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Predictive Ability from ePortfolios of Student Achievement Associated with Professional Teaching Standards: An Exploratory Case Study

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Abstract

This exploratory case study, focused on a music teacher preparation program, examined the coursework ePortfolios of pre-service music teachers to determine if any parts of the ePortfolio process predicted teaching effectiveness in the classroom during the student teaching semester. Sixty-five undergraduate pre-service music teachers made up the sample of the study. Data collected for each student consisted of coursework ePortfolios, summative student teaching assessments from both elementary and secondary placements, and selected licensure-related requirements as mandated by the state board of education. Multiple regression analyses revealed significant relationships between ePortfolio performance and student teaching assessments. Specifically, student teacher reflections (as part of the portfolio process) were found to be the lone significant predictor of teaching effectiveness for both elementary and secondary placements as measured by Danielson's framework. While not significant, it should be noted that the Praxis II: Music Content Test should be examined further as the numbers of cases increased due to the nature of its relationship with the domain of *planning and preparation* in the secondary area. As this is an exploratory case study, further examination of the predictive ability of the ePortfolio process should be undertaken to better define the impact of the portfolio process within a pre-service teacher program.

Introduction

One assessment tool used widely in teacher preparation programs throughout U.S. schools is the portfolio, which, though most often used to assess achievement of knowledge and proficiency, might also be used to indicate potential teaching effectiveness (Henry et al., 2003). However, while the portfolio can be a valid, authentic approach to assessment in teacher

education (Reckase, 1993; Darling-Hammond, 2000; Henry et al., 2013; Wilson et al., 2014), Burns and Haight (2005) suggest that many teacher education programs assess the competencies of pre-service teachers without examining reliability or validity or identifying the extent to which indicators of learning gleaned from portfolios could predict future success in the classroom. Furthermore, these relationships must be identified, demonstrated, and reported especially within the scope of recent educational reform (Diez, 2010).

While several researchers have documented the development, implementation, and reliability testing of portfolios in music teacher preparation (Bauer & Dunn, 2003; Berg & Lind, 2003; Draves, 2009; Burrack & Payne, 2016), none examined whether portfolio assessments can serve as predictors of teaching quality. Findings of Wilson, Hallam, Pecheone, and Moss (2014) indicate that portfolio scores distinguish among teachers who demonstrate success in enhancing their students' achievement from those who do not, but do not specifically address the issue of predictive ability of the portfolio process on teaching effectiveness. As Henry, Campbell, Thompson, Patriarca, Luterbach, Lys, and Covinton (2013) point out, teacher candidates who perform better on progress indicators during preparation should become more effective teachers when they enter the classroom. As Henry, et al. explain:

> … the evidence from these assessments can be used to (a) provide feedback about the strengths and weaknesses of teacher candidates that relates directly to their ability to improve student achievement; (b) identify specific teacher candidates who need supplemental instruction, coaching, or mentoring; (c) redirect low performing teacher candidates into other fields; and (d) provide systematic information about knowledge, skills, and dispositions of effective teachers that are or are not being developed through the preparation program. (p. 440)

Danielson (2007) suggests that, because of the complexity of teaching, it is vital to establish a teaching framework that is flexible enough to address a broad spectrum of experiences. In response to a need to organize specific parts of the teaching profession "that have been documented through empirical studies and theoretical research as promoting improved student learning" (p.1), Danielson's (2007) *Framework for Teaching* (FFT) identifies and describes critical areas for teachers to master in order to maximize their impact on student learning. The FFT measures 22 components across four domains—*planning and preparation*, *classroom environment*, *instruction*, and *professional responsibilities*—in order to describe the knowledge, skills, and dispositions of effective teachers as observed in the classroom by a teacher's appointed supervisor.

The present exploratory case study examined a broad range of progress and performance indicators within a large music teacher preparation program. Potential indicators of teaching effectiveness (i.e. Performance assessments during student teaching and comprehensive ePortfolios) were routinely documented through an array of rubrics. Furthermore, both ceritification exams (Praxis II and the Music: Content Knowledge) were included in the study to determine if any predictive ability resided with candidates' performances on those standardized tests. A framework was developed to effectively examine the predictive validity of ePortfolio-based assessments for effective teaching in the classroom. Predictive validity was operationally defined as the extent to which data gathered on teacher candidates in the course of their preparation could potentially indicate effectiveness of teaching during their student teaching experience. The primary research question for this study was: which elements of the pre-service teachers' ePortfolios predict effectiveness of student teaching performance in the domains of *planning and preparation*, *classroom environment*, *instruction*, and *professional responsibilities*?

