**Exposure-based treatment on public speaking self-efficacy and competence**

*Keanu Aebramh G. Costalesa, Alawi C. Canlasa*

*aPampanga State Agricultural University, Magalang, Pampanga*

**\****Email: keanucostales123@gmail.com*

|  |  |  |
| --- | --- | --- |
| **Article info** |  | **Abstract** |
| *Recieved:*  *18/7/2019*  *Accepted:*  *10/9/2019* |  | This study aimed to examine exposure-based treatment, i.e. various ungraded speech activities, as a pedagogical strategy to heighten public speaking self-efficacy and competence. Also, it aimed to determine the influence of mastery experience, vicarious experience, social persuasions, and physiological states as sources of self-efficacy before and after.  Quasi-experimental, one group pretest-posttest design was used to meet the objectives of the study. Furthermore, it was conducted as a single-blind experiment. The seven participants answered scales to determine their public speaking self-efficacy and to determine how influential the sources were. An evaluation of images activity was conducted to determine public speaking competence. All instruments were administered twice: before and after the exposure-based treatment. The data were analyzed using mean, scoring and descriptive scales, paired-samples T-test, Pearson r, and multiple regression analysis.  The findings of the study revealed that the participants had *average* self-efficacy before and after; vicarious experience was the most influential source before and after; the participants had *proficient* public speaking competence after. Moreover, there is *a significant difference* between public speaking self-efficacy before and after; there is *a highly significant difference* between public speaking competence before and after; there is *a significant difference* between and social persuasions before and after. Furthermore, there is *no significant relationship* between public speaking self-efficacy and competence. Lastly, the sources of self-efficacy are *not significant predictors* of public speaking self-efficacy. |
| *Keywords:*  *Public speaking self-efficacy, sources of self-efficacy, exposure-based treatment, public speaking competence, public speaking instruction* |  |

**1. Introduction**

Public speaking is a form of public communication wherein the speaker decodes his message in front of an audience whether to inform, to persuade, or to entertain (Kadian-Baumeyer, n.d.). According to Zekeri (2004), it is the skill that graduates found to be the most useful in the professional setting.

On the flipside, it is also the most feared form of communication (Rozakis, 2007). It is estimated that 75% of all individuals face the fear of public speaking. Paradewari (2017) pointed out specifically that students dread public speaking because they are unaware of their self-efficacy.

Self-efficacy refers to a person’s beliefs of his capabilities to accomplish or do a certain task at a certain level of success (Bandura, 1994). Alawiyah (2018) and Warren (2011) found out that self-efficacy is positively related to public speaking performance and competence. Meanwhile, Dwyer and Fus (2002) found out that self-efficacy has an inverse relationship with communication apprehension, also referred to as public speaking anxiety. This means that in order to lessen anxiety, self-efficacy must increase.

Relatedly, in order to increase self-efficacy, the influence of its sources must be reinforced. These sources of self-efficacy are 1) mastery experience, which comes from a person’s actual exposure to a task, 2) vicarious experience, which comes from social modeling, 3) social persuasions, which comes from verbal appraisals and feedback, and 4) physiological states, which comes from the perception of one’s somatic and bodily arousals while doing the task (Bandura, 1994).

Dwyer and Fus (2002) suggested that assigning ungraded mini speeches is one of the ways that may help in heightening the students’ self-efficacy because they get exposed to public speaking without the fear of being negatively evaluated.

**Statement of the Problem**

The objective of the study was to examine exposure-based treatment, i.e. various ungraded speech activities, as a pedagogical strategy to heighten public speaking self-efficacy and public speaking competence.

Specifically, it sought answers to the following:

- How may the public speaking self-efficacy of the participants before and after the exposure-based treatment be described?

- How may the sources of self-efficacy before and after the exposure-based treatment be described in terms of

*+ Mastery experience;*

*+ Vicarious experience;*

*+ Social persuasions; and*

*+ Physiological states?*

- How may the public speaking competence of the participants before and after the exposure-based treatment be described?

- Is there a significant difference between the participants’ public speaking self-efficacy before and after the exposure-based treatment?

- Is there a significant difference between the sources of self-efficacy before and after the exposure-based treatment?

- Is there a significant difference between the participants’ public speaking competence before and after the exposure-based treatment?

- Is there a significant relationship between the participants’ public speaking self-efficacy and their public speaking competence?

