the teacher can begin to design an appropriate assessment. The teacher should also consider students' interaction with the assessment and what implications students might read into the assessment itself and the outcomes of the assessment.

The assessment target. What Brookhart calls "a clear purpose," Stiggins calls "clear achievement targets" (Brookhart, 1993, p. 40; Stiggins, 2001, p. 21). Both

experts refer to the same quality in effective assessments. Brookhart explains that assessment developers must "have a clear purpose, stating what you want the students to be able to do, and why and how this goal fits with the instruction" (Brookhart, 1993, p. 40). Stiggins (2001) echoes this when he says "those who develop or select classroom assessments begin that process with a refined sense of the specific knowledge, reasoning, skill, and product expectations they hold for their students" (p. 21). Teachers cannot produce effective assessments if they have not clarified what knowledge or skill is being assessed and how students can show that they have mastered that knowledge or skill.

In order to design a good assessment, teachers must connect the skills that they have taught their students with the skills that students should display as a result of the assessment. Johnson (1996) explains that "a crucial starting point in designing assessments is to begin with a clear picture of what it is we want students to know and be able to do" (p. 9). If the teacher does not clearly understand the task, the task will probably not measure the skills that the teacher wants to assess. Teachers must make clear to themselves and their students what constitutes displaying mastery of a certain set of skills or knowledge. Assessments should help students to display that mastery.

Assessment tasks. In order to present the task clearly to the students, teachers must know what task they want their students to perform and why. The assessment task is what gives students the opportunity to display their mastery of the assessment target or as Brookhart (1993) defined it, an assessment task is "an exercise or assignment that gives students an opportunity to demonstrate the performance" that the teacher identified as the target of the assessment (p. 40). Kay Burke (1999) states that "it is important to select or create performance tasks that are 'rich' in terms of the

criteria which meet and require an in-depth understanding of key concepts, knowledge, and skills" (p. 83). Teachers need to choose tasks that allow students to display the knowledge and skills that the teacher is trying to assess.

Tasks must also allow teachers to "accurately generaliz[e] a student's capabilities" (Burke, 1999, p. 82). The tasks that teachers use to assess their students knowledge must be tasks that require general knowledge that could be applied to a variety of tasks not specific knowledge that is only used in the particular task being assessed. The grades teachers give students are measures of students' abilities in a general content area, product assessment tasks must be generalizable so that teachers grades are a good measure of students' general abilities not just their ability to produce a single product.

Evaluation criteria. In order to create tasks that allow teachers to measure students' general abilities in a content area, teachers need to have well-defined criteria that both they and the students can use to judge the resulting products. This is what Brookhart(1993) describes when she says that "criteria to be used for evaluation [should be] clear and relevant to the purpose" (p.40). Burke (2006) emphasizes the importance of such criteria by explaining that "without clear criteria, judging a performance is subjective and somewhat arbitrary" (p. 40) Both students and teachers must understand the criteria used to score a product in order for students to understand the scores they receive on their assessments and teachers to give standardized scores across products. Burke (2006) further explains that "criteria are the heart and soul of assessment because they specify qualities of excellence so that all the stakeholders know the target goals" (p. 41). Well-defined criteria help both teachers and students use product assessments successfully.

One way of presenting criteria to students is to have them help develop the criteria that teachers will use to assess their products. Burke (1999) believes that this strategy is "one of the most powerful instructional tools to help students internalize the criteria and recognize quality work is to have students develop the criteria for performance assessment with the teacher" (p. 89) Whether or not this method is used to help students understand the criteria they will be judged by, teachers must be sure to clearly explain and illustrate the criteria they will use to judge students' products.

The sample of tasks. In product assessment, as with every other form of assessment, Stiggins reminds us that there must be enough tasks in order for the assessor to make an accurate judgment about student abilities being assessed. Because tasks vary in difficulty, students should be presented with multiple tasks that assess their skill level. Taking the average score across multiple tasks gives teachers a better basis for generalizing students' actual skill levels. Stiggins explains that "a sound assessment offers a representative sample that is large enough to yield confident conclusions about how the respondent would have done given all possible exercises." (Stiggins, 2001, p. 22) Since many product assessment tasks are time consuming to create, perform, and grade, teachers must carefully construct assessments in order to gather enough evidence for their rating of students' abilities.

Product assessments can represent an appropriate sample size, if they are properly constructed. Developers of product assessments must be sure that "the tasks sample appropriately from the possible breadth and depth of the skill or body of knowledge to be applied" (Stiggins, 2001, p. 332). Teachers can create tasks with multiple parts that allow students to display a broad range of abilities and depth of

ability in specific areas. This enables students to display their abilities in many different skill areas but as a part of one main task.

Controls for bias. Any assessment can introduce sources of bias which advantage some students and disadvantage others. Product assessment is no exception. Stiggins (2001) cautions teachers to "design, develop, and use assessments in ways that permit you to control for all sources of bias and distortion that can cause your results to misrepresent real student achievement." (p. 22) To help teachers do this, Stiggins (2001) recommends that teachers try to "understand the social and linguistic backgrounds of your students; seek advice of qualified reviewers in revising and selecting tasks" (p. 221). As teachers interact with their students, they can watch for cultural or linguistic differences among them. Then when teachers are creating or revising assessment tasks, they can use language and concepts that their particular students will be familiar with. Teachers can also take time in class to explain language and concepts that may be unfamiliar to students of different cultural backgrounds in order to clarify the assessments teachers will use in their classrooms.

Presentation of the assessment task to students. One of the key components to a successful product assessment is presenting a meaningful assessment task to students with criteria explaining what makes a good product which fulfills the expectations given for the task. Nancy Harman (1999) explains that "students must understand the rules of the game before they can successfully participate. . . . By explaining and showing exemplary learning, students can become focused upon successful outcomes. The criteria for excellence then becomes a benchmark for students to evaluate their own level of comprehension and the quality of their work" (p. 37). In order to present a meaningful task with "criteria for excellence," teachers must understand how the task

they have chosen helps students display the knowledge and skills they have learned in the class and what criteria an excellent product fulfills. Then the teacher can present those criteria to students along with examples of excellent products. This will help students know what they have been asked to create and how to ensure its quality.

Evaluation and feedback dissemination tools. One method for explaining scoring criteria to students is for teachers to present a rubric for scoring products at the same time that they present the assessment task. Kay Burke (2006) explains rubrics as "a scoring guide designed to provide constructive feedback to students by helping them think more clearly about the characteristics of quality work" (p. 126). Rubrics do this by "identify[ing] and clarify[ing] specific performance expectations and provid[ing] attainment goals" (Custer qtd in Taggart & Wood, 1996, p. 58).

To create effective rubrics, teachers must include "the following components: an identified behavior within an assessment task; [a] quality or performance standard; descriptors of the desired standard; and a scale to be used in rating student performance" (Taggart & Wood, 1998, p. 58–59). These components allow both teachers and students to rate a product against an identified standard. This helps students understand the scores they receive on their products and helps them understand how they can improve their products and their scores. "Tomlinson and Edison (2003) believe that the most effective rubrics help students explore qualitative differences in their work" (Burke, 2006, p. 129). This means that students understand why they have received the scores their teachers have given them and they understand how improve that score through improving the quality of their product.

Another method for explaining criteria is to present a checklist to students as they begin their assessment task. Checklists remind teachers and students of the

different criteria that need to be present in a project, though they do not measure how well a criterion was implemented in a project. The reminder of all the criteria to be considered helps both students and teachers more accurately assess the quality of a project. Burke (2006) explains that "a criteria checklist takes much of the guesswork out of the grading process and helps 'objectify' even the most creative and subjective assignments" (p. 57). Though a checklist does not allow teachers to rate students on compliance with standards like a rubric does, checklists can help teachers clearly present criteria that they will use to score students' products.

Summary and Implications of Literature

Product assessment is a good method for assessing skills and knowledge that are difficult to assess with paper-and-pencil tests. This makes it a good fit for assessing students' ability to apply concepts, principles, procedures, and criteria that they have learned in courses like CHum's print design courses and IP&T's technology in the classroom courses. But effective product assessment tasks are challenging to create. The task itself must allow students to display appropriate knowledge and skills; the criteria that will be used to evaluate the product must be clear and well-defined; and teachers must be able to present the task and the scoring criteria to students effectively. These challenges are difficult to overcome and may not even be recognized by the untrained professionals teaching print design in BYU's CHum department or IP&T graduate students introducing technological aides to undergraduate education students. In order to avoid many errors in assessing students' products, a product assessment instructional packet would help teachers understand what an effective product assessment project is and what clear evaluation criteria are and how these can be successfully presented to their students.

Chapter 3: Method

To create the instructional packet described in this project, I looked at many examples of product assessment exercises provided by experts such as Richard Stiggins and others. I read their evaluations of these sample exercises and I read the standards they used to evaluate the exercises. I also read literature about developing product assessment exercises and identified eight steps or standards that could be used to judge if a product assessment was effective. Then I developed a product assessment project for the content area that I teach. I used this product assessment as an example for other instructors as they develop their own exercises. I then wrote an introduction to product assessment that identifies the eight standards I found for evaluating product assessment exercises. Then I wrote step-by-step guidelines to creating a product assessment project. I used the standards I found in the literature and my own experience in creating a product assessment that conforms to those standards to develop the instructional packet that I gave the instructors who participated in this study.

The stakeholders for this instructional packet are the instructors who use it, their students, the departments where the instructors work, the parents of the students in the course who care about their children's success, and me, the creator of the packet. Each of these stakeholders will benefit from the evaluation of this packet because the better the instructional packet is, the more easily instructors will be able to access the information in the packet and implement it in their courses. This will improve the projects given to students in those instructors' courses, which will help students to better understand the requirements they need to meet to succeed in the course. Improved projects should also help instructors better assess their students' skill

levels and their students' needs for further instruction. The departments will be benefited as students better understand what they need to do to succeed and have a more positive classroom experience. The parents of the students will also be benefited as students have more positive classroom experiences.

Instructional Materials

The instructional materials that were created include an instructional packet that explains how to create effective product assessments. The four main sections of this packet include (a) an introduction to product assessment, (b) instructions on creating a product assessment project, (c) a step-by-step example of the creation of a product assessment, and (d) sample product assessment projects from a print document design course. I designed this packet to be a concise explanation to busy instructors about the importance of creating effective product assessments and a short guide to help the instructors do so.

The first section of the packet is an introduction to product assessment. In this section I summarized my review of literature into a few paragraphs that highlight the most important keys to creating effective product assessment projects. This summary includes an overview of the eight standards for effective product assessments that I found as I read the literature on product assessments. I wanted to introduce instructors to each of the eight standards so that they would be familiar with the most important aspects that would be addressed in creating product assessment projects. I tried not to overwhelm the instructors with the details that I found as I reviewed literature on product assessments, but to clearly present the main ideas that seemed most significant in the current literature.

The next section is a set of instructions for creating product assessments. These instructions are a short list of eight steps to creating a product assessment project. These eight steps correspond to the eight standards for effective product assessments that I found while researching product assessment creation and implementation.

Following that is a step-by-step example of creating a product assessment. This section shows the process that I went through as I created a product assessment for one of my print design classes while implementing the eight standards of product assessment in the assessments for the courses I teach. In this section I explain the content that I am assessing and my thinking as I went through the process of deciding how to assess my students' knowledge and skill levels in relation to that content. I tried to explain the challenges I found as I designed my assessment project and the solutions that I implemented to overcome those challenges.

The final section of the instructional packet contains three examples of different types of product assessments. These product assessment types include a simple checklist presentation for the assessment, a scored checklist presentation for the assessment, and a rubric presentation for the assessment. I explain how these examples correspond to the eight standards for product assessments and explain the strengths and weaknesses of each product assessment project type.

Each of these sections are short introductions to creating effective product assessment projects. My purpose in creating the packet with these sections was to help busy instructors better understand the general principles behind product assessment and create better product assessment projects to evaluate their students. Hopefully this packet will spark instructors' interest in understanding how to create assessments that best evaluate their students' abilities. This packet was meant to be short so that it does

not add too much to instructors' already busy schedules. I wanted the information to be as accessible as possible so that instructors would be able to easily implement these principles in their courses.

This instructional packet that I developed based on my research in product assessment and organized to accommodate the realities of teaching at a university is the evaluand in this research project. The objectives of this packet are to inform instructors of the characteristics of effective product assessments as identified by experts in assessment and to help instructors create product assessment projects to be used in their courses that contain these characteristics. The instructional packet is meant to be studied before instructors create product assessment projects and then used as a reference and a guide as the instructor creates his or her own product assessment project.

Participants

The performance assessment template was given to three IP&T 286 instructors. All three were master's students in Instructional Psychology and Technology. They do not necessarily have any teaching background or a background in product assessment. They do have a faculty mentor to help them as they learn to teach their classes.

The students who completed the performance assessment project were undergraduate college students ranging from freshmen to seniors. They were students in the McKay School of Education, at Brigham Young University who were enrolled in the IP&T 286 courses during Fall semester 2007. These students took these courses as part of their graduation requirements to become secondary education teachers.

Assessment Instruments

The information needed by the stakeholders can be summarized in two main questions:

1. Does the instructional packet help instructors create product assessment projects which adhere to the characteristics for effective product assessment found in the literature? and
2. Is the information in the instructional packet presented so that instructors can easily understand the concepts that are explained and implement them in their courses? This study addressed both of these questions.

In order to answer these two questions, I decided that I needed to find out about the experiences of both the instructors who used the packet to create a product assessment project and the students who were evaluated using that. The instructional packet was created to directly affect instructors and their experience creating product assessment projects, but this experience affects students and their experience being evaluated through completing those projects. Both groups seemed to be important in evaluating the effectiveness of the instructional packet.

Instructors' survey. To evaluate the experiences of both of these groups I created two surveys. One survey was created to assess each instructor's experience using the product assessment packet. The instructors' surveys consisted of 27 questions divided into two sections. The first section referred to the instructors' experiences creating and presenting their own product assessment. The second section referred to the instructors' experiences using the product assessment packet. I chose these questions to help me understand if the instructional packet presented information accessibly to the instructors and if they were able to implement the concepts presented in the packet

in their own product assessment projects. In each of these sections were questions with a rating scale for each question. Instructors marked where on a continuum they felt their assessments or the instructional packet fell. The questions and continuum corresponds to the eight standards for effective product assessment projects found in the literature on product assessment. I used these standards as a way to measure the instructors' assessments and my packet against the most current expectations for product assessment projects.

Students' survey. To evaluate students' experience being assessed by an assessment created with the use of this packet, I created a different survey. The students' survey consisted of 11 questions that referred to their experience having the assessment presented to them and completing the assessment. The questions on this survey also included at rating scale for students to rate the product assessment project that they completed in their course. Again these questions and the rating scale continuums correspond to the eight standards for effective product assessment projects. This helped me understand whether or not my product assessment template met the standards for effective product assessments.

Procedures

I gave my product assessment packet to three IP&T 286 instructors and asked them to use the packet to create a product assessment project to be used in their course. I met with the instructors to make sure they understood the packet and that they were supposed to use the packet to create a product assessment project. Other than these brief meetings, the instructors used the packet without instruction as they would if it were given them as a reference material to a new instructor on campus. I asked the instructors to use the project they developed to assess their students. I also

asked them to evaluate the instructional packet and their experience assessing their students with the product assessment project they developed using the instructional packet. I met with the instructors again to find a time to meet with them and their students and give them surveys to help me understand their experiences with product assessment for the semester. I came to each class on their final exam day and gave the students and instructors their surveys at those times. The students filled out the survey and returned it to me before participating in the final activities for the course.

Each instructor had about 30 to 40 students in the section of the course they taught. This means that about 90 students rated their experience with the product assessment projects based on the eight characteristics and three instructors rated their experience with the instructional packet. These responses were used to evaluate the instructional packets effectiveness in all eight areas.