The predictive value of ePortfolios is important if ePortfolios are to be used as summative evaluations or high stakes measures for licensure.[1]

Method

Subjects

Subjects consisted of all candidates in the undergraduate pre-service music teacher program at Kansas State University from 2009 to 2015 for whom full data sets were available ($N = 65$). Data were collected from subjects' ePortfolios[2] and their respective components, student teaching assessments, and selected licensure-related requirements. A majority of subjects were female (64%), all were Caucasion (100%), and all student-taught at both the elementary and secondary levels.

ePortfolio Process

The ePortfolio was initiated during the freshman year of study and developed throughout all music education coursework. Each subjects' portfolio consisted of documentation related to knowledge and application of the state's nine state music teaching standards. Guidance in understanding achievement expectations was provided by incorporating peer and faculty feedback, as well as self-assessment. For each standard, subjects submitted three components: a reflective essay, artifacts, and accompanying rationales. The reflective essay focused on revealing understanding of each standard and describing how that understanding would impact effectiveness in the classroom. The artifacts consisted of two work samples from subjects' own

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[1] http://education.state.mn.us/MDE/EdExc/Licen/LicenPort/index.html
[2] ePortfolios are continually assessed throughout the undergraduate curriculum resulting in a summative assessment administered the semester prior to the student teaching.

teaching that document the meeting or exceeding of the state licensing standards. Each artifact was accompanied by a rationale that described why the artifact was selected and how the artifact demonstrated the pre-service teacher's understanding of effective teaching in the classroom. The essays and rationales were assessed for depth of connection made to the teaching standards as well as anticipated impact on student learning in the classroom. Following multiple opportunities for self-, peer-, and instructor feedback, the pre-service teachers submitted their final ePortfolio prior to their student teaching semester.

Reflective essays, artifacts, and rationales were scored using the ePortfolio Scoring Rubric (PSR) found in Appendix A. The PSR was divided into two sections: reflective essay scores and rationales (Artifact #1 and Artifact #2) and yielded a maximum score of 72 (36 for each section). [3] Reflective essays were scored from 1 to 4 with 1 representing unsatisfactory and 4 representing exemplary for essay responses. Criteria were designed to measure pre-service teachers' articulation of the state teaching standards and clear connections to effective music teaching in their future classroom.

Rationales were individually scored 0 to 2 with 0 indicating unsatisfactory work and 2 indicating exemplary work. Criteria were written to measure abilities to connect current work samples with future professional expectations. The scores were recorded for each standard resulting in a minimum possible score of 9 and a maximum of 36 for reflective essays. Furthermore, the rationales could have a minimum of 0 and a maximum of 36 across all nine state music teaching standards. A copy of the assignment and rubrics are located in Appendix A.

Data Collection

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[3] Artifacts are used to document the written rationale.

ePortfolio scores for this exploratory case study were collected following the summative assessment, which occurs in students' final semesters on campus. The ePortfolio Scoring Rubrics (PSR) were compiled (predictor variables) along with summative evaluations in the four domains of Danielson (2007)[4] from all students' respective elementary and secondary student teaching experiences (outcome variables). Prior to summative evaluations (the final on-site observation), each pre-service music teacher was provided verbal and written feedback from both university supervisors and cooperating teachers. During the observations, all supervisors were trained in implementing the rubrics from Danielson's (2007) framework as it pertained to teaching in the music classroom (See Appendix B). Other data collected included: College Test (ACT) composite score, the *Principles of Learning and Teaching: Grades 7 – 12* (PLT:Licensure test), the *Praxis II: Music Content Test (MCT)*, and the students' GPA. Therefore, the predictor variables of teaching effectiveness in the classroom selected for this study were the ePortfolio reflections of the pre-service teachers, standardized content and certification examinations, college entrance exams, and individual Grade Point Averages (GPA).