- Can the sources of self-efficacy predict public speaking self-efficacy?

**2. Methodology**

This part presents how the study was conducted and how the results were gathered to provide answers to the objectives.

***2.1. Research design***

The quasi-experimental, one group pretest-posttest design was used to meet the objectives of the study. It was used to examine the public speaking self-efficacy and competence before and after exposure-based treatment on the same set of participants without a non-equivalent group. Furthermore, the study was conducted as a single-blind experiment to avoid research errors.

***2.2. Participants of the study***

A class of freshman students who took Purposive Communication in the first semester served as the population of the study. The seven students who were on the lower self-efficacy group were purposively chosen as the participants. However, to achieve the aims of the study, the whole class (participants and non-participants) participated in the whole process.

***2.3. Research instruments***

To gather the data needed in this study, two scales were answered by the participants.

**Public Speaking Self-efficacy Scale-Revised** by Warren (2011) was used to determine the participants’ public speaking self-efficacy before and after the exposure-based treatment. Bandura (1977) emphasized that self-efficacy scales should be context-specific, so a scale specifically made to measure self-efficacy on public speaking skill or competence was used for the purpose of this study. It was a 19-item, six-point Likert scale based on the four components of an effective speech: content, structure, delivery, and effective use of presentational aids. However, for this study, it was reduced to 4 points with interpretations: I definitely can’t (1 point), I can’t (2 points), I can (3 points), and I definitely can (4 points).

Warren’s (2011) **29-item Sources of Self-Efficacy Scale-Revised** was administered to determine the influence of the four sources on the participants’ public speaking self-efficacy before and after the exposure-based treatment. It included sub-scales that focused on mastery experience, vicarious experience, social persuasions, and physiological states. Originally it was a 6-point Likert scale; however, it was reduced to 5 points with interpretations: Strongly Disagree (1 point), Disagree (2 points), Fair (3 points), Agree (4 points), and Strongly Agree (5 points).

Moreover, an **Evaluation of Images activity** prescribed in Purposive Communication was conducted twice to determine the participants’ public speaking competence before and after the exposure-based treatment. The activity was made identical to make the judging unbiased. Also, the participants were rated by the researcher and the Purposive Communication instructor.

Lastly, the **exposure-based treatment** served as the intervention in the study. It consisted of three ungraded speech activities: informative speech of self-introduction, special occasion speech, and impromptu speech. The activities were adopted from Sellnow’s (2010) public speaking syllabus. They were conducted in three consecutive days.

***2.4. Research procedures***

Before the exposure-based treatment, screening was conducted by administering to the class of freshman students Warren’s Public Speaking Self-Efficacy Scale-Revised. The students who had average self-efficacy were purposively chosen as the participants. Also, the class answered Warren’s Sources of Self-Efficacy Scale-Revised to know the influence of mastery experience, vicarious experience, social persuasions, and physiological states before the exposure-based treatment. Then, an evaluation of images activity was conducted.

For the exposure-based treatment, the participants and non-participants met the researcher for a series of exposure-based public speaking sessions.

After the exposure-based treatment, the participants and non-participants answered the two scales again. Also, they had another evaluation of images activity. The results determined if exposure to various ungraded speech activities may be used to improve one’s public speaking self-efficacy and competence, consequently.

***2.5. Statistical treatment of data***

The data were analyzed using the following appropriate statistical tools:

**Mean**, **grand mean**, and **total score** were used to describe the numerical results from the scales and rubric.

**Paired-samples T-test** was used to test the difference between the participants’ public speaking self-efficacy before and after; between the sources of self-efficacy before and after; and between public speaking competence before and after the exposure-based treatment.

**Pearson r** was used to test the relationship between the participants’ public speaking self-efficacy and their public speaking competence.

Also, **multiple regression analysis** was used to determine if the four sources of self-efficacy can statistically predict the participants’ public speaking self-efficacy.