Analysis

After I received the survey responses, I compiled and analyzed them by computing the mean and standard deviation for each question. This helped me identify the strengths and weakness of the projects with regard to the eight characteristics of effective product assessments. Student comments were used to support the conclusions drawn from this analysis.

Chapter 4: Results

Student Ratings

The purpose for collecting and analyzing responses from the students was to understand where the instructional packet was weak in helping instructors understand and implement product assessment projects that conform to the eight standards found in the current literature on creating and implementing product assessments. To do this, I gave both instructors and their students surveys about their experience with product assessment. For every question on the survey, the participants rated the standard being addressed from 1 (noncompliance with the standard for product assessments being addressed in that question) to 5 (excellent implementation of the standard for product assessments being addressed). I compiled the students' answers from each class together to assess the degree to which the student users believed the assessment project they completed adhered to the standards for product assessments. The students' answers are summarized in Table 1.

The students' responses indicate that though most students rated each project high in every category, every rating category was marked by at least one student for every question. This means every rating category was useful to students in describing their experience with the product assessment project.

Table 1 also shows that as a whole the projects were rated as above average in implementing each standard. The questions where the projects were rated the lowest were item 5 and item 7. These questions assessed the quality of the presentation of the product assessment project and the quality of the examples of products that fulfill the requirements for the product assessment project.

Table 1

Distribution of Students' Responses to Items 1–11 (n=90)

	Rating Categories							
Item	1	2	3	4	5	Omitted	M	SD
1	1.08%	3.23%	21.51%	39.78%	34.41%	0.00%	4.03	0.89
2	3.23%	2.15%	27.96%	48.39%	17.20%	1.08%	3.75	0.89
3	6.45%	5.38%	33.33%	37.63%	17.20%	0.00%	3.54	1.05
4	3.23%	8.60%	35.48%	26.88%	25.81%	0.00%	3.63	1.06
5	6.45%	10.75%	36.56%	30.11%	16.13%	0.00%	3.39	1.08
6	2.15%	9.68%	36.56%	31.18%	19.35%	1.08%	3.57	0.99
7	4.30%	13.98%	32.26%	34.41%	12.90%	2.15%	3.39	1.03
8	1.08%	5.38%	23.66%	38.71%	25.81%	5.38%	3.88	0.92
9	2.15%	10.75%	21.51%	23.66%	35.48%	6.45%	3.85	1.13
10	7.53%	7.53%	27.96%	36.56%	13.98%	6.45%	3.45	1.10
11	2.15%	6.45%	37.63%	32.26%	15.05%	6.45%	3.55	0.93

Instructor Ratings

The instructors' survey consisted of 27 questions. These questions assessed both the assessment project they created while using the instructional packet and their experience using the instructional packet. Like the students' survey, this survey gave instructors a rating scale for each question. Instructors rated the standard being addressed from 1 (noncompliance with the standard for product assessments being addressed in that question) to 5 (excellent implementation of the standard for product assessments being addressed). I compiled the data from each instructor's survey into two tables, Table 2 and Table 3.

Table 2 shows the ratings that the instructors gave the product assessment project they developed. They rated this project after their students had completed the project. This data shows that the instructors only used the top three categories

throughout the survey. This may be because only three instructors completed the survey. The instructors' survey and the students' survey were constructed similarly, so since the students used every rating category for every question, more instructors may have used a broader range of categories for their survey answers as well.

Table 2

Instructor Responses to the Survey Section about the Project They Created Using the Instructional Packet (n=3)

	Item														
Instructor	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	5	5	5	5	5	4	5	5	3	3	5	4		5	4
2	5	5	4	5	5	4	5	3	3	3	3	4	5	4	4
3	5	5	4	5	4	5	3	5	3	3	4	5	5	3	3
M	5	5	4.3	5	4.7	4.3	4.3	4.3	3	3	4	4.3	5	4	3.7
SD	0	0	0.6	0	0.6	0.6	1.2	1.2	0	0	1	0.6	0	1	0.6

The teachers rated their product assessment project as meeting most standards well. The questions where the instructors rated their projects the lowest were questions 9, 10, and 15. These questions assessed the quality of students' understanding of the project and the standards for a quality project when the project was presented to them.

Table 3

Instructor Responses to the Survey Section about the Instructional Packet

	Item											
Instructor	1	2	3	4	5	6	7	8	9	10	11	12
1	4	5	5	5	5	5	5	5	4	5	5	5
2	4	4	4	4	4	4	3	4	3	3	3	3
3	5	5	5				5	5	5	5	5	5
M	4.3	4.7	4.7	4.5	4.5	4.5	4.3	4. 7	4	4. 3	4. 3	4. 3
SD	0.6	0.6	0.6	0.7	0.7	0.7	1.2	0.6	1	1.2	1.2	1.2

Table 3 shows the ratings that the instructors gave the instructional packet after using it to create their own product assessment projects. Again the instructors never used the lowest two ratings for any question. Since this survey was constructed like the other two surveys, I believe that if more instructors had been given this survey, more of the categories would have been used.

This section of the instructors' survey focused on how accessible and easy to manipulate the instructional packet was for the instructors as they used it to create their product assessment projects. Table 3 shows that though the instructional packet was rated high overall, there were areas where the packet was weaker than others. The instructors rated the packet lowest on question 9. This question assessed how easily instructors could explain their new product assessment project to their students. The other questions where instructors indicated the packet was weak were questions 1, 7, 10, 11, and 12. These questions addressed the clarity of the instructions given in the packet, the comprehensiveness of the packet, grading the new projects, creating projects that are fair to all students, and the clarity of the feedback given to students about their completed projects.

Overall both the instructors and the students felt that the presentation of the new product assessment projects was the weakest area in their experience giving or completing the projects. The instructors also felt that the packet did not adequately explain how to clearly present their product assessment projects.

Findings

Since the instructional packet was created based on the eight standards for product assessment that I found in the literature, looking at how well students and instructors felt the packet performed in all eight areas will be helpful in understanding

how well the instructional packet prepared instructors to create effective product assessment projects.

The purpose of the assessment. The first question on the instructors' survey assessed the purpose of the assessment project. Instructors were asked if they knew whether their assessment project was formative or summative and if they understood why they were assigning the project. All the instructors rated their experience as a 5 or that "[they] knew exactly what the purpose of the assessment task was and why [they were] assigning it." This indicates that the instructional packet clearly explained the different purposes for assessment projects, such as formative or summative, and that each instructor understood the purpose for assigning their assessment project.

The assessment target. The second and third questions on the instructors' survey assessed the effectiveness of the assessment target. The second question asked instructors if they understood which skills or knowledge was being assessed in their assessment project and if the project was assessing important skills. Each instructor rated their experience as a 5 or that "[they] understood which skills or knowledge were being assessed by the task and they seemed to cover the important skills and knowledge and to avoid irrelevant skills and knowledge." This indicates that the packet helped instructors understand that assessment projects should be created to assess specific skills and knowledge and that these skills or knowledge should be important in the discipline being taught in the course.

The third question asked instructors about their understanding of how students could show mastery of the skills being assessed in the project. One instructor was confident in this area and marked that "[he or she] understood how students could display mastery of each skill or knowledge being assessed." The other two instructors

rated their experience as a 4 or between the above statement and that "[they] understood what mastery of some skills or knowledge being assessed was but some skills or knowledge were still unclear as to how they would be displayed as having been mastered." These ratings indicate that the packet could have emphasized more the importance of understanding exactly how mastery of a skill would be displayed by students.

Assessment tasks. Questions 4 and 5 on the instructors' survey and question one on the students' survey assessed the quality of the assessment tasks contained in the project. Question 4 assessed the relevance of the skills being assessed. Each instructor rated their experience as a 5 or that "the assessment task was worthwhile because the task developed skills that were useful as the students took the course or would be in the future if students pursued a career in this field." This indicates that the packet clearly explained the importance of creating a project that assesses skills relevant to the student.

Question 1 on the students' survey asks a similar question by asking students to rate the relevance of the skills assessed by the project they completed. Students rated the relevance of the skills as a 4.03 or between "the assessment project was somewhat relevant because I can use some of the skills we practiced now or in the future but many of the skills seemed useless outside of this assessment" and "the assessment project was worthwhile because the task developed skills that are useful now or would be in the future if I pursued a career in this field." Students did not feel that the skills assessed were as relevant as the instructors felt they were, but on the whole, students felt like the skills were very relevant to them. I believe this relates more to the nature of the course than the instructional packet. Some students felt that this course "was a

waste of . . . time" and that they already knew the skills taught in the course. But most students were preparing to teach secondary education and felt that the skills they learned in their course were preparing them to teach in the future. This feeling about the course would impact students' views of the relevance of the skills being assessed in the project.

The fifth question in the instructors' survey examined the generalizability of the skills being assessed. Two instructors felt that "the task is generalizable because the skills used in the task could be used in a variety of other tasks." One instructor felt that the project was between that and "the task seems somewhat relevant because some of the skills tested could be used in other tasks but many of the skills seem only useful in this one task." This indicates that in many projects some skills needed for the project are specialized to that certain type of project. But the most important skills needed for the project should be generalizable to other projects that students are likely to encounter in the future. Overall it seems that the packet helped instructors create projects where most skills are transferable to a broad spectrum of tasks.

Evaluation criteria. Question 6 on the instructors' survey and question two on the students' survey assessed the relevance of the evaluation criteria to creating a successful product. One of the instructors rated the evaluation criteria as a 5 or "the evaluation criteria were relevant and all seemed to contribute to creating a successful product." The other two instructors rated their evaluation criteria as a 4 or between the above response and "the evaluation criteria were somewhat relevant but some criteria seemed unrelated to creating a successful product." This indicates that the instructors understood the importance of relevant evaluation criteria but still were not sure that all of their criteria were important to a successful project. The students rated

the course between the two responses recorded above, but they rated the course at a 3.75. This indicates that though most students believed that most of the criteria were relevant to creating a successful project, at least some criteria seemed irrelevant to the students. This could be because they did not completely understand their instructor's vision for the project. More explanation of how instructors can relate evaluation criteria to the project as they are presenting the project could be included in the packet to help instructors better explain to their students how each evaluation criterion adds to an effective product.

The sample of tasks. Question 7 on the instructors' survey and Question 3 on the students' survey examines whether the project gave students enough tasks to show instructors sufficient evidence of their skill level for instructors to make accurate assessments of each student's skills or knowledge. Two instructors rated their project as a 5 or that "the tasks gave me enough evidence of the students' skills for me to accurately evaluate their skills being assessed in the tasks." One instructor rated his or her project as a 3 or that "the tasks gave me some evidence of the skills that were being assessed but more areas could have been assessed which would have given me a better understanding of their true skill levels." This indicates that while most instructors were satisfied with the evidence of skills and knowledge elucidated by their project, one instructor was concerned that their project did not elucidate enough evidence to make an accurate assessment.

The students gave this item a mean rating of 3.54. They were also concerned that the project did not provide enough evidence for an accurate assessment of their skill levels. This concern may connect to the evaluation criteria being used to assess the project. These criteria may not take into consideration some important skills that

students should be assessed on or they may take into consideration unimportant skills that do not give evidence of student learning. In either case students do not receive enough opportunities to display key skills learned in the course. The packet should be changed to emphasize the importance of giving students enough opportunities to display their skills that an accurate assessment of students' skill levels can be achieved. One way teachers can do this is by giving students several smaller projects instead of only one large project.

Controls for bias. Question 7 of the instructors' survey and question 4 of the students' survey assessed whether the project given to the students gave some students an unfair advantage in completing it successfully. Two instructors rated their project as a 5 or that "the task was fair to all students and did not give any specific students an advantage in understanding or completing the projects." One instructor rated their project as a 3 or that "the task seemed pretty fair to most students, but a few students seemed unfairly advantaged or disadvantaged." This instructor wrote "I had 1 blind student and 1 ESL student." This indicates that instructors with more homogenous classes felt that their projects were unbiased, but when classes had students with specialized needs, instructors realized that the projects were biased. Though learning to include students with specialized needs is an important aspect of creating effective product assessments, it is beyond the scope of my packet which is intended to help instructors understand the basic building blocks for effective product assessment. Instructors should turn to literature about including special needs students in their courses for information about how to make their projects less biased for those students.

The students rated their projects as 3.63 on the average, again between the two responses listed above. Students do not seem to have been affected by the special

needs students in their courses as they rated their experience because the class with the special needs students because that class actually rated their project as a 3.76, the highest rating given by a class on this question. Instead, I believe the prior knowledge students' had before they entered the classroom was the biggest factor in whether the projects were perceived as fair. One student wrote, "I know all of these skills already." Another student wrote, "some students don't use Macs—it felt very mac influenced in class." These comments indicate that how much students already knew about the technology being taught in the course impacted their perception of how unbiased the course and the project they completed was. Unfortunately, there are almost always students who take courses where they know most of the material being covered, but to fulfill a requirement they are required to take the course. This is difficult to correct for in assessment because often the course objectives are to help students achieve a certain level of proficiency. Even if students come into the course with that level of proficiency, instructors cannot change their projects to accommodate those students prior skill level. Instructors must decide if students have met the level of proficiency required by their course objectives. This means that there may always be some students that have an unfair advantage or disadvantage in a course. Instructors should be sensitive to this situation, and can recommend other courses that might fit students' skill levels better, but often there is no good solution to this situation and instructors must try to create as unbiased projects as possible based on their course objectives and the average student skill level.

Presentation of the assessment task to students. Questions 9, 10, 11, and 15 from the instructors' survey and questions 5, 6, 7, and 11 from the students' survey focused on the presentation of the assessment task to the students. Question 9 asked to instructors

to assess how much students understood the project they were supposed to complete when it was given to them. All the instructors rated their projects as a 3 or that "the students seemed to understood about half of the task that they were expected to complete when they were given the task." Students felt similarly and rated their projects at 3.39, indicating that they only half understood how to complete the project when it was given to them. This indicates that the packet did not adequately prepare the instructors to present their product assessment projects clearly to their students.

Question 10 focused on whether students understood what characteristics a quality product would have that fulfilled the expectations for the project they were assigned. Again all instructors rated their project as a 3 or "the students understood some of the standards for a good product when the task was given to them." Students rated their projects at 3.57, when they were asked this question. This indicates that the instructors did not receive enough guidance from the packet to help them clearly explain to their students what the characteristics of a quality product are that would fulfill the project they assigned to their students.

Question 11 assessed whether the examples that instructors used to help students understand the product they were supposed to create were effective. One instructor rated their project a 3 or "examples were given that seemed to give the students some idea of what the project was that they should create, but some examples were confusing and didn't seem to match the task they were given." Another instructor gave their project a 5 or "the students seemed to understand the key components in excellent products because of the examples they were given." The third instructor gave their project a 4 or in between the two above responses. The students, as a whole, rated their projects at 3.39. The students indicate that they were on the whole confused

by the examples given, and those examples did not always seem to match the project given. This is understandable because the instructors created a new product assessment project using the instructional packet, so they did not have a lot of examples of student work for students to look at. But in the literature, experts recommend instructors create their own excellent example of a product if none are available. This option should be emphasized in the packet because it will help instructors understand more clearly which evaluation criteria are most important in a quality project and how they can clearly present their projects to their students.

Question 15 asked instructors assess their overall experience administering their project. One instructor rated their experience as a 3 or "sometimes I felt my presentation of the assignments and the descriptions given to the students were clear, but sometimes the students did not seem to understand the assignments from the presentations and descriptions." The other two instructors rated their experience as a 4 or between the above response and "most of the time I felt my presentations of the assignments and the descriptions given to the students were clear and helped them understand the assigned project." Students rated their experience as a 3.55. This indicates that presentation of the projects was one of the weakest areas of the packet. I did not adequately explain how to present the assignment, the evaluation criteria, or examples of a quality project in the packet. Because of this instructors and students were frustrated by the project and how to express their expectations or what they were being asked to produce.

