

Contents

Executive Summary	3
Introduction.....	4
Purpose of the evaluation.....	4
Approach and methodology	5
Results.....	5
Participants	5
Question 1: To what extent did the PLC process impact faculty knowledge of SB1, teacher preparation, and teaching practices to meet the needs of undergraduate students?	6
Question 2: To what extent did the PLC process impact instructional design and classroom practice at EKU?	9
Level of implementation	9
Instructional Strategies.....	9
Question 3: What are faculty perceptions regarding the process of syllabi alignment?	10
Question 4: What are participant perceptions of the strengths and weaknesses of the PLC model?	12
What were the greatest strengths of the embedded PLC model? (<i>N</i> = 23)	12
What should be changed to improve the PLC process at EKU? (<i>N</i> = 15)	12
Conclusions and recommendations.....	14
References:.....	15

Tables and Figures

Table 1: Average level of agreement by statement.....	6
Table 2: Average responses by content area.....	8
Figure 1: Level of agreement for alignment process by content area.....	11

Curriculum Alignment for Retention and Transition at Eastern (CARTE) Evaluation

Executive Summary

Professional Learning Communities (PLCs) have been successfully used to provide professional development and effect change in university settings. Utilizing an embedded PLC model, Eastern Kentucky University began the process of aligning syllabi for general education classes and teacher education classes. The goal was to create a pathway for undergraduate students based on the knowledge and skills defined by the new Common Core standards. The PLC process focused on alignment, training, pedagogy, and retention.

Thirty seven participants responded to the online survey (58% response rate) and there was at least a 50% return rate for each of the content areas of: teacher education, math, English, social science, and natural science. Both quantitative and qualitative data were collected and analyzed for the evaluation.

When reflecting on their experience with the PLC, participants report they have more ability in the area of teaching, greater knowledge of Common Core, and have a greater understanding of teacher preparation. However, there is a need to better understand how to retain undergraduate students. This need crosses all content areas.

The majority of responses indicate they will implement changes to their syllabi as a result of the PLC. However, the open ended comments convey varying levels of commitment to this. The open responses show that 53% will fully implement the changes, while the rest will if “it is required” or “if it is relevant.” Specifically, faculty reported they will implement changes in the area of assessment and feedback and that they will use project-based learning, small group activities, and classroom discussion.

Overwhelmingly, the greatest strength of the PLC was the opportunity to collaborate by having a designated time to work together. Faculty suggested that more money, stronger leadership, and getting more faculty involved would be ways to improve the PLC experience in the future. The majority of respondents agreed that faculty should be involved with the alignment process; however, the results from the questionnaire show large differences in perception of value between content areas.

Overall, participants reported the PLC provided valuable collaboration and professional development in the areas of teaching and learning. While there were varying levels of commitment and implementation, overwhelmingly, faculty indicated they saw the benefit of, and desire for, collaboration across disciplines and that they will change their behaviors as a result of participation in the CARTE PLC.

Introduction

In November 2010, Eastern Kentucky University began the process of revising course syllabi, content, and pedagogy with the Kentucky Core Academic Standards (KCAS) for the general education and teacher preparation courses. Since higher education is part of the continuum of learning, Senate Bill 1 required that universities focus on improving retention and graduation rates by addressing the unique needs of undergraduate students who will be the product of the new standards to examine potential gaps in preparation and expectations. This response to The Eastern Initiative for Next Generation Educator Preparation and College Success required training and collaboration between faculty in several departments that deliver general education courses and prepare future teachers for this new P-12 environment.

To accomplish the task of alignment and training, ECU developed a hybrid approach to the Cox-Miami University model (Cox, 2004) with an emphasis on faculty development focusing on student success as in models from DuFour (2004) and Stiggins (2005). The result was an embedded PLC model. This approach had three intersecting layers: an executive PLC, a SuperPLC, and content area PLCs. The executive PLC consisted of the co-directors of Eastern's Teaching & Learning Center and two leaders in the College of Education. One member from each content area joined with the executive PLC to comprise the SuperPLC and these content area representatives then became the facilitators of their own discipline-specific PLC. The five content areas were: teacher education, math, English, social science, and natural science. The intent of the embedded structure was to provide professional development (Garet, Porter, Desimone, Birman & Yoon, 2001) and an efficient method for quick response and collaboration. In addition, an expectation of working in PLCs is that a sense of community is created as participants work toward goals that are supported by tasks relevant to their individual work and that the process is enjoyable (Cox, 2002).