The **scoring scale** below was used to interpret the participants’ public speaking competence before and after the exposure-based treatment.

|  |  |
| --- | --- |
| **Score range** | **Descriptive Rating** |
| 37 – 45 | Advanced |
| 28 – 36 | Proficient |
| 19 – 27 | Basic |
| 10 – 18 | Minimal |
| 9 | Deficient |

The **descriptive scales** below were used to determine the public speaking self-efficacy of the participants and the influence of the sources of self-efficacy before and after the exposure-based treatment, respectively.

|  |  |
| --- | --- |
| **Mean** | **Descriptive Rating** |
| 3.01 – 4.00 | High self-efficacy |
| 2.01 – 3.00 | Average self-efficacy |
| 1.00 – 2.00 | Low self-efficacy |

|  |  |
| --- | --- |
| **Mean** | **Descriptive Rating** |
| 4.01 to 5.00 | Highly influential |
| 3.01 to 4.00 | Moderately influential |
| 2.01 to 3.00 | Slightly influential |
| 1.00 to 2.00 | Not influential |

**3. Results and discussion**

This part presents the findings of the study which aimed to answer the general and specific objectives of the study.

***3.1. Public Speaking Self-Efficacy of the Participants Before and After the Exposure-Based Treatment***

Table 1 shows the public speaking self-efficacy of the participants before and after the exposure-based treatment. The seven participants obtained the grand mean of 2.63 before the exposure-based treatment while they obtained the grand mean of 2.95 after. The participants had an *average* self-efficacy before and after the exposure-based treatment. Despite this though, the grand mean after the exposure-based treatment was 0.32 higher than that before the intervention.

This implies that the exposure-based treatment is useful to some extent in heightening the public speaking self-efficacy of the participants in terms of the components of an effective speech: content, structure, delivery, and effective use of presentational aids.

**Table 1.** Public speaking self-efficacy of the participants before and after the exposure-based treatment

|  |  |  |
| --- | --- | --- |
| **Public Speaking Self-Efficacy** | **Mean** | **Descriptive Rating** |
| Before Exposure-Based Treatment | 2.63 | Average S.E. |
| After Exposure-Based Treatment | 2.95 | Average S.E. |

Descriptive Rating: 3.01 to 4.00 – High S.E.

2.01 to 3.00 – Average S.E.

1.00 to 2.00 – Low S.E.

***3.2. The Sources of Self-Efficacy Before and After the Exposure-Based Treatment***

Table 2 shows the sources of self-efficacy of the participants and how influential they are in heightening the participants’ public speaking self-efficacy before and after the exposure-based treatment. The participants obtained the mean of 3.16 and 3.29 for mastery experience before and after the exposure-based treatment, respectively. On the other hand, they obtained the mean of 3.47 and 3.76 for vicarious experience before and after, respectively. Meanwhile, they obtained the mean of 2.78 and 3.31 for social persuasions before and after, respectively. Lastly, they obtained the mean of 2.32 and 2.35 for physiological states before and after, respectively.

The results show that mastery experience and vicarious experience were *moderately influential* sources in establishing the public speaking self-efficacy of the participants before and after the exposure-based treatment. In addition, social persuasions as a source of self-efficacy was *slightly influential* before the exposure-based treatment, but it became *moderately influential* after the exposure-based treatment. Lastly, physiological states as a source of self-efficacy was *slightly influential* before and after the exposure-based treatment.

The findings, however, do not agree with the theory of Bandura (1994), as asserted by Arslan (2012), that mastery experience is the most influential among the sources since vicarious experience obtained the highest mean, and thus, the most influential in this study.

**Table 2.** Sources of self-efficacy of the participants before and after the exposure-based treatment

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sourcs of**  **Self-Efficay** | **Before Exposure-Based Treatment** | | **After Exposure-Based Treatment** | |
| **Mean** | **Descripe Rating** | **Mean** | **Descripe Rating** |
| Mastey Experince | 3.16 | Moderaty influentil | 3.29 | Moderately influential |
| Vicaris Experiene | 3.47 | Moderaty influentil | 3.76 | Moderately influential |
| Social Persuasis | 2.78 | Slightly influentil | 3.31 | Moderately influential |
| Physiolol States | 2.32 | Slightly influentil | 2.35 | Slightly influential |

Descriptive Rating:

4.01 to 5.00 – Highly influential

3.01 to 4.00 – Moderately influential

2.01 to 3.00 – Slightly influential

1.00 to 2.00 – Not influential

***3.3. Public Speaking Competence of the Participants Before and After the Exposure-Based Treatment***

Table 3 shows the public speaking competence of the participants before and after the exposure-based treatment. The participants obtained the total mean score of 21.50 in the pre-test. In the post-test, moreover, they obtained the total mean score of 28.71. This means that the participants had *basic* public speaking competence before the exposure-based treatment while they obtained *proficient* public speaking competence after.