Evaluation and feedback dissemination tools. Questions 12 and 13 from the instructors' survey and questions 8 and 9 from the students' survey assessed how the projects were evaluated and feedback was given to the students. Question 12 focused

on whether the criteria used to assess products was understood by the students. One instructor rated their experience as a 5 or that "the students seemed to understand all the criteria I used to score their projects." The other two instructors rated their experience as a 4 or between the response above and "the students seemed to understand some of the criteria I used to score their products, but they did not seem to understand other criteria that I also used." The students rated their experience as a 3.88. This seems to indicate that the majority of the students understood most of the criteria used to evaluate their projects.

Question 13 focused on whether the feedback given to students helped them understand how to improve their products. One instructor did not answer this question. This instructor wrote, "N/A Because this was the final project there will be no feedback." The other two instructors rated their project as a 5 or that "the students seemed to understand well how they could improve their projects in the future based on the feedback given them." The students rated their experience as a 3.85, or between the above response and "I know some ways I could improve my product based on my teacher's feedback but not enough to make my project a quality project." These responses seem to show that instructors understood how to make their feedback relevant to the project they were evaluating and overall students felt that the feedback they received was useful, though more feedback would have been better. This indicates that the packet provided enough guidance to help instructors give useful feedback to their students.

Overall perception of the projects. Question 14 on the instructors' survey and question ten on the students' survey focused on the overall feeling participants had toward the project. One instructor rated his or her project as a 3, or "sometimes I

could explain the projects well but I often felt they weren't worth doing." Another instructor rated his or her project as a 5 or "most of the projects were easy to explain to the students and on the whole I felt like they were worth the time it took to complete them." And one instructor rated his or her project as a 4. The students rated their overall experience as a 3.45. (I told the participants to take this survey in relation to the one big project in the course.) The spread of responses from the instructors indicates to me that as the instructors evaluated their projects based on these standards and their experiences with their students throughout the semester, some instructors were satisfied with their experience and others felt that they could improve their course. I hope that the packet was a helpful measuring tool to guide each instructor as they assessed the effectiveness of their course.

Assessment of the Instructional Packet

The instructors were given a second section of their survey to assess their experience using the instructional packet. This section contained twelve questions regarding how accessible the instructional packet was and how easily the instructors were able to follow the steps in the packet to creating a product assessment project. I will discuss each question briefly.

Clarity of instructions. Question 1 focused on whether the instructions in the packet were clear. One instructor rated the packet as a 5 or "the instructions were clear and I could follow them easily as I created my assessments." Two instructors rated the packet as a 4 or between the above response and "the instructions seemed to make sense until I started to create my own assessments and then I couldn't figure out what I was supposed to do." This indicates that the instructions in the packet were

fairly clear, though they could be made even more clear so that they are easier to follow as an instructor creates a new assessment project.

Relevance of instructions. Question 2 focused on the relevance of the instructions. Two instructors rated the packet as a 5 or "the instructions were relevant and helped me understand more clearly how to create successful product assessments." One instructor rated the packet as a 4 or between the response above and "the instructions seemed relevant some of the time, but sometimes they had no connection to how I create product assessments." This indicates that overall the instructors found the instructions relevant.

Steps in the instructions. Question 3 assessed the steps for creating a product assessment project in the instructional packet. Two instructors rated these steps as a 5 or "the steps were clear and their sequence made sense as I followed them to create product assessments." One instructor rated these steps as a 4 or between the response above and "Some of the steps were clear and seemed to build off previous steps and some didn't make sense and had no relation to the steps that preceded and followed them." This seems to indicate that overall the instructors found the steps easy to follow and in the proper sequence.

Examples in the instructional packet. Question 4 focused on the relevance of the examples included in the instructional packet. One instructor wrote "n/a" beside the question. Another rated the examples as a 5 or "the examples were relevant and helped me understand how the different parts of a product assessment task fit together." The other instructor rated the examples as a 4 or between the above response and "the examples were somewhat relevant because I saw how some of the characteristics of a successful product assessment were included in a task but other characteristics were

not displayed in the examples." This indicates that the example included in the instructional packet was confusing and didn't connect with instructors as well as I hoped it would.

Implementation of new assessment projects. Question 8 assessed how easily instructors implemented the new assessment project into their course. Two instructors rated their experience as a 5 or "new assessment tasks created using this instructional packet were easy to implement in my course." One instructor rated his or her experience as a 4 or between the response above and "new assessment tasks created using this instructional packet could be implemented in my course but not without a major reworking of the curriculum of my course." This indicates that overall instructors found that they could implement their new assessment projects, but this implementation did require changes in their curriculum. Since curriculum and assessment should be closely connected, I would expect that some changes would need to be made for the projects to fit into the courses. But the instructors seem to indicate that these changes were not so disrupting that they could not continue to teach their course basically as they were planning. They were able to modify both the project and the course enough for each to complement the other.

Presenting new assessment tasks. Question 9 focused on explaining the new assessment projects to the students. One instructor rated his or her experience as a 3 or "new assessment tasks were easy to explain to students but they did not seem to understand how to complete the tasks successfully." One instructor rated his or her experience as a 5 or "new assessment tasks were easy to explain to students so that they understood the tasks and could complete them successfully." And one instructor rated his or her experience as a 4 or between the two above responses. This lower

rating corresponds to the low rating by instructors and students of their experiences with the presentation of the projects in the courses. This continues to indicate that the packet needs to better prepare instructors to present their projects to their students.

Scoring new assessment tasks. Question 10 focused on the validity of the scores given to students on their projects. Two instructors rated their experience as a 5 or "new assessment tasks were easy to grade and seemed valid so that good products received high scores and poorer products received lower scores." The other instructor rated his or her experience as a 3 or "new assessment tasks were not too difficult to grade but the products' scores could have been more valid." This indicates that some good products received lower scores and some poorer products received higher scores than the instructor anticipated. This is a common situation as instructors struggle to discover which characteristics of a product are the most important for meeting standards of excellence. Working through the project again as an instructor can help the instructor to identify which characteristics are crucial for quality projects and what the differences between good quality projects and poor quality projects actually are. I should provide an explanation of this in the packet and help instructors understand how they can revise their projects that may have had this problem.

Bias of new assessment tasks. Question 11 focused on whether the new projects were fair to all students. Two of the instructors rated their experience as a 5 or "new assessment tasks seemed fair to all students." The other instructor rated his or her experience as a 3 or "new assessment tasks seemed to give some types of students a slight advantage." This lower rating comes from the special needs students who took this section of the course. Overall, instructors felt that their projects were fair to all students.

Feedback using new assessment tasks. Question 12 focused on the feedback given to students about their work. Two instructors rated their experience as a 5 or "new assessment tasks helped me give students clear feedback about their products." The other instructor rated his or her experience as a 3 or "new assessment tasks did not make it difficult to give students clear feedback about their products but did not help make the feedback more clear for students either." This instructor indicates that the project did not impact the effectiveness of the feedback he or she would have given the students. These responses indicate that for the most part, the instructional packet helped instructors give their students effective feedback and that in any case, the instructional packet did not interfere with the feedback given to the students.

Overall based on these responses, the instructional packet seems to have had a positive impact on the instructors who used it to create a product assessment project. Though there are weaknesses in the packet that could be improved to better serve future instructors, the packet seems to have fulfilled its purpose in helping instructors understand the standards for effective product assessment and how to create product assessment projects that they can implement in their courses.

Chapter 5: Discussion and Conclusions

Based on the data I collected from both instructors and students, the biggest weakness of the instructional packet is that it does not adequately prepare instructors to present their product assessment projects clearly to their students. Overall, students found that they "understood about half of the product that [they were] expected to complete when [they were] given the project" and that "examples were presented that gave [them] some idea of what the product was [they] should create, but some examples were confusing and didn't seem to match the project [they were] given." This indicates that after the instructors presented the project to the students, the students were unsure how to complete the project and the examples that the instructors gave were also confusing to the students. Students did not feel that they understood how to complete the project well based on the examples that instructors gave them.

As the instructors assessed their own projects, they also found that their presentation of the projects to their students did not clearly explain the project to their students. Instructors rated their projects between "the students seemed to understood [sic] about half of the task that they were expected to complete when they were given the task" and "the students seemed to understood [sic] what they were expected to create when the task was given to them." Instructors also rated their projects between "the students understood some of the standards for a good product when the task was given to them" and "the students understood the standards for what makes a good product when the task was given to them." Instructors rated their "overall feeling about how the assessment projects were administered" as between "sometimes I felt my presentation of the assignments and the descriptions given to the students were clear, but sometimes the students did not seem to understand the assignments from the

presentations and descriptions" and "most of the time I felt my presentations of the assignments and the descriptions given to the students were clear and helped them understand the assigned project." These ratings indicate that the instructors noticed that students did not completely understand the product assessment project given to them after the instructors presented the project.

When the instructors rated the instructional packet with regard to explaining the new product assessment projects to their students, they rated the packet between "new assessment tasks were easy to explain to students but they did not seem to understand how to complete the tasks successfully" and "new assessment tasks were easy to explain to students so that they understood the tasks and could complete them successfully." This indicates that instructors felt that the packet did not provide enough information about how to explain new product assessment projects in a way that students could understand how to complete to projects successfully.

Also one of the instructors skipped questions 4, 5, and 6 in the second section of the instructors' survey and wrote not applicable by those questions. This indicates that the instructor did not clearly see the examples presented in the instructional packet and understand how to apply them to his or her own projects. The packet needs to be reorganized to display and explain the included examples more clearly. Better presentation of the examples will also help instructors understand more clearly how to present their own projects to their students.

Despite these weaknesses, the instructional packet seems to have had a positive impact on the instructors. One instructor noted on his or her survey, "Thanks. Your product assessment was helpful." And the instructors gave the packet very positive ratings for the most part. But I believe that further research on presenting product

assessment projects would strengthen this packet. Also reorganizing the packet to present the current examples in a more accessible way would strengthen the packet. These changes would help instructors to better present their projects to their students and would improve both their students' and their own experiences using product assessment projects in their courses.

Recommendations

The following recommendations are based on my analysis of the students' and instructors' responses to the product assessment experience.

1. Improve the section in the packet on presenting product assessments to students.
2. Include a section in the packet on how instructors can develop good examples of the products that fulfill the requirements for their product assessment projects.
3. More clearly present my own examples of product assessment projects.

Critique

As with most projects that I complete for the first time, my initial expectations of the time and money that will be needed to complete the project were less than what I actually needed. I finished my project almost six months after I anticipated finishing it. Also I spent almost $500 more than I anticipated spending. But the experience will help me better evaluate how much time and money a similar project would require in the future.

Table 4

Proposed and Actual Schedules for Completing My Master's Project

Activity	Proposed Schedule	Actual Schedule
Apply for IRB approval	August 2007	August 2007
Give instructional packet to instructors	August 2007	October 2007
Give survey to students	September 2007	December 2007
Revise instructional packet based on students' and instructors' evaluations	September 2007	January 2008
Complete writing thesis	November 2007	February 2008
Graduate	December 2007	April 2008

Table 5

Proposed and Actual Budgets for Completing My Master's Project

Activity	Proposed Budget		Actual Budget	
	Hours Spent	Money Spent	Hours Spent	Money Spent
Instrument development	50	$800	50	$800
Instrument implementation and evaluation	40	$640	40	$640
Data analysis	10	$160	20	$320
Instrument revision	10	$160	20	$320
Total	110	$1760	130	$2080

No monetary remuneration was given to those who worked on the project. The instructors and students generously donated their time in using the instructional packet and filling out the surveys. My committee members also donated their time in helping me create an effective project and evaluation strategy. Mostly I spent time researching the information included in the instructional packet, organizing the information I found, and creating the design to display that information as well as giving the surveys, analyzing the data I received, and revising the instructional packet based on the results found in the evaluation. I used university computers, my friends' and chair's know-how, paper, printers, ink, copiers, and the library.

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Appendix A: Original Instructional Packet

Product Assessment Template

Materials to help you develop effective product assessments

Catharine Verhaaren

Assessment Template

Introduction

Welcome to teaching. You may not have taken a formal course on assessment, but I'm sure that you have personal experience with different testing methods. One of those methods is product assessment. In some teaching situations, testing students by having them create a specific product is the most effective way of knowing if students have mastered the skills you've taught them in class. This method of assessing students is known as product assessment. Though many teachers use this method, you may be frustrated by not knowing what makes an effective product assessment or how to create good assessments for your specific teaching situations. This template is designed to help you understand product assessments and how you can use them effectively in your courses.

Eight principles of effective product assessments will be explained in this template. Then instructions for creating a product assessment along with examples of product assessments will be presented. Hopefully, this instruction and these examples will help you develop effective product assessments for your courses.

Eight Product Assessment Principles.

The eight principles of effective product assessment presented below were found through studying what various product assessment experts have emphasized in their articles and books. These principles are having (1) "a clear purpose," (2) "a proper target," (3) an appropriate assessment tasks, (4) clear and relevant evaluation criteria, (5) "a proper sample of . . . tasks," (6) controls for bias, (7) a clear presentation of the task to the students, and (8) an appropriate tool for giving students feedback (Brookhart, 1993; Harman, 1999; Stiggins, 2001). I will explain each of these principles and I will list references for sources with more information at the end of this section in case you have further questions.

The Purpose of the Assessment.

The first step in developing a product assessment is to identify the reason you are creating the assessment. You need to know how you will use the information provided by the assessment and also how students will be impacted by the assessment. There are many reasons to assess students. Sometimes you want to know what skills they have right now so you know what to teach in the future. Sometimes you want to know what students have understood from the instruction you've already given and what they have not. And sometimes you want to give students a grade at the end of a section that lets you know their competence level on a certain set of skills. Once you know how you will use your assessment and what impact the assessment will have on a student's standing in your class, you can begin to design an appropriate assessment. You should also consider students' interaction with the assessment and what implications students might read into the assessment itself and the outcomes of the assessment.

The Assessment Target

Teachers cannot produce effective assessments if they have not clarified what knowledge or skill is being assessed and how students can show that they have mastered that knowledge or skill.

In order to design a good assessment, teachers must connect the skills that they have taught their students with the skills that students should display as a result of the assessment. If the teacher does not clearly understand an assessment task, the task will probably not measure the skills that the teacher wants to assess. Teachers must make clear to themselves and their students what constitutes displaying mastery of a certain set of skills or knowledge. Assessments should help students to display that mastery.

Assessment Tasks

In order to present the assessment task clearly to the students, teachers must know what task they want their students to perform and why. The assessment task is what gives students the opportunity to display their mastery of the assessment target. Teachers need to choose tasks that allow students to display the knowledge and skills that the teacher is trying to assess.

The tasks that teachers use to assess their students knowledge must be tasks that require general knowledge that could be applied to a variety of tasks not specific knowledge that is only used in the particular task being assessed. The grades teachers give students are measures of students' abilities in a general content area, product assessment tasks must be generalizable so that teachers grades are a good measure of students' general abilities not just their ability to produce a single product. For example, a graphic design teacher could ask students to create

Evaluation Criteria

In order to create tasks that allow teachers to measure students' general abilities in a content area, teachers need to have well-defined criteria that both they and the students can use to judge the resulting products. In order for students to understand the scores they receive on their assessments and teachers to give standardized scores across products, both students and teachers must understand the criteria used to score a product.

One way of presenting criteria to students is to have them help develop the criteria that teachers will use to assess their products. Whether or not this method is used to help students understand the criteria they will be judged by, teachers must be sure to clearly present the criteria they will use to judge students' products.

The Sample of Tasks.

In product assessment, as with every other form of assessment, Stiggins reminds us that there must be enough tasks in order for the assessor to make an accurate judgment about student abilities being assessed. Since many product assessment tasks are time consuming to create, perform, and grade, teachers must carefully construct assessments in order to gather enough evidence for their rating of students' abilities.