Purpose of the evaluation

The purpose of this evaluation was to provide an objective perspective and generate information that will supplement other data gathered over the course of the PLC. For example, number of syllabi aligned, number of faculty trained, modules created, and prior pre/post assessments have already been collected. Primarily, this evaluation was designed to examine the impact on the alignment process, as well as, examine the effectiveness of PLC model itself. The overarching questions guiding this evaluation were:

1. To what extent did the PLC process impact faculty knowledge of SB1, teacher preparation, and teaching practices to meet the needs of undergraduate students?
2. To what extent did the PLC process impact instructional design and classroom practice at ECU?
3. What are faculty perceptions regarding the process of syllabi alignment?
4. What are participant perceptions of the strengths and weaknesses of the PLC model?

This is an ex-post facto evaluation; PLC participants were asked to reflect back on their experiences working with the PLC. The summative results will examine what worked well, if it made a difference, and if the process met the overall goals of the university (Grayson, 2012) to make informed decisions regarding future endeavors. This evaluation will measure final outcomes, overall quality (Scriven, 1991), and determine the value of the program or experience (Hearn, 2012).

Approach and methodology

This evaluation gathered participant perceptions to examine the overall impact of the PLC and identified future areas of growth. An online survey was created in SurveyMonkey (Attachment A) and contained 10 questions in total. The questions captured descriptive information, perceptions of PLC impact on understanding in 14 areas, level of implementation of changes, and open ended responses gathering their perceptions of the strengths and weaknesses of the PLC process.

The survey sought to gather each participant's perceptions of their experience and results are reported as descriptive information only. Perceptions were reported using a Likert-type scale of 1-5 (strongly disagree to strongly agree) and open ended responses, such as "why or why not" to triangulate the impression. There were not enough participants to support any statistical analysis (less than 15 participants per group) between content areas.

All participants were notified in advance by the project coordinator that a survey request would be forthcoming. This notification process has been shown to improve response rate (Sheehan & McMillan, 1999). The evaluator then sent the e-mail inviting them to complete the online, web-based survey created in SurveyMonkey. The online survey was selected to increase speed and reduce cost (Sheehan & Mcmillan, 1999) and an e-mail invitation was sent by the evaluator asking the PLC members to take the survey. A follow-up e-mail was sent a week later and, in a final attempt to improve the response rate, the evaluator directed a personal e-mail to the three content areas with the lowest response rates. There were 64 PLC participants invited and 37 valid responses for a 58% response rate. The literature on web-based response rates is limited, but the average response rate is 30%. For e-mail surveys range from 24% to 76%, therefore the rule of thumb for social research is around 50% for adequate and 60% is considered good (Sue & Ritter, 2007). Therefore, the 58% response rate for the evaluation is sufficient.

Results

Participants

The participants were all experienced educators with an average of 14 years working in higher education. Sixty-percent of the participants had previously been part of a PLC at ECU, as well at other locations with varying responsibilities and foci. Therefore, they possess a broad frame of reference for their opinions. There was adequate representation from the discipline

specific PLCs and of the 34 participants who chose to indicate their content area, 17.6% represented each area of English, math, and natural science. Social sciences represented 20.6% and teacher education was 26.5%.

The majority (78.4%) of the participants were non-facilitators and 13.5% were content facilitators. Eight percent were with the executive PLC. While there is overlap between roles, it is helpful to examine responses by level and content area to identify trends or anomalies.

Question 1: To what extent did the PLC process impact faculty knowledge of SB1, teacher preparation, and teaching practices to meet the needs of undergraduate students?

To answer this question, participants were asked to reflect on their participation with the PLC and indicate their level of agreement with statements shown in Table 1. Responses were reported using a Likert-type scale of 1- 5 ranging from strongly disagree to strongly agree.