This implies that the exposure-based treatment is effective in improving the public speaking competence of the participants with average self-efficacy in public speaking. This agrees with Ballo-allo (2010) claim that exposure may increase public speaking competence.

**Table 3.** Public speaking competence of the participants before and after the exposure-based treatment

|  |  |  |
| --- | --- | --- |
| **Public Speaking Competence** | **Mean** | **Descriptive Rating** |
| Before Exposure-Based Treatment | 21.50 | Basic |
| After Exposure-Based Treatment | 28.71 | Proficient |

Descriptive Rating:

37 to 45 – Advanced

28 to 36 – Proficient

19 to 27 – Basic

10 to 18 – Deficient

9 – Minimal

***3.4. Paired-Samples T-test for Difference between the Public Speaking Self-Efficacy of the Participants Before and After the Exposure-Based Treatment***

Statistical analysis using Paired-Samples T-test revealed the p-value of 0.045 which is less than the 0.05 level of significance. This means that the null hypothesis is rejected; thus, the alternative hypothesis is accepted. The results reveal that there is *a significant difference* between the public speaking self-efficacy before and after the exposure-based treatment.

This implies that the exposure-based treatment had an effect in heightening the public speaking self-efficacy.

The result is in congruence with the findings of Dwyer and Fus (2002) that assigning ungraded speech activities will increase self-efficacy. Furthermore, the findings substantiate Finn, Sawyer, and Schrodt (2009) that three extra speaking opportunities would habituate students in public speaking, and thus, would increase self-efficacy.

**Table 4.** Paired-Samples T-test results for difference between the public speaking self-efficacy of the participants before and after the exposure-based treatment

|  |  |  |  |
| --- | --- | --- | --- |
| **Public Speaking Self-Efficacy** | **Mean** | **S.D.** | **p-value** |
| Before Exposure-Based Treatment | 2.63 | 0.17 | 0.045\* |
| After Exposure-Based Treatment | 2.95 | 0.25 |

Legend: If p-value is <.05\* = significant

<.01\*\* = highly significant

>.05ns = not significant

***3.5. Paired-Samples T-test for Difference between the Sources of Self-Efficacy of the Participants Before and After the Exposure-Based Treatment***

Statistical analysis using Paired-Samples T-test revealed the p-value of 0.561 for mastery experience before and after the exposure-based treatment; 0.38 for vicarious experience before and after the exposure-based treatment; 0.022 for social persuasions before and after the exposure-based treatment; and 0.921 for physiological states before and after the exposure-based treatment.

The p-values for mastery experience, vicarious experience, and physiological states are higher than the 0.05 level of significance which means that the null hypotheses were rejected. Hence, there is *no significant difference* between mastery experience, vicarious experience, and physiological states as sources of self-efficacy before and after the exposure-based treatment. On the other hand, the p-value for social persuasions is lower than the 0.05 level of significance, which means that the null hypothesis is rejected; thus, the alternative hypothesis is accepted. The results reveal that there is *a significant difference* between social persuasions as a source of self-efficacy before and after the exposure-based treatment.

This implies that among the sources of self-efficacy, only the influence of social persuasions increased because of the exposure-based treatment. This may suggest that they received more positive feedbacks, encouragements, or constructive criticisms in the intervention.

**Table 5.1.** Paired-Samples T-test results for difference between mastery experience as a source of self-efficacy before and after the exposure-based treatment

|  |  |  |  |
| --- | --- | --- | --- |
| **Mastery Experience** | **Mean** | **S.D.** | **p-value** |
| Before Exposure-Based Treatment | 3.16 | 0.35 | 0.561ns |
| After Exposure-Based Treatment | 3.29 | 0.25 |

Legend:

If p-value is <.05\* = significant

<.01\*\* = highly significant

>.05ns = not significant

***3.6. Paired-Samples T-test for Difference between the Public Speaking Competence of the Participants Before and After the Exposure-Based Treatment***

Statistical analysis using Paired-Samples T-test revealed the p-value of 0.009 which is less than the 0.01 critical level of significance. This means that the null hypothesis is rejected; thus, the alternative hypothesis is accepted. Therefore, there is *a highly significant difference* between the public speaking competence before and after the exposure-based treatment.

