Changes in College Students' Attitudes and Intentions for Civic Involvement as a Function of Service-Learning Experiences

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College students, 217 doing service-learning and 324 not so engaged, completed the Civic Attitudes and Skills Questionnaire (CASQ) at the beginning and end of a semester, reporting their views regarding civic and interpersonal skills and attitudes. Students who were doing service-learning showed increases over the semester in their plans for future civic action, assessments of their own interpersonal, problem-solving, and leadership skills, and agreement with items emphasizing societal factors that affect individual outcomes (social justice). No differences were seen in students' diversity attitudes. Students engaged in service-learning showed greater satisfaction with their courses, reporting higher levels of learning about the academic field and the community than did students not participating in service-learning. Among service-learning students, satisfaction with course aspects and with service contributions was related to social justice attitudes, appreciation of diversity, and plans for future civic action.

Service-learning is receiving wide acceptance in higher education as an innovative educational practice that strengthens the acquisition of course concepts while also affecting students' attitudes regarding social problems, community issues, and civic action (Eyler & Giles, 1999; Yates & Youniss, 1996). With this increased interest, the question arises as to how well these educational and personal development goals are being accomplished. Stukas, Clary, and Snyder (1999) organize a review of service-learning research around several major goals, concluding that students who participate in service-learning may show increases in Self-Enhancement, Understanding of Self and World, Value-Expression, Career Development, and other matters. They also note that the extent and quality of research supporting positive outcomes in these domains is still limited.

The present study tests service-learning's influence on college students' self-reports of such attitudes and self-evaluations. The Civic Attitudes and Skills Questionnaire (CASQ) was used to assess students' self-evaluations. The CASQ yields scores on six scales, developed through factor analysis, and for which reliability and validity evidence has been presented (Moely, Mercer, Ilustre, Miron, & McFarland, 2002). The six scales reflect three of the goals described by Stukas et al. (1999): Interpersonal and Problem-Solving Skills, Political Awareness, and

Leadership Skills are aspects of *Self-Enhancement*; Social Justice Attitudes and Diversity Attitudes are components of Stukas et al.'s *Understanding of Self and World*; and a scale measuring plans for Civic Action reflects *Value-Expression*. The CASQ was used in this study to evaluate changes in attitudes over a semester for students who were participating in service-learning through an academic course. A comparison group of students not doing service-learning was obtained from either the same courses or from courses attracting students similar to the service-learners in academic discipline and year in college.

The Office of Service-learning (OSL) at Tulane University provides a broad range of services to faculty, students, and community partners participating in service-learning. Each OSL program coordinator is responsible for eight to nine courses (total approximately 120 students) per semester. Service-learning is a relatively recent development at this University, with numerous faculty members beginning their first experience with service-learning each semester. Program coordinators consult with faculty members as they develop service-learning courses and work with community agency representatives to plan service activities that will complement the faculty member's course goals while providing a useful service to the agency. The OSL staff members arrange training sessions and on-site

orientations, monitor students' service activities throughout the semester, and communicate regularly with students, faculty, and community site representatives, so that any developing difficulties can be handled quickly. To help students make connections between the course and service experiences, the program coordinators organize reflection sessions at the OSL and collaborate with faculty members, upon request, to facilitate classroom reflection sessions. Most program coordinators are recent college graduates who have had extensive experience working in community agencies and are highly committed to the program goals, so that the support level for all constituents is high.

Students carry out their service-learning activities for approximately 10 weeks during the semester, spending 2-4 hours each week at the community site. University students in the program are predominately white (see Table 1), from middle and upper-middle class backgrounds, and most sites where they work serve individuals from a low-income African American community. Training sessions, provided early in the semester by OSL staff and community site representatives, help students understand issues such as university-community relationships that may affect their community experiences, and also help them develop specific skills for working in community settings (e.g., tutoring tips for work with children of different ages in the public schools, professional skills for their work in city government offices or non-profit agencies, etc.)

The university strives to create a high quality service-learning experience for students (Eyler & Giles, 1999). In particular, efforts are made in planning and through semester-long monitoring to assure *placement quality*, so that students' community activities will be productive and personally rewarding. *Application* is emphasized in arranging service sites for a course so that students can link classroom learning to the service activity in ways that enhance both. Opportunities for *reflection* are available to students in classroom discussions or through the OSL; most faculty members also require students to complete reflective journals. *Diversity* in race and class is apparent in most service placements. Programs showing these characteristics are likely to produce positive personal and interpersonal development (self-enhancement), attitudes of tolerance (understanding of self and world), and citizenship values and value-expression (Eyler & Giles; Stukas, et al., 1999). We hypothesized that students engaging in service-learning would show increases in the six CASQ scales, reflecting changes in self-evaluations, attitudes toward social issues, and plans for future civic action.