Table 1

Average level of agreement by statement

	<i>N</i>	<i>M</i>	<i>SD</i>
<i>Teaching</i>			
I have a better understanding of what beginning college students need	30	3.70	1.09
I have a better understanding of how to retain undergraduate students at ECU	31	2.97	0.98
I have a better understanding of how I impact student learning	32	3.78	0.97
I have more confidence to implement new ideas in my classes	31	3.71	0.97
I have a better understanding of assessment for learning	32	3.44	1.05
I have a better understanding of how to teach undergraduate students	29	3.41	1.09
<i>Common Core/SB1</i>			
I can explain the requirements of SB1	25	4.12	0.73
I can explain the implications of SB1 as they relate to relevant courses in my discipline	26	4.08	0.80
I am knowledgeable of the Common Core standards	24	4.29	0.75
I can explain the impact of KY's Core Academic Standards on post-secondary education	25	3.84	0.85
<i>Teacher Preparation</i>			
I have a better understanding of what pre-service teachers need to prepare students for college and careers	30	3.97	0.93
I can identify courses in my department that are critical to teacher preparation	24	4.46	0.51

On the 1-5 scale, a higher average indicates a stronger level of agreement with the statement. Therefore, responses above 3 indicate an above average response. Based on the overall responses to the questions, all participants agree or strongly agree with 11 of the 12 the statements presented. Participants have an understanding of courses impacting teacher preparation a strong understanding of the Common Core standards. They also report having a better understanding of how they can impact student teaching and feel more confident to implement new ideas in their classes. The response averages decreases when it comes to understanding how to teach and assess college students and the lowest average was in the area of how to retain undergraduate students. While 2.97 is just below the neutral response of 3, it indicates an area of growth.

In addition, there was also a selection option of “already proficient” to better examine the true impact. The questions that received four “already proficient” responses were:

- I have a better understanding of what beginning college students need
- I have a better understanding of what pre-service teachers need to prepare students for college and careers
- I have a better understanding of how to teach undergraduate students
- I can identify courses in my department that are critical to teacher preparation (n = 5)
- I am knowledgeable of the Common Core standards

Those indicating proficiency came from several content areas, therefore, no content area had overwhelming expertise skewing the data. Also, no participant reported across-the-board expertise, indicating that people read and were thoughtful in their responses. It also shows there were opportunities to learn even when there was perceived expertise in some areas. This led to further examination by content area (Table 2).

Table 2

Average responses by content area (N = 31)

Statement	English n = 6	Math n = 5	Natural Science n = 5	Social Science n = 7	Teacher ed. n = 8
<i>Teaching</i>					
I have a better understanding of what beginning college students need	4.40	3.00	3.40	3.29	4.14
I have a better understanding of how to retain undergraduate students at ECU	*3.17	*2.60	*2.40	*2.71	*3.43
I have a better understanding of how I impact student learning	4.50	3.75	3.40	3.14	3.88
I am more confidence to implement new ideas in my classes	4.00	3.25	3.40	3.17	4.25
I have a better understanding of assessment for learning	4.00	3.25	2.80	*2.71	4.00
I have a better understanding of how to teach undergraduate students	4.17	3.25	2.60	3.00	3.57
<i>Common Core/SBI</i>					
I can explain the requirements of SB1	4.20	4.50	3.40	4.00	4.75
I can explain the implications of SB1 as they relate to relevant courses in my discipline	4.17	4.50	3.80	3.71	4.63
I am knowledgeable of the Common Core standards	4.80	4.67	3.60	4.00	4.75
I can explain the impact of KY's Core Academic Standards on post-secondary education	4.17	4.00	3.60	3.14	4.75
<i>Teacher Preparation</i>					
I have a better understanding of what pre-service teachers need to prepare students for college and careers	4.00	3.67	3.20	3.86	4.50
I can identify courses in my department that are critical to teacher preparation	4.50	5.00	4.25	4.14	4.75
Overall average	4.27	3.89	3.41	3.54	4.37

* Lowest score in column

When examining the responses by content area, natural sciences reported the lowest level overall followed closely by social science. The averages less than 3 should provide opportunities to target training. For example, teaching undergraduate students and using assessment is an area of need for natural sciences. However, *all* content areas responded the lowest in the area of understanding how to retain undergraduate students. Since this is a key goal for the University, this is also an area of growth to be explored so instructors have a better sense of what is needed and what they can do to have a greater impact within their content area. All content areas report above average levels of agreement overall.

Question 2: To what extent did the PLC process impact instructional design and classroom practice at EKU?

Level of implementation

Participants were asked if they plan to implement the syllabus changes in their course. There were 32 responses and 97% indicate they will implement the changes. While this portrays an overwhelming success, the open responses ($n = 17$) show varying levels of commitment to this implementation.

Of the 17 extended answers, 53% of the responses imply a full commitment to the process by stating they have already made changes, that the alignment process helped them to think in terms of outcomes, or that they believe in the standards. Some verbatim quotes which support this interpretation are:

“Now that I know what I should be doing, I feel like it would be bad practice to not implement it with my students. I feel like I would not be doing my job if I didn't.”