This implies that the exposure-based treatment increases public speaking competence. This suggests that the intervention helps the participants to improve on their public speaking competence especially in terms of the components of an effective speech: content, structure, delivery, and effective use of presentational aids.

The findings reinforce Herbein, et al.’s (2017) findings that participating in public speaking training, which refers to the exposure-based treatment in the current study, would increase the public speaking skills or competence of students.

**Table 6**. Paired-Samples T-test results for difference between the public speaking competence of the participants before and after the exposure-based treatment

|  |  |  |  |
| --- | --- | --- | --- |
| **Public Speaking Competence** | **Mean** | **S.D.** | **p-value** |
| Before Exposure-Based Treatment | 21.50 | 6.99 | 0.009\*\* |
| After Exposure-Based Treatment | 28.71 | 4.69 |

Legend:

If p-value is <.05\* = significant

<.01\*\* = highly significant

>.05ns = not significant

***3.7. Pearson r Test for Relationship between the Participants’ Public Speaking Self-Efficacy and Public Speaking Competence***

Statistical analysis using Pearson r shows an r-value of -0.01 which indicates a very low negative correlation. In addition, the acquired p-value of 0.983 is higher than the 0.05 level of significance. Because of this, the null hypothesis is accepted; hence, there is *no significant relationship* between the participants’ public speaking self-efficacy and their public speaking competence.

This implies that an increase or decrease in public speaking self-efficacy would not necessarily mean the same thing to the public speaking competence as they do not significantly affect each other.

This disagrees with Alawiyah (2018), Warren (2011), Paradewari (2017)’s claim that there is a positive significant relationship between the public speaking self-efficacy and public speaking competence.

**Table 7.** Pearson correlation test results for relationship between the participants’ public speaking self-efficacy and public speaking competence

|  |  |  |  |
| --- | --- | --- | --- |
| **Public Speaking**  **Self-Efficacy** | **Public Speaking**  **Compete** | **p-value** | **r-value** |
| 2.95 | 28.71 | 0.983ns | -0.01  -very low correlation |

Legend:

If p-value is <.05\* = significant

<.01\*\* = highly significant

>.05ns = not significant

If r-value is

0.00 = no correlation

0.01 – 0.20 = very low/negligible correlation

0.21 – 0.40 = low correlation

0.41 – 0.60 = moderate correlation

0.61 – 0.80 = high correlation

0.81 – 0.99 = very high correlation

1.00 = perfect correlation

***3.8. Multiple Regression Analysis of the Sources of Self-Efficacy as Predictors of the Participants’ Public Speaking Self-Efficacy***

The regression model shows the adjusted R-squared of 0.717, which implies that the prediction value of the four sources of self-efficacy in public speaking self-efficacy is high. However, the goodness-of-fit change is 0.18 which is higher than the 0.05 level of significance. This means that the null hypothesis is accepted. The results show that the prediction of the model is not a good fit; hence, the prediction of the regression model is not significant. Ultimately, the sources of self-efficacy are *not significant predictors* of the participants’ public speaking self-efficacy.

**Table 8.1.** Multiple regression analysis model of the sources of self-efficacy as predictors of the participants’ public speaking self-efficacy

|  |  |  |
| --- | --- | --- |
| **Regression Model** | Adjusted R-squared | Sig. F Change |
| .717 | .18ns |

Legend:

If p-value is <.05\* = significant

<.01\*\* = highly significant

>.05ns = not significant

**4. Conclusions**

Based on the results gathered in this study, the following conclusions were drawn:

4.1. The participants had an average self-efficacy before and after the exposure-based treatment.

4.2. Vicarious experience was a more influential source of self-efficacy than mastery experience; physiological states was the least influential source of self-efficacy.

4.3. The participants had a basic public speaking competence before, but they got proficient public speaking competence after the exposure-based treatment.

4.4. There is a significant difference between the public speaking self-efficacy of the participants before and after the exposure-based treatment.

4.5. Among the four sources of self-efficacy, only social persuasions had a significant difference before and after the exposure-based treatment.

4.6. There is a highly significant difference between the public speaking competence of the participants before and after the exposure-based treatment.

4.7. There is no significant relationship between public speaking self-efficacy and public speaking competence.

4.8. The prediction of the regression model is not significant; the individual prediction of the four sources of self-efficacy is not significant.