Product assessments can represent an appropriate sample size, if they are properly constructed. Teachers can create tasks with multiple parts that allow students to display a broad range of abilities and depth of ability in specific areas. This enables students to display their abilities in many different skill areas but as a part of one main task.

Controls for Bias

Any assessment can introduce sources of bias which advantage some students and disadvantage others. Product assessment is no exception. As teachers interact with their students, they can watch for cultural or linguistic differences among them. Then when teachers are creating or revising assessment tasks, they can use language and concepts that their particular students will be familiar with. Teachers can also take time in class to explain language and concepts that may be unfamiliar to students of different cultural backgrounds in order to clarify the assessments teachers will use in their classrooms.

Presentation of the Assessment Task to Students.

One of the key components to a successful product assessment is presenting the meaningful task to the students with criteria explaining what makes a good product. In order to present a meaningful task with "criteria for excellence," teachers must understand how the task they have chosen helps students display the knowledge and skills they have learned in the class and what criteria an excellent product fulfills. Then the teacher can present those criteria to students along with examples of excellent products. This will help students know what they have been asked to create and how to ensure its quality.

Evaluation and Feedback Dissemination Tools.

One method for explaining scoring criteria to students is for teachers to present a rubric for scoring products at the same time that they present the assessment task. Kay Burke (Standards to Rubrics) explains rubrics as "a scoring guide designed to provide constructive feedback to students by helping them think more clearly about the characteristics of quality work" (p. 126). Rubrics do this by "identify[ing] and clarify[ing] specific performance expectations and provid[ing] attainment goals" (Custer qtd in Taggart & Wood, 1996, p. 58).

To create effective rubrics, teachers must include "the following components: an identified behavior within an assessment task; [a] quality or performance standard; descriptors of the desired standard; and a scale to be used in rating student performance" (Taggart & Wood, 1998, p. 58–59). These components allow both teachers and students to rate a product against an identified standard. This helps students understand the scores they receive on their products and helps them understand how they can improve their products and their scores.

Another method for explaining criteria is to present a criteria checklist to students as they begin their assessment task. Burke (Standards to Rubrics) explains that "a criteria checklist takes much of the guesswork out of the grading process and helps 'objectify' even the most creative and subjective assignments" (p. 57). Though a checklist is not as detailed as a rubric, checklists can help teachers clearly present criteria that they will use to score students' products.

Instructions

Here are steps to follow as you create your own product assessment:

1. Determine the purpose for the assessment. Will it impact your students' grades or just let you know their present skill level?
2. Decide what skill area you want to assess. Make sure you understand exactly what mastery of those skills is comprised of.
3. Choose a task that invites students to use the skills you want to assess. Make sure you understand how this task allows you to assess the skills that you want to assess.
4. Identify the criteria that determine mastery of the skills you want to assess. These criteria should be recognized by experts who use these skills.
5. Evaluate the task to make sure it gives you enough evidence to judge students' skill levels. You can add more parts to the task if you feel you need more evidence of students' skills.

6. Think about the students who will probably be in your class or students who are in your class. Make sure that your task gives each student equal opportunity to create the product you will use to assess your students. If the task seems to advantage certain types of students, change the task or use instruction to bring all students to the same understanding of the task and opportunity of completing it.
7. Present the task clearly to the students. Include the criteria you will use to score the task and several examples of completed tasks that fall in different areas of the scoring continuum. For instance, include an excellent product, an average product, and a poor product. Make sure the criteria you use help students to identify what makes the examples excellent, average, or poor.
8. Prepare a rubric or some other tool to give comprehensive and comprehensible feedback to your students about their product. Make sure the feedback helps them understand how they could improve their product to make it an excellent product.

Example creation of a product assessment

To help explain the process of creating a product assessment more clearly, let's walk through the creation of one together. This sample creation will come from the course I teach on print design. In this course students learn both computer software and basic print design principles in order for them to create basic print documents.

Step one: The purpose

The first step in creating an effective product assessment is to know the purpose for the assessment. In my course, all of my assessments impact my students' grades, but all of my assessments do not impact their grades equally. I give my students two kinds of product assessments. The first kind are homework assignments. These assignments require my students to create small products using the basic skills we learned in class for a few points. The purpose of these assignments is for students to understand the skills and understanding that is most important for them to learn in this class, their current ability level in using those skills and understandings, and my grading procedures for the course. These assignments give students formative feedback about their abilities in using the course content and their understanding of how they can display their abilities for evaluation. These assignments also help me know what skills and understanding have been understood by most students and which I need to review in order for students to be able to use effectively.

The second kind of product assessments I give are major projects. These projects require students to create more complicated products using the skills we have learned in class. These projects incorporate elements already assessed in the smaller homework assignments, but require students to use them with more sophistication. The projects impact students' grades significantly and represent my assessment of

their final ability level in the skills and understandings that are important in my course. These assignments give students summative feedback about their abilities in using the course content.

For this example, we will develop a major project for my course. This means that the purpose of the assessment will be to determine students' level of ability with regard to the most important skills and understandings introduced in the course. This project will significantly impact students' grades.

Step Two: The target

Now that we know this assessment will be summative and will significantly impact students' grades, we can decide what the target of the assessment will be. This means we decide what set of skills we are going to ask the students to display and we need to know what mastery of those skills looks like.

In my course there are two main aspects of each project that need to be assessed. These aspects are the design of the document and the use of the software to create the document. As my course progresses, students are asked to apply more of the principles of design that we study in this course. Also as the course progresses, students are asked to use more of the features of the software program that we study in this course. Depending on when in the course the assessment is given, students are required to show mastery of a certain amount of design principles and software features.

Let's say this is my students' first major project in the course. They will be asked to display mastery of four of the seven design principles addressed in the course. These are: emphasis, contrast, balance, and typography. My students will also be asked to display mastery of five program features. These are: creating a new document; manipulating items, including text and picture boxes and lines (placing, resizing, skewing, rotating); manipulating strokes (changing weight, changing style, changing color); manipulating items as a group (aligning, distributing, grouping, merging); and manipulating text (choosing typeface, type size, paragraph justification).

Now that I have identified the specific skills that will be assessed in this project, I need to identify what mastery of these skills means.

- Mastery of emphasis: means students have created a logical hierarchy of the elements of the project and displayed that hierarchy visually. For instance, in a piece with a title, a description, a date, a time, a location, contact information, and a picture, students will rank information from most important to least important and will visually express that ranking through size, weight, placement on the page, etc, so that the audience sees a significant difference between elements of the piece.
- Mastery of contrast: means students have created significant visual differences between elements in the piece. For instance, in a piece with a title, a description, a date, a time, a location, contact information, and a picture, students will differentiate between some information visually through size,

weight, placement on the page, etc, and not differentiate between other information visually so that the audience sees a significant difference between some elements of the piece and no difference between others.

- Mastery of balance: means students have used all of the space allocated to the piece appropriately by placing sufficient information and elements in the piece without cluttering or oversimplifying the piece and by arranging the information and elements so that they show clear relationships between elements and are spatially pleasing in the piece.
- Mastery of typography: means students have used only one or two typefaces from different type categories in their piece. Students have created a typographic visual hierarchy by ranking text from most important to least important and visually expressing that ranking through typeface, type size, type weight, and other type attributes. Students have chosen appropriate type sizes based on they kind of piece they are producing and their audience for that piece. Students have chosen an appropriate leading and indent size based on their typeface and type size. Students have used appropriate line lengths and paragraph justifications according to the amount of text presented and the purpose for the text.
- Mastery of creating a new document: means students have created a document that conforms to the size, page layout, and other specifications set in the new document dialogue box and required by the instructions for the assignment.
- Mastery of manipulating items: means students have created separate boxes for logically and visually separate information as well as graphic elements such as lines and shapes that enhance the audience's understanding of and attraction to the information presented.
- Mastery of manipulating stroke: means students have chosen to use or not use stroke around boxes and on lines as well as chosen the weight, style, color, and other stroke options to enhance the audience's understanding of and attraction to the information presented.
- Mastery of manipulating items as a group: means students have used the alignment, distribution, grouping, and merging features to place items in relation to each other on the page to enhance the audience's understanding of and attraction to the information presented.
- Mastery of manipulating text: means students have chosen typefaces, type sizes, paragraph justifications, and other type options using the character and paragraph palettes to enhance the audience's understanding of and attraction to the information presented.

After identifying which skills I am assessing and what mastery of those skills entails, I have identified the target of my assessment and am ready to choose a task.

Step Three: The Task

When choosing a task for my assessment, I want it to be a significant task and a generalizable task. This means that the task the students are to accomplish has intrinsic value besides just a means of displaying a certain set of skills and the task calls for skills that can be used in a variety of similar tasks. This means I don't want to ask my students to create three text boxes with various stroke options applied, a task like that has no meaning besides showing me that they can create text boxes and change stroke options. I also don't want to create a task that is so specific that my students cannot use the skills called for in any other task.

In order to give my task intrinsic value, I look for a task that my students might naturally be exposed to either now or in the future. Since most of my students are editing minors, they may become editors in the future. Any tasks that an editor might be involved with has some intrinsic value. In order to give my task generalizability, I look for a task that uses techniques and skills that can be applied to a variety of other tasks that my students might be exposed to. For this assignment, I chose to have my students create a flyer that might be hung on a board somewhere to advertise an event or product. Editors are often asked to help write text for and critique flyers that advertise products they help produce or events where those products will be displayed. Also many students are involved in activities that are advertised through flyers. This makes learning to create effective flyers an intrinsically valuable task.

In order to make sure my task is generalizable, I check that they can use the skills required for this task in other worthwhile tasks. Other tasks that use similar skills to flyers are printed ads that are found in phone books, newspapers, magazines, etc; posters; and less similar but still using similar concepts are book and magazine covers. Many other projects use the same design principles and software features but just in a different way such as pages in a book or magazine, etc. So the flyer task is generalizable to a variety of tasks that editors might be involved in.

Step Four: The Evaluation Criteria

The next step in creating an effective product assessment is identifying criteria that you will use to judge your students' mastery of the target skill set. These criteria should reflect the opinions of experts in your discipline not just your own feelings on the subject. Identifying these criteria may require researching the content area and discussing potential criteria with colleagues in your discipline.

In order to identify significant criteria in print design, I looked at many books by graphic designers, editorial designers, and professors of print design. In order to identify significant criteria in using the computer program, I talked to professionals using the program and read books that teach people to use the program. From this research and my own experience helping students to improve their print documents,

I identified criteria to gauge student mastery of print design. I present these criteria to my students throughout the class and use these criteria to evaluate the projects that students create for the class.

Step Five: The Sample of Tasks

Next you need to make sure that your product assessment gives you sufficient evidence of students' abilities for you to make a sound evaluation of them. You can create a sample of tasks through multiple assessments, through one assessment where the same task is required multiple times or through one assessment where multiple similar tasks are required. For example, a product may require a student to complete a task multiple times as in print design where a student may need to link text boxes together throughout the document. Since this task is repeated multiple times, you can evaluate whether the student understands how to link text boxes or whether they accidentally succeeded once or twice in linking two boxes correctly. An example of a similar task performed multiple times in an assessment is cleaning up a document using the find and replace feature in Microsoft Word. Because students have to look for six or seven items that need to be replaced throughout the document, the assessment helps the assessor understand if students know how to use the find and replace feature.

Not every task in a project needs to be performed more than once, but plan to build into an assessment multiple opportunities for students to show evidence of the skills being assessed.

Step Six: Controlling for Bias

To control for bias, make sure that the language you use to describe the tasks and the tasks themselves do not give certain types of students in the course an advantage in completing the tasks. Consider the students who you are teaching and think about ways you can present assessments clearly to them. Try to use examples that are accessible to all students so that they understand the projects they are supposed to create. Define terms that may be unfamiliar to some of your students and make sure each student understands the tasks they need to complete.

In my class, some of my students have studied visual arts before and others have not. In order to prevent biases in my assessments of their print documents, I assign reading that explains principles behind good design and lead class discussions where new terms are defined that will help them complete their projects. Then as I create my assessments, I try to use the terms that we have discussed in class so that every student understands what the need to create for their project.

Step Seven: Presenting the Task

Present the task clearly to your students by presenting the criteria you will use to assess their projects. Explain how students can show mastery of each of the criteria you present. This may take the form of sample projects that show students what excellent work for the project can look like. Explain how students should use the skills they have learned in class to create a quality project for the assessment. This along with examples of excellent projects will help students to clearly understand the project they should create and what the standards for the project are as well as how to meet those standards.

In my class, I show examples of projects projected onto a screen to help students understand what completed projects look like and what excellent work looks like. I also create a cover sheet describing my projects where I explain which criteria I will use to grade the project and how much weight each criteria will have in determining students' overall grades for a project. This helps students what constitutes an excellent project and how they can create excellent work.

Step Eight: Feedback Dissemination

Prepare to give students feedback on the projects they create. This can be done in several ways. One way is to create a rubric that shows students the criteria they will be graded on and different levels of achievement for each criteria so that students understand why their project is assigned a certain grade. Another way to give feedback is to use a checklist which helps students understand what should be included in their project and helps you to check each project for the same criteria. Both rubrics and checklists should help students understand which parts of the project they completed and which they need to improve in order to improve their project. Rubrics and checklists can be given to students when the project is originally presented to them or they can be discussed in class. Make sure students understand where their project falls on the scale from unfinished and incorrect to complete and meeting criteria standards and how they could improve their projects if they were to continue working on them.

For my projects I have created a scored checklist. This helps students understand what elements are required in their projects and how each element influences their final grade for the project.

Examples

Simple Checklist

The example on the facing page is an example of a simple checklist similar to the assessments I give my students in the courses I teach. You can see that a checklist of characteristics is provided so that students understand what qualities I am looking for in their analyses of print documents. Also points are given next to each section of analysis so that my students can see where their analyses were strong and where they were weak. The characteristics of each of these sections fall into a you have it or you don't dichotomy. Including the individual points on the checklist contributes to the total grade for that section.

this is a summative assignment in my course →

Design Brief
Homework Assignment 3

Assignment

the task for the assignment →

Poppy Evans's second chapter goes through what is discussed in a basic design brief or a document that outlines what the client expects from a the designer for a specific project. Specifically, she mentions the goal of the piece being designed, the audience for the piece being designed, and the venue where the piece being designed will be seen and used (p. 22–25). In this assignment, you will take the three flyers/ads/catalogs you found for homework one and write your best guess of the design brief for each piece. Make sure you address the three specific areas mentioned above and refer to the chapter to include the important information for each section. Also look at the four components of visual communication discussed in *Elements of Design* ch. 6. Please include a copy of each piece with your typed briefs.

total points for the assignment →

Requirements (21 points possible)

6 Goals of the piece
Think about these aspects of the pieces' purposes:

dichotomous checklist item—you have it or you don't →

- goals of the client who commissioned the piece (*ED* p. 209)
- benefits of the piece to the client
- information to be communicated
- reason for communicating the information (to inform, persuade, sell, or entertain *PD* p. 22)
- benefits of the message to the audience

feedback is given through varying scores for each criterium →

6 Audience of the piece
Think about these aspects of the pieces' audiences:

- the target audience of the piece
- demographics of the target audience
- the psychological foundations of the audience (behavior, thinking, feeling *ED* p. 194)
- why the audience would value this message
- why the piece would visually appeal to this audience

← cognitive targets being assessed and evaluation criteria

6 Format of the piece
Think about these aspects of the pieces' formats:

generalizable skills used in analyzing print documents →

- what venue does this piece appear in (bookstores, information booth, etc)
- size of the piece
- ease of use of the piece
- whether the communication is type heavy or image heavy

3 Original Designs
Turn in the original designs with your assignment.

Please turn in a **hard copy** for this assignment. The assignment is due at the beginning of class on the date due; late assignments turned in within the week will be marked down 5 points. Assignments later than one week will not be accepted.