Design and Analysis

A quasi-experimental design employing multiple regression was employed in this study with predictor variables being identified as ePortfolio reflection scores, rationale scores, ACT, GPA, MCT, and PLT. The dependent variable was the overall teaching score as measured by the Danielson framework evaluation during the pre-service teachers' student teaching semester. Once significant predictors were found, scores were then disaggregated to determine whether the predictor variables were specific to any one domain. A previous study of the same sample

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[4] *Planning and Preparation*, *Classroom Environment*, *Instruction*, and *Professional Responsibilities* (Danielson, 2007)

(Burrack & Payne, 2016) established validity and reliability of the ePortfolio measures for the same sample used in this study.

An analysis of the scoring tool revealed an internal consistency of $\alpha = 0.92$, which falls within the acceptable range for internal consistency. Two music education professors, who were experts in the field and held terminal degrees in music education, scored each reflection independently, then met and discussed the rationale for scores earned. This allowed for member checking of the application of the rubric and an increased control of the inter-rater reliability of the measure $r = .89 - .91$ (Draves, 2009). Multiple linear regressions were applied to determine if any variables significantly predicted teaching effectiveness in the classroom overall as well as within the domains of *planning and preparation*, *classroom environment*, *instruction*, and *professionalism*.

Results

The primary question for the current study was, "which elements of the pre-service teachers' ePortfolios and additional predictors (reflections, artifacts, rationales, GPA, PLT, MCT, and ACT) predict effectiveness of student teaching performance in the domains of *planning and preparation*, *classroom environment*, *instruction*, and *professionalism*?" Results were calculated and analyzed based on elementary and secondary placements.

Overall Results

Multiple linear regression was used to predict the teaching scores in the pre-service teachers' elementary placements based on the summative score of the content provided through their ePortfolio. A significant regression equation was found ($F(7,57) = 2.131$, $p < .05$), with an

R^2 of 0.207. Only the category of student reflections was found to be a significant predictor of overall teaching effectiveness in the pre-service teachers' elementary placements. Additional results from this regression equation are provided in Tables 1.1 – 1.3.

Table 1.1 *Regression Analysis: Elementary Student Teaching*

R	R^2	Adjusted R^2	Std. Error	R^2 Change
.455[a]	.207	.110	25.7880	.207

Table 1.2 *Regression Analysis: Elementary Student Teaching*

ANOVA[ab]

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	9921.937	7	1417.420	2.131	.050[b]
Residual	37906.309	57	665.023		
Total	47828.246	64			

a. Dependent Variable: Elementary ST
b. Predictors: (Constant), Music Content, Refl, P-Rel, ACT, GPA, PRAXIS II, Artifacts

Table 1.3 *Regression Analysis: Elementary Student Teaching*

Coefficients[a]

Model	Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t
(Constant)	22.657	78.013		.290
Reflections[b]	2.050	.749	.343	2.735
Artifacts	.781	.722	.189	1.083
Total Score	-.850	1.740	-.085	-.489
ACT	.449	.562	.110	.799
GPA	4.542	12.423	.060	.366
PRAXIS II	-.446	.500	-.150	-.892
Music Content	.402	.401	.149	1.002

a. Dependent Variable: Elementary ST
b. Significant Predictor ($p < .05$)

Additionally, a multiple linear regression was calculated to predict the teaching scores in the pre-service teachers' secondary placements based on the summative score of the content provided through their ePortfolios. A significant regression equation was found ($F(7,57) = 2.78$, $p < .05$), with an R^2 of 0.255. The only significant predictor found was the students' abilities to reflect on the application of state teaching standards within the music classroom when predicting overall scores in the pre-service teachers' secondary placements. Additional results from these regression equations are provided in Tables 2.1 – 2.3.

Table 2.1. *Regression Analysis: Secondary Student Teaching*

R	R^2	Adjusted R^2	Std. Error	R^2 Change
.505[a]	.255	.163	13.4237	.255

Table 2.2 *Regression Analysis: Secondary Student Teaching*

	ANOVA[a]				
Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	3507.035	7	501.005	2.780	.015[b]
Residual	10271.181	57	180.196		
Total	13778.215	64			

a. Dependent Variable: Secondary ST
b. Predictors: (Constant), Music Content, Refl, P-Rel, ACT, GPA, PRAXIS II, Artifacts