“This will ensure students are receiving instruction that targets their needs, aiding achievement and retention.”

“The alignment process required me to rethink my student outcomes which will, out of necessity, impact my instruction and assessment.”

Other comments ($n = 5$) indicate a lower level of fidelity regarding commitment, meaning that some changes might stop at the syllabi level versus changing practice. Responses such as “If required” and “It’s necessary” and “Where they are relevant, I will” represent these themes. While a small portion of the responses, these sentiments might reflect attitudes of the more general population regarding change. This might support the need for continued follow-up after PLCs stop meeting formally.

Instructional Strategies

Participants were asked what specific instructional strategies they learned that are most likely to use in their own teaching. Of the 21 responses, the most often mentioned ($n = 8$) was the change in their assessment practices and grading. It was also mentioned that the information regarding formative and summative practices was helpful. Feedback was also mentioned as part of assessment, which is appropriate, since feedback is critical to the process of using assessment *for learning* (Stiggins, 2005).

“My PLC talked extensively about assessment and are pursuing more information on the role of grading. This isn't an instructional strategy in and of itself, but it does affect the way instruction is handled in the classroom.”

Several classroom related practices were reported ($n = 5$) and faculty will use project-based learning, small group activities, and classroom discussion. They also plan to provide more opportunities for student participation.

“I think one of the best exercises we did in our PLC was to actually walk through strategies that would make research reading something actually beneficial to undergraduate students. I have implemented this year in one of my upper level classes and it has made a huge difference in terms of the students making connection between theory and practice.”

The word standards was explicitly used ($n = 5$) and comments show that participants understand the connection and the value of using standards to guide instruction. Specifically, they mentioned they were aligning the syllabi and content with the standards and how these learning outcomes impact teaching.

“I emphasize learning outcomes more explicitly when giving assignments. I also explicitly link the learning objectives of each assignment to the Common Core Standards.”

Question 3: What are faculty perceptions regarding the process of syllabi alignment?

PLC members were asked if they felt faculty should be involved with the curriculum alignment process (beyond SB1). Thirty three people responded to the question and 88% indicated that, yes, faculty should be involved. The 4 people who were opposed to faculty involvement represented three different areas. There were 18 people who elaborated to explain why or why not. The statements reflect an overwhelming sense of ownership of the process and desire for autonomy in making decisions relevant to their work.

The majority of responses ($n = 8$) mentioned that faculty buy in is “crucial to the success” to increase effectiveness and for full implementation. Otherwise “...it will just show up as numbers on their syllabi” and “if faculty are involved then it will make the changes more efficient and more relevant.” “Changes imposed from the outside are not very successful. Changes proposed by faculty are the ones that work.” “Better a faculty-driven initiative than a top-down mandatory one.” One person also indicated “Besides, faculty are better at it than administrators.”

People also mentioned that “Faculty tend to be focused on their own domains, but alignment helps to get them thinking more broadly about content” and that “...alignment directly affects what we teach in the classroom.” “If faculty aren't involved in the alignment process,

they can't truly understand the connection between teaching and learning.” However, one person indicated that the process was better for content area teachers.

Only one person had a negative comment “*I find this another effort of government to micromanage education and find this offensive, particularly at the post-secondary level.*” It should be noted that this individual’s responses were consistently low regarding the alignment process and the use of instructional strategies.

In addition, two questions were asked to gain faculty perceptions of the alignment process. Using a Likert-type scale from 1-5 (strongly disagree to strongly agree), participants ($N = 26$) reported an average response 3.65 ($SD = 1.44$) response to the question : I feel the alignment process was valuable to me as an educator. Similarly, the response ($N = 27$) to the question: I feel the alignment process was necessary to improve student learning and retention, was an average of 3.35 ($SD = 1.37$). Figure 1 examines these results by content area.