Examples

Scored Checklist

The example on the facing page is an example of a scored checklist similar to the assessments I give my students in the courses I teach. You can see that a checklist of characteristics is provided so that students understand what qualities I am looking for in their print documents. Also points are given next to each item so that my students can see the weight I give to each of the qualities on the checklist. This also helps them understand what they can improve in their documents instead of just letting them know that their document had a certain quality or it didn't. Though some characteristics of the document do fall into a you have it or you don't dichotomy. This is especially true for the mastery of InDesign skills section.

this is a summative project in my course

Flyer Design Assignment
CHum 230, Computers & Print Publishing, Fall 2007

Assignment

Design a black-and-white or color flyer to advertise some fictitious event. ← the task for the assessment

total points for the assignment →

Requirements (62 points possible)
Due Tuesday, September 25, 2007

Using the skills you have learned by this point in the class, create a 1-page, 8 1/2″ x 11″ flyer. Emphasize the crucial information and use a judicious mix of fonts and type sizes. It must include at least 1 picture box, although you may leave the box empty and assign a color and shade to it to represent a picture if you do not have one handy in electronic form.

feedback is given through varying scores for each criterium →

5 Three flyers with a paragraph on the good and bad points of their designs (up to five extra credit points can be earned for extra photocopies and analysis)

3 Six thumbnail sketches of your flyer ideas.

scored checklist item where scores vary depending on degree of competence shown →

25 Effective use of design principles
- (5) Unity and Variety
- (5) Hierarchy and Dominance
- (5) Proportion
- (5) Balance
- (5) Typography: not too many fonts or sizes, good mix of distinct fonts, good use of character attributes

← design targets being assessed and design criteria

1 Create a 1-page, 8 1/2″ x 11″ document

10 Use of at least 1 text box and 1 picture box and using different text boxes for logically and visually separate information

generalizable skills used in designing print documents →

5 Manipulating the stroke of boxes and lines to enhance the audience's understanding of and attraction to the information presented

5 Manipulating items as a group by aligning, distributing, grouping, and/or merging them

5 Manipulating text by choosing typefaces, typsizes, paragraph justifications, and other type options

← computer skills targets being assessed and computer skills criteria

dichotomous checklist item—you have it or you don't →

3 Mastery of InDesign skills

Use at least **three** of the following tools or skills that we've learned so far in InDesign. (They must be changed from the default settings to count.) **Circle** which skills you've used on your design and turn this sheet in with your flyer.

Text inset	Scaled box	Box text wrap
Rotated box or content	Vertically centered text in box	
Skewed box or content	Line	
Type on a path	Arrow	
Contentless box	Cropped picture	
Pen line	Background color in box	

Write down the fonts you use and their sizes:

Font	**Sizes**
_____	_____
_____	_____

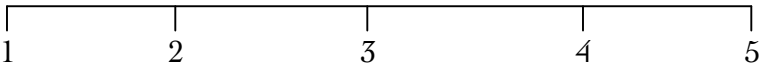
Please turn in this sheet, three flyers with analyses, a hard copy of your flyer, and the electronic file for this assignment. The assignment is due at the beginning of class on the date due; late assignments will be marked down 10 points.

Appendix B: Student Survey

Students' Rating Scale

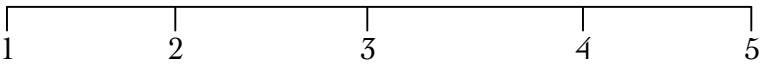
Directions: Rate the specified product assessment you participated in for this class by assigning a number 1–5 to each aspect of the assessments evaluated below.

1. Relevance of skills assessed in the assessment project



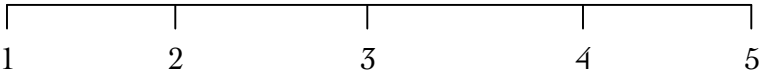
1	3	5
The assessment project had no relevance beyond an opportunity to get points in this class because the skills tested seemed useless outside of this class.	The assessment project was somewhat relevant because I can use some of the skills we practiced now or in the future but many of the skills seemed useless outside of this assessment.	The assessment project was worthwhile because the task developed skills that are useful now or would be in the future if I pursued a career in this field.

2. Relevance of the evaluation criteria



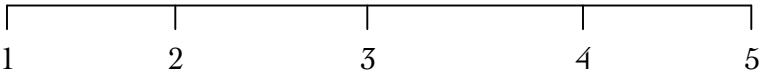
1	3	5
The evaluation criteria were irrelevant because I couldn't understand how they related to creating a successful product.	The evaluation criteria were somewhat relevant but some criteria seemed unrelated to creating a successful product.	The evaluation criteria were relevant and all seemed to contribute to creating a successful product.

3. Whether the number of tasks required in the project gave sufficient evidence of your skill level for the skills being assessed by the project



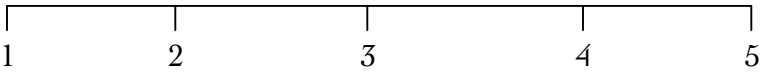
1	3	5
The tasks were not sufficient to give the teacher a good sample of my skills that were being assessed.	The tasks gave the teacher some evidence of my skills that were being assessed but I could have been assessed in more areas which would have given the teacher a better understanding of my true skill levels.	The tasks gave the teacher enough evidence of my skills for him or her to accurately evaluate the skills being assessed in the tasks.

4. Controls for bias



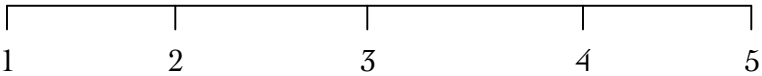
1	2	3	4	5
The project seemed to give certain students an advantage in understanding and completing the required tasks.		The project seemed pretty fair to most students, but a few students seemed unfairly advantaged or disadvantaged.		The project was fair to all students and did not give any certain students an advantage in understanding or completing the tasks.

5. Whether the presentation of the project helped you understand what product you were expected to create to complete the project



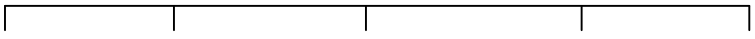
1	2	3	4	5
I did not understand what I was expected to create when I was given the project.		I understood about half of the product that I was expected to complete when I was given the project.		I understood what I was expected to create when the project was given to me.

6. Whether the presentation of the project helped you understand the requirements for creating a quality product



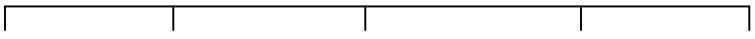
1	2	3	4	5
I couldn't tell what the standards for a good product were when the project was given to me.		I understood some of the standards for a good product when the project was given to me.		I understood the standards for what makes a good product when the project was given to me.

7. Examples of products were presented which helped me understand the product I was expected to create



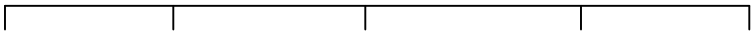
1	2	3	4	5
No examples of products were presented that helped me know what I should include in the product I was creating.		Examples were presented that gave me some idea of what the product was I should create, but some examples were confusing and didn't seem to match the project I was given.		I was presented with examples of excellent products that helped me know what key components were expected in the projects I was given.

8. Scoring criteria was understandable



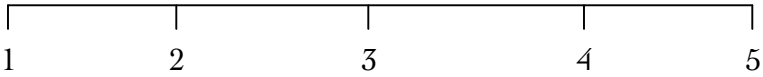
1	2	3	4	5
I could not understand what criteria the teacher used to score my product.		I understood some of the criteria the teacher used to score my product, but other criteria also seemed to have been used that I didn't understand or know about.		I understood all the criteria the teacher used to score my projects.

9. Feedback given by the teacher about my product helped me understand how I could improve it



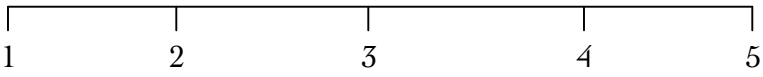
1	2	3	4	5
I had no idea how I could improve my product based on the feedback the teacher gave me.		I know some ways I could improve my product based on my teacher's feedback but not enough to make my project a quality project.		I understood well how I could improve my product in the future based on my teacher's feedback.

10. Overall feeling about the assessment project given



1	2	3	4	5
Basically I never understood the projects and thought they weren't worth doing.		Sometimes I understood the projects but I often felt they weren't worth doing.		I understood most of the projects and on the whole I felt like they were worth the time it took to complete them.

11. Overall feeling about how the assessment project was administered



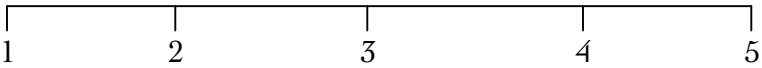
1	2	3	4	5
I could never understand what the products I was expected to create from the teacher's presentations of the projects and the descriptions of the expected products given to me.		Sometimes I understood the teacher's presentation of the assignments and descriptions that were given to me, but sometimes I could not understand what I was expected to create from the presentations and descriptions I was given.		Most of the time I understood the project well both from the teacher's presentations of the projects and the descriptions of the final products given to me.

Comments about the projects:

Appendix C: Instructor Survey

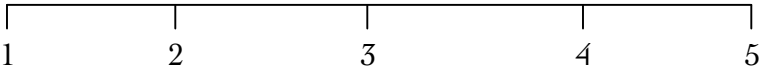
Instructors' Rating Scale for assessments developed with template

1. The purpose of the assessment task (formative or summative)



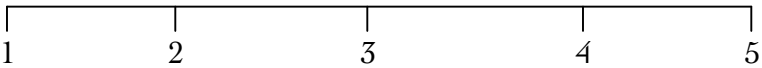
1	2	3	4	5
The purpose of the task seemed unclear, I wasn't sure if it was formative or summative or why I was assigning the task.		I had a vague idea that the purpose of the task was either formative or summative, but I still wasn't sure exactly why the task needed to be assigned.		I knew exactly what the purpose of the assessment task was and why I was assigning it.

2. Skills or knowledge being assessed using the task



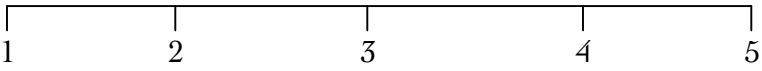
1	2	3	4	5
I was not sure which skills or knowledge was being assessed by the task.		I could identify some skills and knowledge being assessed by the task but the task seemed to include irrelevant skills and knowledge or not to include important skills and knowledge that logically pertained to the task.		I understood which skills or knowledge were being assessed by the task and they seemed to cover the important skills and knowledge and to avoid irrelevant skills and knowledge.

3. Evidence of skill mastery



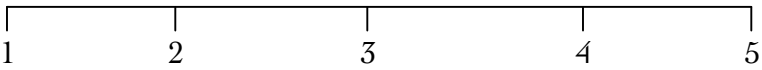
1	2	3	4	5
I had no idea what constituted mastery of each skill or knowledge being assessed.		I understood what mastery of some skills or knowledge being assessed was but some skills or knowledge were still unclear as to how they would be displayed as having been mastered.		I understood how students could display mastery of each skill or knowledge being assessed.

4. The relevance of the skills that were assessed



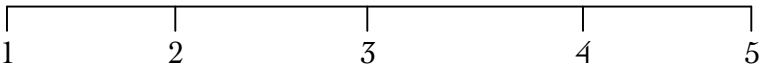
1	2	3	4	5
The assessment task had no relevance beyond an opportunity for students to get points in this class because the skills tested seemed useless outside of this class.		The assessment task was somewhat relevant because students can use some of the skills we practiced now or in the future but many of the skills seemed useless outside of this assessment.		The assessment task was worthwhile because the task developed skills that were useful as the students took the course or would be in the future if students pursued a career in this field.

5. Generalizability of the skills being assessed



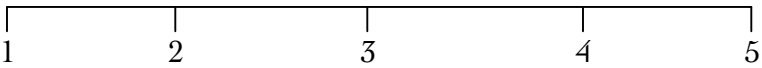
1	2	3	4	5
The task seems so specific that all the skills required in it are not useful in any other task.		The task seems somewhat relevant because some of the skills tested could be used in other tasks but many of the skills seem only useful in this one task.		The task is generalizable because the skills used in the task could be used in a variety of other tasks.

6. Whether evaluation criteria relate to creating a successful product



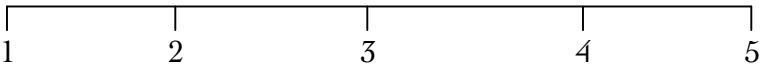
1	2	3	4	5
The evaluation criteria included in the assessment task were irrelevant because I couldn't understand how they related to creating a successful product.		The evaluation criteria were somewhat relevant but some criteria seemed unrelated to creating a successful product.		The evaluation criteria were relevant and all seemed to contribute to creating a successful product.

7. Sample of tasks to form a summative assessment of students' abilities regarding a certain skill (This may have been within one task or across multiple tasks used in the course)



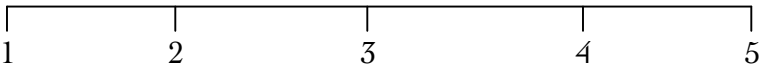
1	2	3	4	5
The tasks were not sufficient to give me a good sample of the students' skills that were being assessed.		The tasks gave me some evidence of the skills that were being assessed but more areas could have been assessed which would have given me a better understanding of their true skill levels.		The tasks gave me enough evidence of the students' skills for me to accurately evaluate their skills being assessed in the tasks.

8. Controls for bias



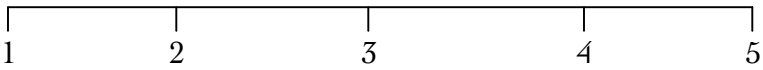
1	2	3	4	5
The task seemed to give certain students an advantage in understanding and completing the projects.		The task seemed pretty fair to most students, but a few students seemed unfairly advantaged or disadvantaged.		The task was fair to all students and did not give any specific students an advantage in understanding or completing the projects.

9. Student understanding of the task when it was given to them.



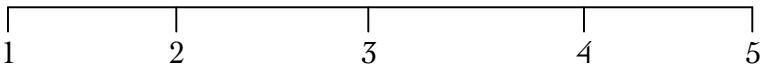
1	2	3	4	5
The students did not seem to understand what they were expected to create when they were given the task.		The students seemed to understood about half of the task that they were expected to complete when they were given the task.		The students seemed to understood what they were expected to create when the task was given to them.

10. Student understanding of what makes a quality product in completing the assessment task



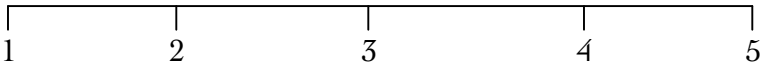
1	3	5
The students couldn't tell what the standards for a good product were when the task was given to them.	The students understood some of the standards for a good product when the task was given to them.	The students understood the standards for what makes a good product when the task was given to them.

11. Whether useful examples were given to students of the products they should create to complete the assessment task



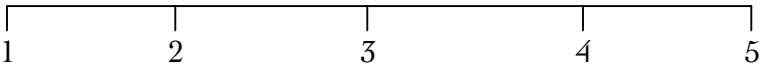
1	3	5
No examples of products were given that seemed to helped the students know what they should include in the project they were creating.	Examples were given that seemed to give the students some idea of what the project was that they should create, but some examples were confusing and didn't seem to match the task they were given.	The students seemed to understand the key components in excellent products because of the examples they were given.

12. Criteria used to assess products were understood by students



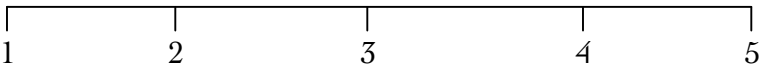
1	3	5
The students did not seem to understand what criteria I used to score their products.	The students seemed to understand some of the criteria I used to score their products, but they did not seem to understand other criteria that I also used.	The students seemed to understand all the criteria I used to score their projects.