Table 2.3 *Regression Analysis: Secondary Student Teaching*

	Coefficients[ab]			
	Unstandardized Coefficients		Standardized Coefficients	
Model	B	Std. Error	Beta	t
(Constant)	41.671	40.609		1.026
Reflections[b]	1.030	.390	.321	2.640
Artifacts	.414	.376	.187	1.101
Total Score	-.299	.906	-.055	-.330
ACT	-.013	.293	-.006	-.043
GPA	6.741	6.467	.167	1.042
PRAXIS II	-.222	.260	-.140	-.854
Music Content	.347	.209	.240	1.661

a. Dependent Variable: Secondary ST
b. Significant Predictor ($p < .05$)

Results by Domain

After discovering the significant regression equation, each domain was examined, indicating that Domain 4 (*professionalism*) yielded a significant regression equation in the elementary results, while Domains 1 (*planning and preparation*) and Domain 3 (*instruction*) yielded significant regression equations in the secondary area. Consistent with the overall results, student reflections were again found to be the only significant predictor with an R^2 ranging from 0.231 to 0.306. See Tables 3.1 – 5.3 for a more detailed description of all areas and predictors.

Table 3.1 *Regression Analysis: Professionalism – Elementary*

R	R^2	Adjusted R^2	Std. Error	R^2 Change
.480[a]	.231	.136	6.9280	.231

Table 3.2 *Regression Analysis: Professionalism – Elementary*

			ANOVA[ab]		
Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	819.711	7	117.102	2.440	.029[b]
Residual	2735.828	57	47.997		
Total	3555.538	64			

    a. Dependent Variable: Professionalism (Elementary)
    b. Predictors: (Constant), Music Content, Refl, P-Rel, ACT, GPA, PRAXIS II, Artifacts

Table 3.3 *Regression Analysis: Professionalism – Elementary*

	Coefficients[ab]			
	Unstandardized Coefficients		Standardized Coefficients	
Model	B	Std. Error	Beta	t
(Constant)	8.146	20.958		.389
Reflections[b]	.578	.201	.355	2.870
Artifacts	.238	.194	.212	1.230
Total score	-.076	.467	-.028	-.162
ACT	.080	.151	.072	.529
GPA	.550	3.338	.027	.165
PRAXIS II	-.098	.134	-.121	-.730
Music Content	.113	.108	.154	1.047

    a. Dependent Variable: Professionalism (Elementary)
    b. Significant Predictor: Reflections ($p < .05$)

Table 4.1 *Regression Analysis: Planning and Preparation – Secondary*

R	R^2	Adjusted R^2	Std. Error	R^2 Change
.553[a]	.306	.221	4.5301	.306

Table 4.2 *Regression Analysis: Planning and Preparation – Secondary*

			ANOVA[ab]		
Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	516.335	7	73.762	3.594	.003[b]
Residual	1169.726	57	20.522		
Total	1686.062	64			

 a. Dependent Variable: Planning and Preparation - Secondary
 b. Predictors: (Constant), Music Content, Refl, P-Rel, ACT, GPA, PRAXIS II, Artifacts

Table 4.3 *Regression Analysis: Planning and Preparation – Secondary*

	Coefficients[ab]			
	Unstandardized Coefficients		Standardized Coefficients	
Model	B	Std. Error	Beta	t
(Constant)	-.852	13.704		-.062
Reflections[b]	.405	.132	.361	3.079
Artifacts	.140	.127	.180	1.101
Total Score	-.082	.306	-.043	-.268
ACT	.005	.099	.007	.053
GPA	2.921	2.182	.207	1.339
PRAXIS II	-.097	.088	-.174	-1.100
Music Content	.122	.070	.242	1.733

    a. Dependent Variable: Planning and Preparation (Secondary)

    b. Significant Predictor: Reflections

Table 5.1 *Regression Analysis: Instruction – Secondary*

R	R^2	Adjusted R^2	Std. Error	R^2 Change
.486[a]	.236	.142	3.8887	.236

Table 5.2 *Regression Analysis: Instruction – Secondary*

	ANOVA[ab]				
Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	266.517	7	38.074	2.518	.025[b]
Residual	861.945	57	15.122		
Total	1128.462	64			

 a. Dependent Variable: Instruction - Secondary

 b. Predictors: (Constant), Music Content, Refl, P-Rel, ACT, GPA, PRAXIS II, Artifacts