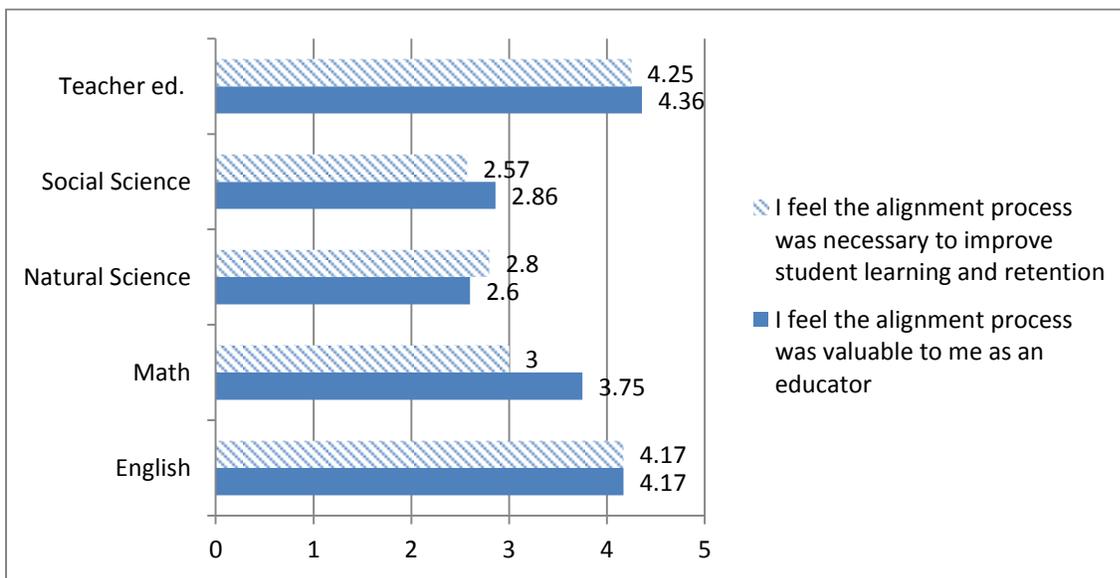


Figure 1: Level of agreement for alignment process by content area

The data show a large difference between content areas, with natural sciences reporting the lowest level of agreement with the statement regarding value to them as an educator. Social science reported the lowest level of agreement with the alignment process to improve student learning and retention.

There is a disconnect between the responses regarding alignment. While it appears that most faculty want to be involved in the alignment process, some areas do not feel the alignment process was valuable. This indicates areas of growth to ensure each area finds the alignment process relevant and worthwhile.

Question 4: What are participant perceptions of the strengths and weaknesses of the PLC model?

What were the greatest strengths of the embedded PLC model? (N = 23)

Overwhelmingly, 78% of the responses indicated the greatest strength was the opportunity to collaborate and share between departments and exchange ideas. People expressed the value of shared decision making and analysis and the cross-curricular discussions and insights. The second most mentioned topic was the value of having a designated time to work together. Having the time to devote to the process was important to busy faculty.

“Providing time to have faculty interaction, especially between departments.”

“It designated time that faculty in my department and college could get together and work/discuss ideas that will greatly impact what we do.”

“Reconsidering teaching practices, conversations about models of practice.”

“This model allows discipline areas to focus on their peculiarities and also allows content areas to share/discuss their process/findings.”

What should be changed to improve the PLC process at EKU? (N = 15)

The areas of improvement were grouped along the lines of wanting more money, getting more faculty involved, and better leadership. All three areas were mentioned equally. Participants would like to have stipends for their work to help them develop professionally and conveyed that getting paid would legitimize the process, because it is not busy work and pay validates the effort. *“I appreciated having the stipends to support the work. It recognizes the extra effort that faculty put forth in accomplishing new - and challenging - goals.”*

Having more “...consistent opportunities for faculty to engage in PLCs, both inter and intra departmental” was mentioned. One quote represents this well:

“I wish there was a way to make sure more faculty get on board, because I don't feel like this was busy work. Instead I think this work could make a significant contribution to student learning and retention. I don't feel like it infringed on my academic freedom as an instructor, but gave me better options to improve the effectiveness of my teaching.”

Leadership was mentioned as an area that impacts the success of the PLC and was an area of improvement. *“If the PLC leadership is poor, then the PLC will be a flop. Pick your leaders carefully.”* Also, one person mentioned the need to improve the alignment document.

The strongest statement was *“I am not interested in improving the process as I will not participate in another PLC at EKU. These are some of my reasons: This PLC was poorly conceived and poorly run. Decision changes were made at random for purposes unknown. Money was spent irresponsibly; too much where not needed; not enough where needed; in the first meeting we professionals were treated like children; information in the first meeting was not useful; so-called experts that gave overviews in first meeting were not experts in the field presented. Our meeting leader tried to keep us informed but she was rarely informed in a timely manner. I will continue to revise syllabi because it is needed. I will not waste my time on another PLC.”* This person plans to implement the changes in the syllabus and thinks faculty should be involved with alignment. The participant has experience with other PLCs and was a non-facilitator. This was the only dissenting opinion within the content area, so it is difficult to know if there was a leadership problem or a personality conflict.