13. Feedback given to students helped them understand how to improve their products



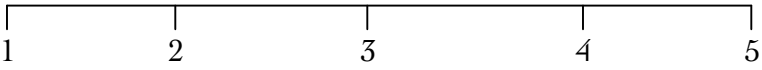
1	2	3	4	5
The students did not seem to understand how they could improve their projects based on the feedback given them.		The students seemed to understand some ways they could improve their projects based on the feedback given them, but not enough to make their projects meet the standards of excellence for that kind of project.		The students seemed to understand well how they could improve their projects in the future based on the feedback given them.

14. Overall feeling about the assessment projects given



1	2	3	4	5
Basically I felt the projects were hard to explain and weren't always worth doing.		Sometimes I could explain the projects well but I often felt they weren't worth doing.		Most of the projects were easy to explain to the students and on the whole I felt like they were worth the time it took to complete them.

15. Overall feeling about how the assessment projects were administered

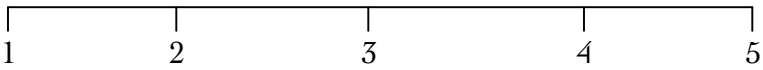


1	2	3	4	5
I felt my presentations were confusing and the assignment descriptions given to students were vague and not useful in creating a quality product.		Sometimes I felt my presentation of the assignments and the descriptions given to the students were clear, but sometimes the students did not seem to understand the assignments from the presentations and descriptions.		Most of the time I felt my presentations of the assignments and the descriptions given to the students were clear and helped them understand the assigned project.

Comments about the projects:

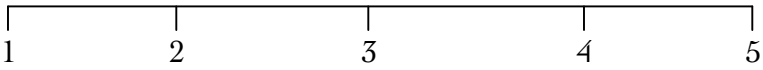
Instructors' Rating Scale for instructional package

1. Clarity of instructions



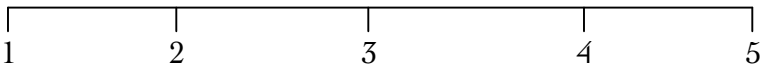
1	2	3	4	5
The instructions were confusing and hard to follow.		The instructions seemed to make sense until I started to create my own assessments and then I couldn't figure out what I was supposed to do.		The instructions were clear and I could follow them easily as I created my assessments.

2. Relevance of instructions



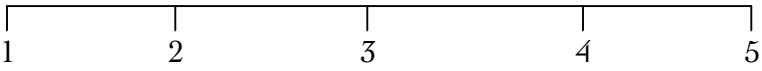
1	2	3	4	5
The instructions had no relevance to how I create product assessments.		The instructions seemed relevant some of the time, but sometimes they had no connection to how I create product assessments.		The instructions were relevant and helped me understand more clearly how to create successful product assessments.

3. Steps in the instructions were clear



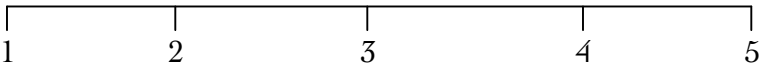
1	2	3	4	5
The steps provided in the instructions seemed out of order and didn't make sense to me.		Some of the steps were clear and seemed to build off previous steps and some didn't make sense and had no relation to the steps that preceded and followed them.		The steps were clear and their sequence made sense as I followed them to create product assessments.

4. Examples in the instructional packet were relevant



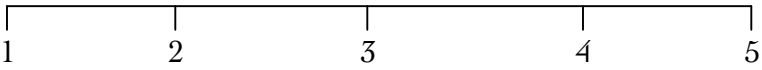
1	2	3	4	5
The examples had no relevance to my product assessment tasks or to the guidelines given in this instructional package for creating product assessments.		The examples were somewhat relevant because I saw how some of the characteristics of a successful product assessment were included in a task but other characteristics were not displayed in the examples.		The examples were relevant and helped me understand how the different parts of a product assessment task fit together.

5. The assessment task template was well organized



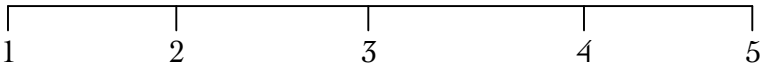
1	2	3	4	5
The template was disorganized and confusing as I tried to adapt it for my own product assessments.		The template was somewhat organized but it was still hard for me to find all the characteristics of a successful product assessment in the template.		The template was well organized and helped me address all the characteristics of a successful product assessment as I adapted it for my own product assessments.

6. Template was easily adapted to new subject matter



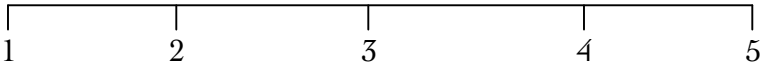
1	2	3	4	5
The template was hard to adapt for my own discipline and product assessments.		The template was adaptable to my own discipline and assessments, but seemed awkward and ambiguous in some areas.		The template was easily adapted to new subject matter and my own product assessment tasks.

7. Template addressed all relevant aspects of product assessment



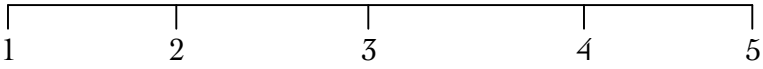
1	2	3	4	5
The template did not address significant aspects of successful product assessments.		The template addressed some aspects of successful product assessment but left out many significant aspects of product assessment.		The template addressed all relevant aspects of product assessment.

8. New assessment tasks were easy to implement in my course



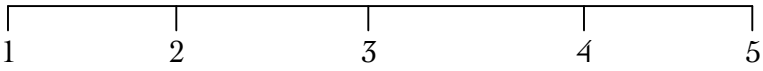
1	2	3	4	5
New assessment tasks created using this instructional packet did not really work in my course.		New assessment tasks created using this instructional packet could be implemented in my course but not without a major reworking of the curriculum of my course.		New assessment tasks created using this instructional packet were easy to implement in my course.

9. New assessment tasks created using this template were easy to explain to students



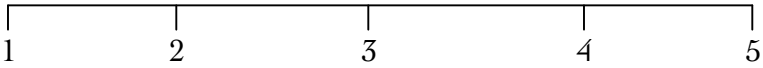
1	2	3	4	5
New assessment tasks were difficult to explain to students so that they could understand what they needed to do to successfully complete the tasks.		New assessment tasks were easy to explain to students but they did not seem to understand how to complete the tasks successfully.		New assessment tasks were easy to explain to students so that they understood the tasks and could complete them successfully.

10. New assessment tasks created using this template were easy to grade reliably



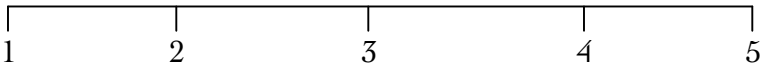
1	2	3	4	5
New assessment tasks were difficult to grade and seemed to make the grades I gave invalid so that some students who did good work got low grades and other students with poorer work got high grades.		New assessment tasks were not too difficult to grade but the products' scores could have been more valid.		New assessment tasks were easy to grade and seemed valid so that good products received high scores and poorer products received lower scores.

11. New assessment tasks were fair to all students



1	2	3	4	5
New assessment tasks seemed to give certain types of students an unfair advantage.		New assessment tasks seemed to give some types of students a slight advantage.		New assessment tasks seemed fair to all students.

12. New assessment tasks helped give students clear feedback about their work



1	2	3	4	5
New assessment tasks made it difficult for me to give students clear feedback about the quality of their product and how they could improve it.		New assessment tasks did not make it difficult to give students clear feedback about their products but did not help make the feedback more clear for students either.		New assessment tasks helped me give students clear feedback about their products.

Appendix D: Student Data

Student responses to survey questions.

Table D1

Student Answers to Survey Questions

		Items										
Student	Class	1	2	3	4	5	6	7	8	9	10	11
1	2	4	4	2	3	1	2	3	3	4	2	3
2	2	5	4	4	3	4						
3	2	4	4	4	3	2	2	2	4	4	4	3
4	2	4	4	4	3	3	3	3	3	3	2	3
5	2	5	3	5	3	3	4	4	5	5	4	5
6	2	3	3	1	3	5	3	1	2	1	1	3
7	2	4	3	2	2	1	2	3	2	4	2	3
8	2	5	4	4	3	4	4	4	4	5	4	4
9	2	4	3	3	5	3	5	3	4	5	3	3
10	2	4	5	4	3	5	4	2	4	2	4	3
11	2	5	5	5	3	2	4	4	4	3	4	3
12	2	3	1	5	1	1	3	1			1	2
13	2	5	4	4	5	3	3	4	5	5	4	4
14	2	4	5	4	5	5	5	4	4	4	4	4
15	2	5	5	5	5	4	5	4	5	5	5	5
16	2	2	3	2	4	2	3	3	3	2	1	3
17	2	5	5	4	4	4	3	4	4	5	3	5
18	2	4	4	4	2	4	2	2	4	3	3	4
19	2	4	5	4	5	3	4	3	4	4	4	3
20	2	5	4	4	4	3	3	3	4	4	4	4
21	2	5	4	3	4	3	4	4	4	3	1	1
22	2	5	4	5	5	5	5	4	4	5	5	5
23	2	3	3	3	3	2	3	4	3	2	3	3
24	2	4	4	5	3	5	5	4	3		5	5
25	2	5	5	4	5	4	5	5	5	4	4	5
26	2	3	3	3	3	4	3	3	4	3	3	3
27	2	3	3	3	3	3	3	3	3	3	3	3
28	2	3	4	5	5	5	5	5	5	5	5	5
29	2	3	4	3	4	3	4	2	3	4	2	3
30	2	4	4	3	5	2	2	5	5	5	4	3
31	2	3	4	3	4	3	4	4	5	4	3	4
32	2	3	4	3	3	4	4	3	2	2	3	3
33	1	4	4	2	4	2	2	2	3	1	4	3
34	1	4	3	4	4	4	4	3	5	4	4	5
35	1	4	4	4	4	3	4	3	4	5	4	4
36	1	5		5	4	3	4	4		5	5	5
37	1	5	4	4	3	3	3	3	4	5	3	2
38	1	4	3	3	4	2	3	3	4	4	3	3
39	1	4	3	4	5	5	4	4	4	5	5	4
40	1	5	3	3	3	5	5	3	3	5	4	4
41	1	3	3	4	1	2	3	3	2	3	2	3
42	1	3	3	3	3	1	1	3	1	2	2	3
43	1	2	2	1	4	3	3	3	3	3	3	3
44	1	4	4	4	4	3	3	4	4	4	4	4
45	1	5	5	4	5	3	4	2	5	5	5	4
46	1	5	4	4	3	2	3	1	4	5	3	2
47	1	4	4	3	4	4	4	4	5	5	3	2

(Table continues)

Table D1

Continued

		Items										
Students	Class	1	2	3	4	5	6	7	8	9	10	11
48	1	4	5	5	5	5	5	4	5	5	4	4
49	1	4	3	3	3	4	4	4	4	4	4	4
50	1	4	4	2	3	4	3	2	4	4	1	3
51	1	5	4	4	4	3	3	2	3	4	3	3
52	1	4	4	3	4	3	3	4	3	5	3	3
53	1	5	4	3	3	3	5	2	4	5	5	4
54	1	1	2	1	3	1	3	3	3	2	3	2
55	1	4	5	4	5	4	2	3	4	5	4	3
56	1	5	5	5	5	4	4	4	5	5	5	5
57	1	5	5	5	4	4	4	5	5	5	5	4
58	1	4	4	4	5	4	3	5	4	4	4	5
59	1	4	4	3	3	4	4	2	3	3		
60	1	5	4	4	4	4	5	5	4	5	4	4
61	1	5	4	4	3	4	4	3	5	5	5	4
62	3	3	3	3	5	4	4	5	4	3	3	3
63	3	4	3	5	3	2	4	4	5	4	5	3
64	3	5	3	3	5	3	3	5	5	5	4	4
65	3	5	4	4	5	5	5	3	5	5	5	4
66	3	3	1	3	5	3	5	3	3	4	3	4
67	3	5	5	5	3	3	3	5	4	4	4	3
68	3	5	4	3	4	5	4	5	5	5	3	3
69	3	3	3	3	2	4	3	1	3	3	3	3
70	3	4	3	1	3	5	3	2	3	3	4	4
71	3	3	3	1	2	5	5	3	2	2	1	5
72	3	4	4	3	5	3	4	4	5	5	4	4
73	3	5	4	4	3	4	4	3	3	3	3	3
74	3	3	3	3	2	3	3	3	3	3	3	3
75	3	4	4	3	4	5	5	5	5		4	5
76	3	5	4	4	4	4	4	4	4	4	4	4
77	3	5	4	3	5	3	2	3	5	4	3	4
78	3	4	4	3	2	3	3	3	4	5	4	5
79	3	4	4	4	5	4	5	4	4	4		
80	3	4	4	4	3	3	2	2	3	3	4	3
81	3	5	3	5	5	5	5	5	5	3	3	4
82	3	3	5	4	4	4	3	4	4	2	3	4
83	3	4	3	3	2	4	4	4	4	5	4	3
84	3	5	3	5	3	3	5	4	4	3		
85	3	3	4	4	4	3	4	4	4	2	4	3
86	3	3	3	3	3	3	3	4	4	3	2	4
87	3	4	4	3	4	3	3	4				
88	3	4	5	5	4	3	3	4	5	5	4	4
89	3	4	4	4	3	3	4	4	4	3	4	4
90	3	3	4	3	3	4	3	3	3	2	3	2
91	3	4	4	4	2	4	3					
92	3	2	1	1	1	1	1	2	3	3	1	1
93	3	5	5	4	5	3	3	3	5	5	4	4

Appendix E: Revised Instructional Packet

Product Assessment Instructional Packet

Materials to help you develop effective product assessments

Catharine Verhaaren

Principles of Effective Product Assessment

Welcome to teaching. You may not have taken a formal course on assessment, but I'm sure that you have personal experience with different testing methods. One of those methods is product assessment. In some teaching situations, testing students by having them create a specific product is the most effective way of knowing if students have mastered the skills you've taught them in class. This method of assessing students is known as product assessment. Though many teachers use this method, you may be frustrated by not knowing what makes an effective product assessment or how to create good assessments for your specific teaching situations. This packet is designed to help you understand product assessments and how you can use them effectively in your courses.

This packet begins with a brief discussion of eight principles of effective product assessment. These principles are the basis for the rest of the packet. Following this discussion, I have provided instructions for creating a product assessment project. These instructions are a brief summary of each of the eight principles introduced in the first section. Then I have included an example of the process of creating a product assessment task. This task is a project that I developed for my own course in document print design. Finally, I have included a section with sample product assessment projects and a brief discussion of those projects as well as a checklist to help you begin creating or refining your own product assessment projects. I hope you will find this packet a useful guide to help you develop effective product assessments for your courses.

Eight Product Assessment Principles

The eight principles of effective product assessment presented below were found through studying what various product assessment experts have emphasized in their articles and books. These principles are having (1) "a clear purpose," (2) "a proper target," (3) an appropriate assessment tasks, (4) clear and relevant evaluation criteria, (5) "a proper sample of . . . tasks," (6) controls for bias, (7) a clear presentation of the task to the students, and (8) an appropriate tool for giving students feedback (Brookhart, 1993; Harman, 1999; Stiggins, 2001). I will explain each of these principles and I will list references for sources with more information at the end of this section in case you have further questions.

The Purpose of the Assessment: Formative or Summative

The first step in developing a product assessment is to identify the reason you are creating the assessment. This means knowing how you will use the information provided by the assessment and also how students will be impacted by the assessment. Instructors usually use informatin from an assessment in one of two ways, either to make a formative evaluation or a summative evaluation of student learning. For example, sometimes you want to know what skills your students have right now so you know what to teach in the future. This would be a formative evaluation. Sometimes you want to know what students have understood from the instruction you've already given and what they have not, so you know if you should move on or review what you've taught. Again this is a formative evaluation. And sometimes you want to give students a grade at the end of a section of learning that lets you know their competence level on a certain set of skills. This would be a summative evaluation. Formative evaluations usually have minimal impact on students' grades or class standing. Summative evaluations usually greatly impact students' grades and class standing. Once you know how you will use your assessment and what impact the assessment will have on a student's standing in your class, you can begin to design an appropriate assessment.