Table 5.3 *Regression Analysis: Instruction – Secondary*

| | Coefficients[ab] | | | |
| Model | Unstandardized Coefficients | | Standardized Coefficients | |
	B	Std. Error	Beta	t
(Constant)	7.311	11.764		.621
Reflections[b]	.253	.113	.276	2.242
Artifacts	.201	.109	.317	1.846
Total Score	-.305	.262	-.198	-1.163
ACT	-.024	.085	-.039	-.289
GPA	2.247	1.873	.195	1.199
PRAXIS II	-.071	.075	-.157	-.946
Music Content	.080	.060	.195	1.330

a. Dependent Variable: I – S
b. Significant Predictor: reflections ($p < .05$)

Discussion

The results of this exploratory case study revealed that some of the current practices contained in this specific ePortfolio process significantly relate to the demonstration of teaching effectiveness during the student-teaching semester. While these results are promising and similar studies could be administered on a broader scale, the authors caution that these findings are generalizable only to students in one undergraduate music education program. Limitations of a single case, currency of data collected, and small sample size create a need for research on a broader scale. Regardless, the emergence of reflection as the sole significant predictor in the domain-specific analyses, as well as in the overall teaching scores, indicates the importance of developing reflective practice during pre-service teaching. Furthermore, when students do not show adequate ability to reflect on components of effective teaching, this might be an indication of potential future struggles in the classroom during student teaching. Revealing teacher reflection as a significant predictor of demonstrating effective teaching in practice is consistent

with Danielson (2007) who stated that students' conceptual learning "depends entirely on their experience in deriving that concept for themselves" (p.15).

More specifically, these findings suggest that reflections in the domains of *planning and preparation*, *instruction*, and *professionalism* incorporated during teaching preparation establish a foundation for effective teaching. One theory inferred from these findings suggests that when students fail to adequately articulate their interpretation of state music teaching standards through reflection, there may be a need for intervention or additional instruction to prepare the pre-service teacher for student teaching.

No significance was found in any equation for Domain 2 (*classroom environment*). This would suggest that regardless of practicum experience or development of management plans, nothing in the ePortfolio currently serves as a predictor of what was being assessed using the Danielson (2007) scoring device. Although the *Praxis II: Music Content Test* was not found to be a significant predictor of *planning and preparation*, it was found to be approaching statistical significance ($p = .06$). The researchers suggest that this finding should be examined further using a larger sample to determine if or how content knowledge impacts a pre-service teacher's understanding of planning and preparation. Furthermore, a lack of significant predictors beyond reflective practice might indicate that exploration of different measures for our current curricula would be helpful. Standardized tests reliably measure the pre-service teachers' knowledge about the profession, but do not directly relate or demonstrate complete understanding of their student teaching semester or first teaching experiences. Therefore, one solution might be to develop best practices in the first year of teaching including mentoring programs and professional development. Once established, developing reliable and valid measures of effectivenss might help reveal more significant predictors of effectivess in the first years of teaching.

Another intriguing finding was that GPA and ACT scores were not found to be significant predictors of teaching effectiveness as measured by the Danielson (2007) framework. While these scores are often used to predict success at the collegiate level for future students, there were no indicators suggesting that these same scores predicted effectiveness in the classroom during student teaching. More investigation of this finding should be undertaken to determine whether this lack of significance extends to the pre-service teachers' abilities to reflect as a future professional.

Although the present study took a step toward examining the link between pre-service teachers' performance in the teacher preparation program and their effectiveness in student teaching, it did not address the extent to which pre-service teachers subsequently apply what they have learned in their teacher preparation program during student teaching. Furthermore, the sample size and scope of the current study limits the generaliziability of the results beyond this program. However, this study can serve as a framework for better understanding the ePortfolio as a means to develop the knowledge, skills, and dispositions of future teachers that can translate into effective practices in the classroom during student teaching. As Diez (2010) points out, identifying the relationship between a teacher preparation program and later effectiveness during student teaching is important when considering the extent to which pre-service teachers actually learned what a teacher preparation program sought to teach and the degree to which this learning contributed to classroom practice.