**5. Recommendations**

In view of the findings and conclusions, the following recommendations are hereby offered:

5.1. Teachers may want to add more public speaking activities in instruction. In this way, their students may have more opportunities to face their feared stimuli, i.e. public speaking; thus, they may be habituated in doing the task and be more self-efficacious about it.

5.1. To increase the influence of the four sources of self-efficacy, students are advised to participate in oral recitation and presentation more, to look for social models such as classmates, to be more receptive of feedback, and to perceive somatic and bodily arousals more positively.

5.3. Teachers of public speaking and other disciplines may want to design their own exposure-based intervention, congruent with their syllabi, as a pedagogical strategy that aims to improve the students’ competence in such disciplines or subject courses.

5.4. Researchers may want to determine the relationship of gender, age, personality, or other variables with the four sources of self-efficacy. These variables may have affected the influence of such sources in the public speaking self-efficacy of the participants.

5.5. Since there are only seven participants in this study, it is suggested that having a larger number of participants may help other researchers to draw more data. This may add more reliability and validity to the results.

5.6. Teachers, regardless of their area of instruction, are advised to be knowledgeable of the four sources of self-efficacy so that they could reinforce them in the class as to heighten the self-efficacy of the students. Furthermore, they are advised to focus on exercises that would lessen the anxiety or nervousness of their students as they perform such tasks.

5.7. Other researchers may use the current study as a guide or reference for conducting studies related to public speaking, self-efficacy, sources of self-efficacy, and exposure-based treatment.

**REFERENCES CITED**

1. Alawiyah, T. (2018). Speaking Self-Efficacy and EFL Student Teachers’ Speaking Achievement. *Edukasi Jurnal Pendidikan dan Pengajaran*. *5*(1), 87-96.

2. Al-Tamimi, N. O. M. (2014) Public Speaking Instruction: Abridge to Improve English Speaking Competence and Reducing Communication Apprehension. *International Journal of Linguistics and Communication*. *2*(4), 45-68. <http://dx.doi.org/10.15640/ijlc.v2n4a4>

3. Arslan, A. (2012). Predictive Power of the Sources of Primary School Students' Self-Efficacy Beliefs on Their Self-Efficacy Beliefs for Learning and Performance. *Educational Sciences: Theory and Practice*. *12*(3), 1915-1920.

4. Ballo-allo, D. (2010). Self-efficacy in English: A comparison of first year and fourth year students’ language self-efficacy in the Philippines and the factors affecting self-efficacy. University of Oslo. Oslo, Norway.

5. Bandura, A. (1994). Self-efficacy. Stanford University. Stanford, California.

6. Dwyer, K. & Fus, D. (2002). Perceptions of communication competence, self-efficacy, and trait communication apprehension: Is there an impact on basic course success? *Communication Research Reports*, 19, 29-37.

7. Finn, A., Sawyer, C., & Schrodt, P. (2009). Examining the Effects of Exposure Therapy on Public Speaking State Anxiety. Communication Education. *58*(1), 92-109, doi: 10.1080/03634520802450549

8. Herbein, E. et al. (2017). Fostering elementary school children’s public speaking skills: A randomized controlled trial. *Learning and Instruction*. *55*(2018), 158-168. <https://doi.org/10.1016/j.learninstruc.2017.10.008>

9. Kadian-Baumeyer, K. (n.d.). *What Is Public Speaking and Why Do I Need to Do It?.* Retrieved February 8, 2018 from

[https://study.com/academy/lesson/what-is-public-speaking-and-why-do-i-need-it.html.](https://study.com/academy/lesson/what-is-public-speaking-and-why-do-i-need-it.html.  10)

[10](https://study.com/academy/lesson/what-is-public-speaking-and-why-do-i-need-it.html.  10). Paradewari, D. (2017). Investigating Students’ Self-Efficacy of Public Speaking. *International Journal of Education and Research.* *5*(10), 97-108.

11. Warren, J. (2011). The Relationship between Service Learning and Public Speaking self-efficacy: Toward Engaging Today’s Undergraduates. University of Kentucky. Lexington, Kentucky.

12. Zekeri, A. (2004). College Curriculum Competencies and Skills Former Students Found Essential to their Careers. *College Student Journal*. 38(3), 412.