The Assessment Target

Teachers cannot produce effective assessments if they have not clarified what knowledge or skill is being assessed and how students can show that they have mastered that knowledge or skill. This knowledge or skill being assessed is the assessment target.

In order to design a good assessment, teachers must connect the skills that they have taught their students with the skills that students should display as a result of the assessment. If the teacher does not clearly understand an assessment task, the task will probably not measure the skills that the teacher wants to assess. Teachers must make clear to themselves and their students what constitutes displaying mastery of a certain set of skills or knowledge. Assessments should help students to display that mastery.

Assessment Tasks

In order to present the assessment task clearly to the students, teachers must know what task they want their students to perform and why. The assessment task is what gives students the opportunity to display their mastery of the assessment target. Teachers need to choose tasks that allow students to display the knowledge and skills that the teacher is trying to assess.

The tasks that teachers use to assess their students knowledge must be tasks that require general knowledge that could be applied to a variety of tasks in the discipline being taught not specific knowledge that is only used in the particular task being assessed. The grades teachers give students are measures of students' abilities in a general content area, product assessment tasks must be generalizable so that teachers grades are a good measure of students' general abilities not just their ability to produce a single product. For example, a graphic design teacher could ask students to create an advertisement using four principles of good design. This task is generalizable because these principles could be used in a variety of design tasks such as creating flyers, posters, brochures, or other print documents.

Evaluation Criteria

In order to create tasks that allow teachers to measure students' general abilities in a content area, teachers need to have well-defined criteria that both they and the students can use to judge the resulting products. In order for students to understand the scores they receive on their assessments and teachers to give standardized scores across products, both students and teachers must understand the criteria used to score a product. In the example above, the four principles of design were the criteria used for judging the product. But these principles must be clearly defined before they are effective evaluation criteria. I will define them in detail in the example section of this packet.

One way of presenting criteria to students so that they understand the criteria is to have them help develop the criteria that you will use to assess their products. Whether or not you use this method to help students understand the criteria they will be judged by, you must be sure to explain the criteria you will use to judge students' products.

The Sample of Tasks

In product assessment, as with every other form of assessment, Stiggins, an expert in assessment, explains that there must be enough tasks making up the assessment in order for the assessor to make an accurate judgment about the student abilities being assessed. Since many product assessment tasks are time consuming to create, perform, and grade, teachers must carefully construct assessments in order to gather enough evidence for their rating of students' abilities.

Product assessments can represent an appropriate sample size, if they are properly constructed. Teachers can create tasks with multiple parts that allow students to display a broad range of abilities and depth of ability in specific areas. This enables students to display their abilities in many different skill areas but as a part of one main task.

Controls for Bias

Any assessment can introduce sources of bias which advantage some students and disadvantage others. Product assessment is no exception. As teachers interact with their students, they can watch for cultural or linguistic differences among them. Then when teachers are creating or revising assessment tasks, they can use language and concepts that their particular students will be familiar with. Teachers can also take time in class to explain language and concepts that may be unfamiliar to students of different cultural backgrounds in order to clarify the assessments teachers will use in their classrooms.

Different students are advantaged and disadvantaged in different ways, so you will have to think about each class of students separately to decide if an assessment project is biased toward or against any of the students in a class. For example some assessment projects will not be biased in a class without a blind student or a deaf student or a student who doesn't speak English natively, but if a class includes those kinds of students, the project may be biased. An example for an unexpected source of bias is in my class I require my students to create a personal or family histoy booklet. One of my students lived in New Orleans and had been affected by hurricane Katrina. She had no resources to use to create the booklet since they had been destroyed. I modified the project so that she could complete requirements with documents that had not been destroyed in the hurricane.

Presentation of the Assessment Task to Students

One of the key components to a successful product assessment is presenting the task to the students, so that they understand why the task they are being asked to complete is meaningful and what makes a good product that fulfills the criteria for the task. In order to present a meaningful task with "criteria for excellence," teachers must understand how the task they have chosen helps students display the knowledge and skills they have learned in the class and what criteria an excellent product fulfills. Then the teacher can present those criteria to students along with examples of excellent products. This will help students know what they have been asked to create and how to ensure its quality.

Examples of quality projects that would fulfill the expectations for the task are helpful to help students understand what exactly is required by a task. Using such examples as you present the assessment task can help students understand the task and the criteria for what makes an excellent product. Also using examples of products that do not fulfill the criteria for the product

can help students understand what is required for the project. Sometimes an example of a poor project, an example of an average product, and an example of an excellent project can help students understand exactly what is required of them to complete the assessment task successfully.

Evaluation and Feedback Dissemination Tools

One method for explaining scoring criteria to students is for teachers to present a rubric for scoring products at the same time that they present the assessment task. Kay Burke (Standards to Rubrics) explains rubrics as "a scoring guide designed to provide constructive feedback to students by helping them think more clearly about the characteristics of quality work" (p. 126). Rubrics do this by "identify[ing] and clarify[ing] specific performance expectations and provid[ing] attainment goals" (Custer qtd in Taggart & Wood, 1996, p. 58).

To create effective rubrics, teachers must include "the following components: an identified behavior within an assessment task; [a] quality or performance standard; descriptors of the desired standard; and a scale to be used in rating student performance" (Taggart & Wood, 1998, p. 58–59). These components allow both teachers and students to rate a product against an identified standard. This helps students understand the scores they receive on their products and helps them understand how they can improve their products and their scores.

Another method for explaining criteria is to present a criteria checklist to students as they begin their assessment task. Burke (Standards to Rubrics) explains that "a criteria checklist takes much of the guesswork out of the grading process and helps 'objectify' even the most creative and subjective assignments" (p. 57). Though a checklist is not as detailed as a rubric, checklists can help teachers clearly present criteria that they will use to score students' products.

Whether you give students a rubric at the time that you give them the assessment task, you need to develop a method for evaluating the products that students will give you and a method for giving students feedback about their product. When evaluating products, it is important that you understand what your evaluation criteria are so that you can evaluate each product fairly. Using your own rubric as you evaluate the products, can help you remember each important characteristic of a quality product. Showing students this rubric can help them understand what specific attributes of their product need to be improved and which attributes meet your expectations. This type of specific feedback helps students understand why their product received the score it did and how they can improve future products in specific areas.

Now that you have been introduced to the eight principles for effective product assessment, I will explain how I have put them into practice in my own product assessment projects.

Reference Materials

This is a short list of some books and articles that may be useful to you as you continue your study of product assessment.

Brookhart, S. M. (1993). Assessing student achievement with term papers and written reports. *Educational Measurement: Issues and Practice*, 12:(1), 40-47.

Burke, K. (1999). *The mindful school: How to assess authentic learning*, (3rd ed.). Arlington Heights, IL: Skylight Professional Development.

Burke, K. (2006). *From standards to rubrics in 6 steps: Tools for assessing student learning, K–8*. Thousand Oaks, CA: Corwin Press.

Harman, N. (1998) Rubrics : setting criteria for young learners. In G. L. Taggart & M. Wood (Eds.), *Rubrics: A handbook for construction and use* (pgs). Lancaster, PA: Technomic Pub.

Stiggins, R. J. (2001) *Student-Involved Classroom Assessment* (3rd ed.). Upper Saddle River, NJ: Merrill Prentice Hall.

Stiggins, R. J. & Conklin, N. F. (1992). *In teachers' hands: Investigating the practices of classroom assessment*. Albany: State University of New York Press.

Taggart, G. L. & Wood, M. (Eds.) (1998). *Rubrics: A handbook for construction and use*. Lancaster, PA: Technomic Pub.

Instructions

Here are steps to follow as you create your own product assessment:

1. Determine the purpose for the assessment. Will it impact your students' grades or just let you know their present skill level?
2. Decide what skill area you want to assess. Make sure you understand exactly what mastery of those skills is comprised of.
3. Choose a task that invites students to use the skills you want to assess. Make sure you understand how this task allows you to assess the skills that you want to assess.
4. Identify the criteria that determine mastery of the skills you want to assess. These criteria should be recognized by experts who use these skills.
5. Evaluate the task to make sure it gives you enough evidence to judge students' skill levels. You can add more parts to the task if you feel you need more evidence of students' skills.
6. Think about the students who will probably be in your class or students who are in your class. Make sure that your task gives each student equal opportunity to create the product you will use to assess your students. If the task seems to advantage certain types of students, change the task or use instruction to bring all students to the same understanding of the task and opportunity of completing it.
7. Present the task clearly to the students. Include the criteria you will use to score the task and several examples of completed tasks. These examples may fall in different areas of the scoring continuum. For instance, include an excellent product, an average product, and a poor product. Make sure the criteria you use help students to identify what makes the examples excellent, average, or poor.
8. Prepare a rubric or some other tool to give comprehensive and comprehensible feedback to your students about their product. Make sure the feedback helps them understand how they could improve their product to make it an excellent product.

Example Creation of a Product Assessment

To help explain the process of creating a product assessment more clearly, let's walk through the creation of one together. This sample creation will come from the course I teach on print design. On the facing page is one of the major projects that my students complete for my beginning print design course. In this course students learn both computer software and basic print design principles in order for them to create basic print documents. The project I have chosen to explain is one where my students create a flyer. The sheet on the facing page is what I hand out to students as I present this product assessment project to them. I also use this sheet to evaluate and score the products that my students give me.

Step one: The purpose

The first step in creating an effective product assessment is to know the purpose for the assessment, or in other words whether the assessment is formative or summative. In my course, most of my assessments impact my students' grades, but all of my assessments do not impact their grades equally. I give my students two kinds of product assessments. The first kind are homework assignments. These assignments require my students to create small products using the basic skills we learned in class for a few points. The purpose of these assignments is for students to understand the skills and understanding that is most important for them to learn in this class, their current ability level in using those skills and understandings, and my grading procedures for the course. These assignments give students formative feedback about their abilities in using the course content and their understanding of how they can display their abilities for evaluation. These assignments also help me know what skills and understanding have been understood by most students and which I need to review in order for students to be able to use effectively.

Sample product assessment project from my beginning print design course.

Flyer Design Assignment
CHum 230, Computers & Print Publishing, Fall 2007

Assignment

Design a black-and-white or color flyer to advertise some fictitious event.

Requirements (62 points possible)
Due Tuesday, September 25, 2007

Using the skills you have learned by this point in the class, create a 1-page, 8 1/2" x 11" flyer. Emphasize the crucial information and use a judicious mix of fonts and type sizes. It must include at least 1 picture box, although you may leave the box empty and assign a color and shade to it to represent a picture if you do not have one handy in electronic form.

5 Three flyers with a paragraph on the good and bad points of their designs (up to five extra credit points can be earned for extra photocopies and analysis)

3 Six thumbnail sketches of your flyer ideas.

25 Effective use of design principles
- (5) Unity and Variety
- (5) Hierarchy and Dominance
- (5) Proportion
- (5) Balance
- (5) Typography: not too many fonts or sizes, good mix of distinct fonts, good use of character attributes

1 Create a 1-page, 8 1/2" x 11" document

10 Use of at least 1 text box and 1 picture box and using different text boxes for logically and visually separate information

5 Manipulating the stroke of boxes and lines to enhance the audience's understanding of and attraction to the information presented

5 Manipulating items as a group by aligning, distributing, grouping, and/or merging them

5 Manipulating text by choosing typefaces, typsizes, paragraph justifications, and other type options

3 Mastery of InDesign skills
Use at least **three** of the following tools or skills that we've learned so far in InDesign. (They must be changed from the default settings to count.) **Circle** which skills you've used on your design and turn this sheet in with your flyer.

Text inset	Scaled box	Box text wrap
Rotated box or content	Vertically centered text in box	
Skewed box or content	Line	
Type on a path	Arrow	
Contentless box	Cropped picture	
Pen line	Background color in box	

Write down the fonts you use and their sizes:

Font	**Sizes**
_____	_____
_____	_____

Please turn in this sheet, three flyers with analyses, a hard copy of your flyer, and the electronic file for this assignment. The assignment is due at the beginning of class on the date due; late assignments will be marked down 10 points.

The second kind of product assessments I give are major projects. These projects require students to create more complicated products than required for homework assignments using the skills we have learned in class. These projects incorporate elements already assessed in the smaller homework assignments, but require students to use them with more sophistication. The projects impact students' grades significantly and represent my assessment of their final ability level in the skills and understandings that are important in my course. These assignments give students summative feedback about their abilities in using the course content.

For this example, we are developing a major project for my course. This means that the purpose of the assessment will be to determine students' level of ability with regard to the most important skills and understandings introduced in the course. This project will significantly impact students' grades. Therefore, this project will be a summative assessment of my students' skill levels.

The summative nature of this project is indicated to my students by the number of points possible to receive for the assignment. Sixty-two points is significantly more points than students receive for homework assignments which can vary from four points to twenty points. The number of points given for this assessment and my presentation of the project as one of the three major projects for the course, tells my students that this assessment is a summative assessment.

Step Two: The target

Now that we know this assessment will be summative and will significantly impact students' grades, we can decide what the target of the assessment will be. This means we decide what set of skills we are going to ask the students to display and we need to know what mastery of those skills looks like.

In my course there are two main aspects of each project that need to be assessed. These aspects are the design of the document and the use of the software to create the document. As my course progresses, students are asked to apply more of the principles of design that we study in this course. Also as the course progresses, students are asked to use more of the features of the software program that we study in this course. Depending on when in the course the assessment is given, students are required to show mastery of a certain amount of design principles and software features.

Since this is my students' first major project in the course. They will be asked to display mastery of four of the seven design principles addressed in the course. These are: emphasis, contrast, balance, and typography. My students will also be asked to display mastery of five program features. These are: creating a new document; manipulating items, including text and picture boxes and lines (placing, resizing, skewing, rotating); manipulating strokes (changing weight, changing style, changing color); manipulating items as a group (aligning, distributing, grouping, merging); and manipulating text (choosing typeface, type size, paragraph justification).

Now that I have identified the specific skills that will be assessed in this project, I need to identify what mastery of these skills means.

- Mastery of emphasis: means students have created a logical hierarchy of the elements of the project and displayed that hierarchy visually. For instance, in a piece with a title, a description, a date, a time, a location, contact information, and a picture, students will rank information from most important to least important and will visually express that ranking through size, weight, placement on the page, etc, so that the audience sees a significant difference between elements of the piece.
- Mastery of contrast: means students have created significant visual differences between elements in the piece. For instance, in a piece with a title, a description, a date, a time, a location, contact information, and a picture, students will differentiate between some information visually through size, weight, placement on the page, etc, and not differentiate between other information visually so that the audience sees a significant difference between some elements of the piece and no difference between others.
- Mastery of balance: means students have used all of the space allocated to the piece appropriately by placing sufficient information and elements in the piece without cluttering or oversimplifying the piece and by arranging the information and elements so that they show clear relationships between elements and are spatially pleasing in the piece.
- Mastery of typography: means students have used only one or two typefaces from different type categories in their piece. Students have created a typographic visual hierarchy by ranking text from most important to least important and visually expressing that ranking through typeface, type size, type weight, and other type attributes. Students have chosen appropriate type sizes based on they kind of piece they are producing and their audience for that piece. Students have chosen an appropriate leading and indent size based on their typeface and type size. Students have used appropriate line lengths and paragraph justifications according to the amount of text presented and the purpose for the text.
- Mastery of creating a new document: means students have created a document that conforms to the size, page layout, and other specifications set in the new document dialogue box and required by the instructions for the assignment.
- Mastery of manipulating items: means students have created separate boxes for logically and visually separate information as well as graphic elements such as lines and shapes that enhance the audience's understanding of and attraction to the information presented.