Appendix A: Standards Assignment and Scoring Rubric

Music Education Content Standard (e-portfolio assignment and rubric).
Provide evidence as to your understanding and competence in relation to each Kansas Music Teacher Standard.
1. Include on the appropriate web page a <u>reflective essay</u> written for each of the nine content standards demonstrating your understanding of the standard and how it applies to you as an effective music teacher.
2. Link 2 forms of evidence (or <u>artifacts</u>) from your coursework and/or field experiences that demonstrating your competence of the content standard. The link is to be imbedded in a description of the artifact. Identify how it reflects the standard and how the artifact impacted you as a music teacher.

What makes an essay "reflective"? A reflective essay requires that you describe your understanding of the content standard and consider what the standard means to you as a music teacher. Describe how you will make use of the content to plan future instruction. Reflective essays should *"paint a picture"* of your understanding of each standard and are enhanced by cross-referencing specific evidence supplied to support your reflection.

Unsatisfactory 1	Basic 2	Proficient 3	Exemplary 4
Teacher candidate attempts a reflective essay but does not appropriately address the standard.	Teacher candidate's reflective essay accurately addresses the standard but does not relate their understanding to teaching.	Teacher candidate's reflective essay addresses the standard appropriately and relates it to teacher on a basic level of application.	Teacher candidate's reflective essay exhibits a deeper understanding for the standard and its impact on effective music teaching.

What kind(s) of evidence (artifacts) should be supplied? Items to consider might be graded assignments or tests, journals, lesson plans, course notes, lesson reflections, observation notes of student response to instruction, etc. Another form of evidence might be to compare/contrast future instructional planning in relation to state and national standards. Thus, the evidence you submit will likely vary across each of the content standards.

Scoring Key for Artifacts	Unsatisfactory 0	Limited 1	Satisfactory 2
Description of the artifact describing how it reflects competence in the standard and analysis of what you've learned.	Does not include a description or what was learned through the artifact.	Briefly describes the artifact and what was learned.	Clearly describes what was learned and how this impacts effective teaching.

Content Standard *4 total point in each category*	Reflective Essay Score	Artifact #1 Score	Artifact #2 Score
1 The teacher of music has skills in teaching and evaluation techniques.			
2 The teacher of music has skills in improvising melodies, variations, and accompaniments.			
3 The teacher of music has skills in composing and arranging music.			
4 The teacher of music has skills in reading and writing music.			
5 The teacher of music has skills in listening to, analyzing, and describing music.			
6 The teacher of music has skills in evaluating music and music performances.			
7 The teacher of music has an understanding of music in relation to various historical periods and cultures.			
8 The teacher of music has skills in establishing effective music-learning environments.			
9 The teacher of music advocates for the school music program in the community at large.			

Appendix B: Danielson Framework

Student Teaching Formal Observations
Professional Progress Form

Teacher Candidate: _____ School: _____

Grade Level: _____ Supervisor: _____

CATEGORY 1. Perspective and Preparation

COMPONENT	UNSATISFACTORY 1	BASIC 2 3 4	PROFICIENT 5 6 7	Score
Demonstrating Knowledge of Content and Pedagogy	Teacher displays little understanding of the subject or structure of the discipline, or of content related pedagogy.	Teacher's content and pedagogical knowledge represents basic understanding but does not extend to connections with other disciplines or to possible student misconceptions.	Teacher demonstrates solid understanding of the content and its prerequisite relationships and connections with other disciplines. Teacher's instructional practices reflect current pedagogical knowledge.	
Demonstrating Knowledge of Students	Teacher makes little or no attempt to acquire knowledge of students' backgrounds, skills, or interests, and does not use such information in planning.	Teacher demonstrates partial knowledge of students' backgrounds, skills, and interests, and attempts to use this knowledge in planning for the class as a whole.	Teacher demonstrates thorough knowledge of students' backgrounds, skills, and interests, and uses this knowledge to plan for groups of students.	
Selecting Instructional Goals	Teachers' goals represent trivial learning, are unsuitable for students, or are stated only as instructional activities, and they do not permit viable methods of assessment.	Teacher's goals are moderate of moderate value or suitability for students in the class, consisting of a combination of goals and activities, some of which permit viable methods of assessment.	Teacher's goals represent valuable learning and are suitable for most students in the class; they reflect opportunities for integration and permit viable methods of assessment.	
Demonstrating Knowledge of Resources	Teacher is unaware of school or district resources available either for teaching or for students who need them.	Teacher displays limited knowledge of school or district resources available either for teaching or for students who need them.	Teacher is fully aware of school and district resources available for teaching, and knows how to gain access to school and district resources for students who need them.	
Designing Coherent Instruction	The various elements of the instructional design do not support the stated instructional goals and engage students in meaningful learning, and the lesson or unit has no defined structure.	Some of the elements of the instructional design support the stated instructional goals and engage students in meaningful learning, while other do not. Teacher's lesson or unit has a recognizable structure.	Most of the elements of the instructional design support the stated instructional goals and engage students in meaningful learning, and the lesson or unit has a clearly defined structure.	
Assessing Student Learning	Teacher's approach to assessing student learning contains no clear criteria or standards, and lacks congruence with the instructional goals. Teacher has no plans to use assessment results in designing future instruction.	Teacher's plan for student assessment is partially aligned with the instructional goals and includes criteria and standards that are not entirely clear or understood by students. Teacher uses the assessment to plan for future instruction for the class as a whole.	Teacher's plan for student assessment is aligned with the instructional goals at least nominally, with clear assessment criteria and standards that have been communicated to students. Teacher uses the assessment to plan for groups of students or individuals.	