All open ended comments were dropped into a Wordle (Figure 2) and provide a holistic perspective based on all verbatim comments. These unedited comments reflect a sense of commitment to the PLC process, an emphasis on standards, and assessment with faculty at the center.



Conclusions and recommendations

This evaluation examined the impact the CARTE PLC had on faculty knowledge levels, implementation, and perceptions regarding alignment and the PLC model. The responses reflect the knowledge and understanding of experienced educators who have served on other Professional Learning Communities. Based on both quantitative and qualitative responses, it appears that the PLC process has changed the level of understanding of teaching practices, Common Core standards, and awareness of teacher preparation. In addition, faculty report this understanding will manifest through changes in their classroom practice. While there was some indication that faculty did not understand how to meet the needs of undergraduate students, the changes they plan to make in the classroom (assessment, feedback, interaction, etc.) are considered best practices and will directly impact student learning and retention from the academic standpoint.

Classroom practices are only one component of student retention and it might be helpful for faculty to have a greater understanding of issues impacting student retention and graduation. For example, sharing results from the National Survey of Student Engagement (NSSE) and Eastern's student responses in areas such as, academic challenge and educational experiences, interactions with faculty, and support, to name a few. In addition, examining the policies in place at EKV, as well as, implementation of those policies (according to faculty), would help to more fully capture engagement and retention (see www.collegeboard.com/retention) within the context of Eastern Kentucky University. Triangulating student perceptions and faculty practice will identify gaps that can be improved. This could result in additional professional development that is well aligned with the initiatives at EKV.

The results from the evaluation reiterate the critical need for a specific time to work together (Dufour, Dufour, Eaker & Many, 2006) and, based on faculty comments, monetary rewards help to legitimize the extra work involved with a PLC. Therefore, in tight financial times, alternative funding should be pursued. Forming a committee to identify and write grant proposals to meet these financial needs is an option with multiplied return on investment.

This evaluation echoes the work of Garet, Porter, Desimone, Birman and Yoon (2001) which highlights the importance of discussions, observations, and collaboration as part of change. While there were varying levels of commitment and implementation for PLC members, overwhelmingly, faculty indicated they saw the benefit of, and desire for, collaboration across disciplines and that they will change their behaviors as a result of participation in the CARTE PLC.

References:

- Cox, M. D., (2002). *The role of community in learning: Making connections for your classroom and campus, your students and colleagues*. In G.S. Wheeler (ed.), *Teaching and Learning in College: A resource for educators*, Elyria, Ohio: Info-Tec, 2002.
- Cox, M.D., (2004). *Faculty learning community program director's and facilitators handbook*. Oxford, OH: Miami University.
- DuFour, R. (2004). What is a professional learning community? *Educational Leadership*, 61(8), 6-11.
- DuFour, R., DuFour, R, Eaker, R., & Many, T.(2006). *Learning by doing: A handbook for professional learning communities at work*. Bloomington, IN: Solution Tree.
- Garet, M. S., Porter, A. C., Desimone, L., Birman, B. F., & Yoon, K. S. (2001). What makes professional development effective? Results from a national sample of teachers. *American Educational Research Journal*, 38 (4), 915-945.
- Grayson, T. (2012). *Program evaluation in higher education*. In C. Secolsky and D.B. Denison (Eds). *Handbook on Measurement, Assessment, and Evaluation in Higher Education* (pp. 459-472). New York, NY: Rutledge.
- Hearn, J. (2010). *Evaluation Research and Policy Analysis* (p. 439- 453) in McMillan, J. & Schumacher, S., *Research in Education: Evidence Based Inquiry* (7th ed). Boston, MA: Allyn & Bacon.
- Scriven, M., (1991). *Evaluation Thesaurus* (4th Ed). Thousand Oaks, CA: Sage Publications, Inc.
- Sheehan, K. B., & McMillan, S. J. (1999). Response variation in e-mail surveys: An exploration. *Journal of Advertising Research*, 39 (4), 45-54.
- Stiggins, R. J. (2005). *Student-involved assessment FOR learning* (4th ed.). Columbus, OH: Merrill Prentice Hall.
- Sue, V.M. & Ritter, L.A., (2007). *Conducting online surveys*. Thousand Oaks, CA: Sage Publications, Inc.