- Mastery of manipulating stroke: means students have chosen to use or not use stroke around boxes and on lines as well as chosen the weight, style, color, and other stroke options to enhance the audience's understanding of and attraction to the information presented.
- Mastery of manipulating items as a group: means students have used the alignment, distribution, grouping, and merging features to place items in relation to each other on the page to enhance the audience's understanding of and attraction to the information presented.
- Mastery of manipulating text: means students have chosen typefaces, type sizes, paragraph justifications, and other type options using the character and paragraph palettes to enhance the audience's understanding of and attraction to the information presented.

After identifying which skills I am assessing and what mastery of those skills entails, I have identified the target of my assessment and am ready to choose a task.

Step Three: The Task

When choosing a task for my assessment, I want it to be a significant task and a generalizable task. This means that the task the students are to accomplish has intrinsic value besides just a means of displaying a certain set of skills and the task calls for skills that can be used in a variety of similar tasks. This means I don't want to ask my students to create three text boxes with various stroke options applied, a task like that has no meaning besides showing me that they can create text boxes and change stroke options. I also don't want to create a task that is so specific that my students cannot use the skills called for in any other task.

In order to give my task intrinsic value, I look for a task that my students might naturally be exposed to either now or in the future. Since most of my students are editing minors, they may become editors in the future. Any tasks that an editor might be involved with has some intrinsic value. In order to give my task generalizability, I look for a task that uses techniques and skills that can be applied to a variety of other tasks that my students might be exposed to. For this assignment, I chose to have my students create a flyer that might be hung on a board somewhere to advertise an event or product. Editors are often asked to help write text for and critique flyers that advertise products they help produce or events where those products will be displayed. Also many students are involved in activities that are advertised through flyers. This makes learning to create effective flyers an intrinsically valuable task.

In order to make sure my task is generalizable, I check that they can use the skills required for this task in other worthwhile tasks. Other tasks that use similar skills to flyers are printed ads that are found in phone books, newspapers, magazines, etc; posters; and less similar but still using similar concepts are book and magazine covers. Many other projects use the same

design principles and software features but just in a different way such as pages in a book or magazine, etc. So the flyer task is generalizable to a variety of tasks that editors might be involved in.

Step Four: The Evaluation Criteria

The next step in creating an effective product assessment is identifying criteria that you will use to judge your students' mastery of the target skill set. These criteria should reflect the opinions of experts in your discipline not just your own feelings on the subject. Identifying these criteria may require researching the content area and discussing potential criteria with colleagues in your discipline.

In order to identify significant criteria in print design, I looked at many books by graphic designers, editorial designers, and professors of print design. In order to identify significant criteria in using the computer program, I talked to professionals using the program and read books that teach people to use the program. From this research and my own experience helping students to improve their print documents, I identified criteria to gauge student mastery of print design. As I taught, I presented these criteria to my students throughout the class and then used these criteria to evaluate the projects that students created for the class.

In this project, the evaluation criteria are the targets that I explained in the section on assessment targets. The definition of mastery given for each of the targets are the criteria I use to evaluate student products. I present each of these targets to the students as the criteria I will use to evaluate their products.

Step Five: The Sample of Tasks

Next you need to make sure that your product assessment gives you sufficient evidence of students' abilities for you to make a sound evaluation of them. You can create a sample of tasks through multiple assessments, through one assessment where the same task is required multiple times or through one assessment where multiple similar tasks are required. For example, a product may require a student to complete a task multiple times as in print design where a student may need to link text boxes together throughout the document. Since this task is repeated multiple times, you can evaluate whether the student understands how to link text boxes or whether they accidentally succeeded once or twice in linking two boxes correctly. In this project, students are asked to manipulate both a text box and a picture box which

Not every task in a project needs to be performed more than once, but plan to build into an assessment multiple opportunities for students to show evidence of the skills being assessed.

Step Six: Controlling for Bias

To control for bias, make sure that the language you use to describe the tasks and the tasks themselves do not give certain types of students in the course

an advantage in completing the tasks. Consider the students who you are teaching and think about ways you can present assessments clearly to them. Try to use examples that are accessible to all students so that they understand the projects they are supposed to create. Define terms that may be unfamiliar to some of your students and make sure each student understands the tasks they need to complete.

In my class, some of my students have studied visual arts before and others have not. In order to prevent biases in my assessments of their print documents, I assign reading that explains principles behind good design and lead class discussions where new terms are defined that will help them complete their projects. Then as I create my assessments, I try to use the terms that we have discussed in class so that every student understands what the need to create for their project.

Step Seven: Presenting the Task

Present the task clearly to your students by presenting the criteria you will use to assess their projects. Explain how students can show mastery of each of the criteria you present. This may take the form of sample projects that show students what excellent work for the project can look like. Explain how students should use the skills they have learned in class to create a quality project for the assessment. This along with examples of excellent projects will help students to clearly understand the project they should create and what the standards for the project are as well as how to meet those standards.

In my class, I show examples of projects projected onto a screen to help students understand what completed projects look like and what excellent work looks like. I also create a cover sheet describing my projects where I explain which criteria I will use to grade the project and how much weight each criteria will have in determining students' overall grades for a project. This helps students what constitutes an excellent project and how they can create excellent work.

Step Eight: Feedback Dissemination

Prepare to give students feedback on the projects they create. This can be done in several ways. One way is to create a rubric that shows students the criteria they will be graded on and different levels of achievement for each criteria so that students understand why their project is assigned a certain grade. Another way to give feedback is to use a checklist which helps students understand what should be included in their project and helps you to check each project for the same criteria. Both rubrics and checklists should help students understand which parts of the project they completed and which they need to improve in order to improve their project. Rubrics and checklists can be given to students when the project is originally presented to them or they can be discussed in class. Make sure students understand where their project falls on the scale from unfinished and incorrect to complete and meeting criteria standards and how they could improve their projects if they were to continue working on them.

For my projects I have created a scored checklist. This helps students understand what elements are required in their projects and how each element influences their final grade for the project.

Examples

In this section I have included three examples of product assessment projects that I use for my courses. As well as displaying the cover sheet that I give my students when I assign them a project, I point out how each step of creating a product assessment project has been displayed in the cover sheet that I give students as I present the project to them. To do this I have positioned arrows throughout the cover sheet with text explaining which step that part of the cover sheet corresponds to. This shows how all of the steps are combined to create a single product assessment project.

When I present product assessment projects to my students, I give them a cover sheet that they return to me with their completed project and their name on it. This cover sheet explains the project to my students. I include information about (step one) the number of points the project is worth, which helps my students understand if the project is formative or summative; (step two) the target skills and knowledge that I expect them to show mastery of; (step three) the task that they are to perform which will allow them to show mastery of the specific skills listed for the assignment; (step four) the evaluation criteria which are usually included as the targets being assessed or near those targets; (step five) how many tasks they need to complete as part of the project; (step six) I use terms and concepts defined in class to give each student equal opportunity to understand the project and I give students the opportunity in class and outside of class to ask questions to clarify the project (this can be done through email or during my office hours); (step seven) each student is given the cover sheet when the project is presented and the cover sheet is on a class server that they can access at any time to remind them of the requirements and I also show examples of past students work and point out areas of each example that show mastery of the concepts required for the project being presented; (step eight) feedback is given written on the cover sheet and the products that are given to me and students know what kind

of feedback to expect from the evaluation criteria listed on the cover sheet. These cover sheets allow me to present projects clearly to my students and give them information about what is required to complete the project and how the products they create will be evaluated. These cover sheets are turned in to me with the products my students create. Then I return the cover sheets and the products with scores and comments on the products, so that my students know what they can change to improve their products. These cover sheets are an integral part of my presentation of my projects to my students and a tool to help them clearly understand what they need to do to successfully complete the project.

Example I

Simple Checklist

The example on the facing page is an example of a simple checklist similar to the assessments I give my students in the courses I teach. You can see that a checklist of characteristics is provided so that students understand what qualities I am looking for in their analyses of print documents. Also points are given next to each section of analysis so that my students can see where their analyses were strong and where they were weak. The characteristics of each of these sections fall into a you have it or you don't dichotomy. Including the individual points on the checklist contributes to the total grade for that section.

purpose: this is a summative assignment in my course

task: the task for the assessment

sample of tasks: multiple performances of the same task to collect enough evidence of students' skill levels

purpose: total points for the assignment

feedback dissemination: dichotomous checklist item—you have it or you don't

task: generalizable skills used in analyzing print documents

feedback dissemination: feedback is given through varying scores for each criterion

Design Brief
Homework Assignment 3

presenting the task: cover sheet given to students to present the project

Assignment

Poppy Evans's second chapter goes through what is discussed in a basic design brief or a document that outlines what the client expects from a the designer for a specific project. Specifically, she mentions the goal of the piece being designed, the audience for the piece being designed, and the venue where the piece being designed will be seen and used (p. 22–25). In this assignment, you will take the three flyers/ads/catalogs you found for homework one and write your best guess of the design brief for each piece. Make sure you address the three specific areas mentioned above and refer to the chapter to include the important information for each section. Also look at the four components of visual communication discussed in *Elements of Design* ch. 6. Please include a copy of each piece with your typed briefs.

Requirements (21 points possible)

6 Goals of the piece
Think about these aspects of the pieces' purposes:

- goals of the client who commissioned the piece (*ED* p. 209)
- benefits of the piece to the client
- information to be communicated
- reason for communicating the information (to inform, persuade, sell, or entertain *PD* p. 22)
- benefits of the message to the audience

6 Audience of the piece
Think about these aspects of the pieces' audiences:

- the target audience of the piece
- demographics of the target audience
- the psychological foundations of the audience (behavior, thinking, feeling *ED* p. 194)
- why the audience would value this message
- why the piece would visually appeal to this audience

controlling for bias: terms used in the assignment were defined in class or in the text book.

6 Format of the piece
Think about these aspects of the pieces' formats:

- what venue does this piece appear in (bookstores, information booth, etc)
- size of the piece
- ease of use of the piece
- whether the communication is type heavy or image heavy

target and evaluation criteria: cognitive targets being assessed and evaluation criteria

3 Original Designs
Turn in the original designs with your assignment.

Please turn in a **hard copy** for this assignment. The assignment is due at the beginning of class on the date due; late assignments turned in within the week will be marked down 5 points. Assignments later than one week will not be accepted.

Example 2

Scored Checklist

The example on the facing page is an example of a scored checklist similar to the assessments I give my students in the courses I teach. You can see that a checklist of characteristics is provided so that students understand what qualities I am looking for in their print documents. Also points are given next to each item so that my students can see the weight I give to each of the qualities on the checklist. This also helps them understand what they can improve in their documents instead of just letting them know that their document had a certain quality or it didn't. Though some characteristics of the document do fall into a you have it or you don't dichotomy. This is especially true for the mastery of InDesign skills section.

purpose: this is a summative project in my course

purpose: total points for the assignment

feedback dissemination: feedback is given through varying scores for each criterium

feedback dissemination: scored checklist item where scores vary depending on degree of competence shown

task: generalizable skills used in designing print documents

sample of tasks: multiple performances of the same task to collect enough evidence of students' skill levels

controlling for bias: these terms were defined in class so all students should be able to understand them

Flyer Design Assignment
CHum 230, Computers & Print Publishing, Fall 2007

presenting the task: cover sheet given to students to present the project

Assignment

Design a black-and-white or color flyer to advertise some fictitious event.

task: the task for the assessment

Requirements (62 points possible)
Due Tuesday, September 25, 2007

Using the skills you have learned by this point in the class, create a 1-page, 8 1/2" x 11" flyer. Emphasize the crucial information and use a judicious mix of fonts and type sizes. It must include at least 1 picture box, although you may leave the box empty and assign a color and shade to it to represent a picture if you do not have one handy in electronic form.

5 Three flyers with a paragraph on the good and bad points of their designs (up to five extra credit points can be earned for extra photocopies and analysis)

3 Six thumbnail sketches of your flyer ideas.

25 Effective use of design principles
- (5) Unity and Variety
- (5) Hierarchy and Dominance
- (5) Proportion
- (5) Balance
- (5) Typography: not too many fonts or sizes, good mix of distinct fonts, good use of character attributes

target and evaluation criteria: design targets being assessed and design criteria

1 Create a 1-page, 8 1/2" x 11" document

10 Use of at least 1 text box and 1 picture box and using different text boxes for logically and visually separate information

5 Manipulating the stroke of boxes and lines to enhance the audience's understanding of and attraction to the information presented

5 Manipulating items as a group by aligning, distributing, grouping, and/or merging them

5 Manipulating text by choosing typefaces, typsizes, paragraph justifications, and other type options

3 Mastery of InDesign skills

Use at least **three** of the following tools or skills that we've learned so far in InDesign. (They must be changed from the default settings to count.) **Circle** which skills you've used on your design and turn this sheet in with your flyer.

Text inset	Scaled box	Box text wrap
Rotated box or content	Vertically centered text in box	
Skewed box or content	Line	
Type on a path	Arrow	
Contentless box	Cropped picture	
Pen line	Background color in box	

target and evaluation criteria: computer skills targets being assessed and computer skills criteria

Write down the fonts you use and their sizes:

Font	Sizes
_____	_____
_____	_____

Please turn in this sheet, three flyers with analyses, a hard copy of your flyer, and the electronic file for this assignment. The assignment is due at the beginning of class on the date due; late assignments will be marked down 10 points.

Discussion of Examples

Though each project for my courses is different from the others, they all share certain characteristics that make them effective. One of these characteristics is that the projects contain the eight standards of effective product assessments. I will briefly explain how each standard was incorporated in my examples.

Step one: The purpose

Each of these projects were summative projects in my course. But the weight each project has to influence a student's score is shown be the number of total points a project is worth. Students are able to make judgments about how much a project will impact their total score.

Step Two: The target

Each project had design, computer, or cognitive targets that were described in some type of checklist so that students understood what skills and knowledge are being assessed in the project.

Step Three: The Task

Each project has a specific task or set of tasks described under the section labeled assignment. Specific characteristics of the tasks are described in more detail under the requirements sections.

Step Four: The Evaluation Criteria

Each project lists the evaluation criteria with points assigned to specific criteria or to sections that the criteria fit into to help students understand what criteria will be used to judge their products and how much each criterion will contribute to their overall score.

Step Five: The Sample of Tasks

Each project requires mutliple performances of the same tasks or performances of a few similar tasks. This creates enough evidence to evaluate students' skill levels.

Step Six: Controlling for Bias

Each project uses terms defined in class or in the text book to describe the expectations that students need to meet when creating their products. Sometimes I reference certain pages in the text book to give all students access to explanations of terms used or tasks required for the project.

Step Seven: Presenting the Task

Each project is presented by me in conjunction with a cover sheet that explains the details of the project. Students are usually shown examples of quality products that fulfill project requirements and students are given time to ask questions about the projects. Students are also advised to email me with any questions they have about completing the projects as they are working on the projects outside of class.

Step Eight: Feedback Dissemination

Each product is returned to the student with the cover sheet. Scores are assigned to the different criteria listed on the cover sheets and comments are written on the products or the cover sheets about how the student could improve their product. This helps all students receive feedback on multiple areas of their product and helps students understand the weak and strong points of their product with regard to the criteria used to evaluate their product.

Hopefully, these examples of my product assessment projects clearly illustrate how the standards for effective product assessment have been integrated in a variety of course product assessment projects.

Checklist

Here is a checklist to quickly run through as you are creating and refining your product assessment projects.

1. Is the assessment formative or summative?
2. What skill areas are you assessing? How will students show mastery of those skills?
3. What task will allow students to display mastery of the skills you want to assess and will be meaningful to students as they complete it?
4. Which criteria are crucial to displaying mastery of the skills being assessed?
5. Does the task your students will perform give you enough information to evaluate their level of mastery of the skills being assessed?
6. Will any students be advantaged or disadvantated by the tasks themselves or the way you are planning to present the tasks to the students?
7. How will you present the tasks and the criteria to the students so that they can successfully create a quality product that shows their level of mastery of the skills you are assessing?
8. How will you give students feedback about the product they created and their level of mastery of the skills you are assessing?