(Highlight all statements on this rubric where evidence was found to support the statements.)
Summary of Progress in Category 1

Appendix B, continued Danielson Framework

CATEGORY 2. Classroom Environment

Component	UNSATISFACTORY 1	BASIC 2 3 4	PROFICIENT 5 6 7	Score
Creating an Environment of Respect and Rapport	Classroom interactions, both between the teacher and students and among students, are negative or inappropriate and characterized by sarcasm, putdowns, or conflict.	Classroom interactions are generally appropriate and free from conflict but may be characterized by occasional displays of insensitivity.	Classroom interactions reflect general warmth and caring, and are respectful of the cultural and developmental differences among groups of students.	
Establishing a Culture for Learning	The classroom does not represent a culture for learning and is characterize by low teacher commitment to the subject, low expectations for student achievement, and little student pride in work.	The classroom environment reflects only a minimal culture for learning, with only modest or inconsistent expectations for student achievement, little teacher commitment to the subject, and little student pride in work. Both teacher and students are performing at the minimal level to "get by."	The classroom environment represents a genuine culture for learning, with commitment to the subject on the part of both teacher and students, high expectations for student achievement, and student pride in work.	
Managing Classroom Procedures	Classroom routines and procedures are either nonexistent or inefficient, resulting in the loss of much instruction time.	Classroom routines and procedures have been established but function unevenly or inconsistently, with some loss of instruction time.	Classroom routines and procedures have been established and function smoothly for the most part, with little loss of instruction time.	
Managing Student Behavior	Student behavior is poor, with no clear expectations, no monitoring of student behavior, and inappropriate response to student misbehavior.	Teacher makes an effort to establish standards of conduct for students, monitor student behavior, and respond to student misbehavior, but these efforts are not always successful.	Teacher is aware of student behavior, has established clear standards of conduct, and responds to student misbehavior in ways that are appropriate and respectful of the students.	
Organizing Physical Space	Teacher makes poor use of the physical environment, resulting in unsafe or inaccessible conditions for some students or a serious mismatch between the furniture arrangement and the lesson activities.	Teacher's classroom is safe, and essential learning is accessible to all students, but the furniture arrangement only partially supports the learning activities.	Teacher's classroom is safe, and learning is accessible to all students; teacher uses physical resources well and ensures that the arrangement of furniture supports the learning activities.	

(Highlight all statements on this rubric where evidence was found to support the statements.)
Summary of Progress in Category 2

Appendix B, continued Danielson Framework

CATEGORY 3. Instruction

Component	UNSATISFACTORY 1	BASIC 2 3 4	PROFICIENT 5 6 7	Score
Communicating Clearly and Accurately	Teacher's oral and written communication contains errors or is unclear or inappropriate to students.	Teacher's oral and written communication contains no errors, but may not be completely appropriate or may require further explanations to avoid confusion.	Teacher communicates clearly and accurately to students, both orally and in writing.	
Using Questioning and Discussion Techniques	Teacher makes poor use of questioning and discussion techniques, with low-level questions, limited student participation, and little true discussion.	Teacher's use of questioning and discussion techniques is uneven, with some high-level questions, attempts at true discussion, and moderate student participation.	Teacher's use of questioning and discussion techniques reflects high-level questions, true discussion, and full participation by all students.	
Engaging Students in Learning	Students are not at all intellectually engaged in significant learning, as a result of inappropriate activities or materials, poor representations of content, or lack of lesson structure.	Students are intellectually engaged only partially, resulting from activities or materials of uneven quality, inconsistent representations of content, or uneven structure or pacing.	Students are intellectually engaged throughout the lesson, with appropriate activities and materials, instructive representations of content, and suitable structure and pacing of the lesson.	
Providing Feedback to Students	Teacher's feedback to students is of poor quality and is not given in a timely manner.	Teacher's feedback to students is uneven, and its timeliness is inconsistent.	Teacher's feedback to students is timely and of consistently high quality.	
Demonstrating Flexibility and Responsiveness	Teacher adheres to the instruction plan in spite of evidence of poor student understanding or of students' lack of interest, and fails to respond to students' questions; teacher assumes no responsibility for students' failure to understand.	Teacher demonstrates moderate flexibility and responsiveness to students' needs and interest during a lesson, and seeks to ensure the success of all students	Teacher seeks ways to ensure successful learning for all students, making adjustments as needed to instruction plans and responding to student interests and questions.	

(Highlight all statements on this rubric where evidence was found to support the statements.)
Summary of Progress in Category 3

Appendix B, continued Danielson Framework

CATEGORY 4. Professional Responsibilities

Component	UNSATISFACTORY 1	BASIC 2 3 4	PROFICIENT 5 6 7	Score
Reflecting on Teaching	Teacher does not reflect accurately on the lesson or propose ideas as to how it might be improved.	Teacher's reflection on the lesson is generally accurate, and teacher makes global suggestions as to how it might be improved.	Teacher reflects accurately on the lesson, citing general characteristics and makes some specific suggestions about how it might be improved.	
Maintaining Accurate Records	Teacher has no system for maintaining accurate records, resulting in errors and confusion.	Teacher's system for maintaining accurate records is rudimentary and only partially effective.	Teacher's system for maintaining accurate records is efficient and effective.	
Communicating With Families	Teacher provides little or no information to families and makes no attempt to engage them in the instructional program.	Teacher complies with school procedures for communicating with families and makes an effort to engage families in the instructional program.	Teacher communicates frequently with families and successfully engages them in the instructional program.	
Contributing to the School and District	Teacher's relationships with colleagues are negative or self-serving, and teacher avoids being involved in school and district projects.	Teacher's relationships with colleagues are cordial, and teacher participates in school and district events and projects when specifically requested.	Teacher participates actively in school and district projects, and maintains positive relationships with colleagues.	
Growing and Developing Professionally	Teacher does not participate in professional development activities, even when such activities are clearly needed for the development of teaching skills.	Teacher's participation in professional development activities is limited to those that are convenient.	Teacher participates actively in professional development activities and contributes to the profession.	
Showing Professionalism	Teacher's sense of professionalism is low, and teacher contributes to practices that are self-serving or harmful to students.	Teacher's attempts to serve students based on the best information are genuine but inconsistent.	Teacher makes genuine and successful efforts to ensure that all students are well served by the school.	
Personal Habits	Is often late and/or tardy. Does not perform minimum required tasks. Clothing does not allow teacher to complete required duties without interference. Hygiene does not allow students and peers to work with teacher without being offended.	Teacher is regularly in attendance and seldom if ever tardy. Generally clothing is clean and allows teacher to perform required tasks without interference. Hygiene generally allows students and peers to work with teacher without being offended.	Shows dedication by working beyond basic requirements. Is absent only when necessary. Clothing is clean and neat and allows the teacher to perform required tasks without interference. Hygiene allows students and peers to work with teacher without being offended.	

(Highlight all statements on this rubric where evidence was found to support the statements.)
Summary of Progress in Category 4

Source: Adapted from Danielson, Charlotte. (2007). *Enhancing Professional Practice: A Framework for Teaching*. Alexandria, VA: Association for Supervision and Curriculum Development.

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About the Authors

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Frederick Burrack, Professor of Music Education, joined the Kansas State music faculty as a music education specialist in Fall 2005. He oversees the graduate studies for the Music Program and is Director of the Office of Assessment associated with the Provost Office. He holds a Bachelor's Degree from Wartburg College, a Master of Music Education from Northwestern

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