Although all students in this study were participating in service-learning through the same program, there is variation in the quality of students' experiences, depending upon the academic course, the faculty member, the community site, and the service-learner's own personal characteristics. To learn about students' individual reactions, we administered several scales asking students to evaluate their courses. A measure of Course Value, based on expectancy-value theory (Eccles et al., 1983), was used to measure students' expectations at the beginning of the semester, and for their evaluations at the end of the semester as to how useful the course had actually been to them. Other measures asked them to evaluate their learning about the academic field and the community, and for service-learners only, to evaluate how much they perceived that their service made a contribution to the community. We expected that students involved in service-learning would show higher satisfaction with their courses than those not so engaged. We further expected that, among service-learning students, CASQ scores at the end of the semester would be predicted by evaluations of the course and service experience.

Method

Research Participants

The 541 students (61% female, 82% white) were enrolled in 26 courses: 22 courses in psychology, biological sciences, social sciences, or humanities disciplines offered service-learning as an option; 4 additional courses were surveyed in order to assure an adequate number of non-service-learners among the research participants.

These students were part of a group of 725 students who completed the pre-test at the beginning of the semester, so that the retention rate from pre- to post-test was 75%. Students who completed the post-test were not significantly different from those who did not complete it in gender, ethnicity, age, year in college, mean GPA, major area of study, planned highest college degree, hours of previous community service experience, or pre-test scores on the measures used in this study. Analyses of variance and Chi-square tests were used to compare those retained with those who did not complete the post-test.

Characteristics of the sample are summarized in Table 1. 212 students completed service-learning, while 324 indicated that they were not doing service-learning. Of the 22 faculty teaching service-learning courses, 13 were teaching their first service-learning course and 9 had previously taught a service-learning course.

Service was carried out at 32 different community

Table 1

Demographic Characteristics of 541 College Students Participating (N = 217) or not Participating (N = 324) in Service-Learning

	All Students	Service-Learning	No Service-Learning
Ethnicity			
African American	5%	5%	5%
Asian American	4%	4%	4%
Hispanic	6%	6%	7%
White	82%	82%	81%
Other or No response	3%	3%	3%
Year in College			
Freshman	14%	15%	14%
Sophomore	26%	23%	28%
Junior	28%	28%	28%
Senior	30%	31%	29%
Graduate	2%	3%	1%
Age	20.31 (2.93)	20.19 (2.09)	20.38 (3.38)
Mean Grade Point (SD)	3.28 (.44)	3.29 (.42)	3.28 (.46)
Major			
Arts and Humanities	20%	19%	20%
Biological Sciences	19%	19%	19%
Psychology	18%	17%	19%
Social Sciences	23%	25%	22%
Professional Schools	14%	13%	15%
Other or Undecided	6%	7%	5%
Mean Hours Previous Service (SD)	206.5 (341.1)	204.3 (298.8)	208.0 (367.1)

sites, including public and private schools, hospitals, government agencies, and nonprofit agencies serving the community. Nearly half of the students worked in educational settings (48%), while the remainder were divided between health settings (19%) and community sites such as nonprofit service organizations or city government offices (32%).

Measures

Student Attitudes, Skills, and Plans

The CASQ was used to assess students' self-evaluations. The CASQ yields scores on six scales, developed through factor analysis, for which reliability and validity evidence has been presented (Moely et al., 2002). The six scales measure: 1. *Civic Action* (plans for future involvement in the community); 2. *Interpersonal and Problem-Solving Skills* (ability to communicate and work effectively with others); 3. *Political Awareness* (knowledge of current local and national politics); 4. *Leadership Skills* (ability to guide others); 5. *Social Justice Attitudes* (awareness of social institutions' importance in determining the fate of the individual); and 6. *Diversity Attitudes* (appreciation and valuing of relationships with persons of diverse backgrounds and characteristics). Items are presented as statements (e.g., "I plan to become an active member of my community"). Respondents express their

views by marking a scale from 1 (strongly disagree) to 5 (strongly agree).

Course Satisfaction Measures

Several scales were developed to obtain students' views of their courses. All students answered the first three scales below, while the fourth was used only at the end of the semester with students who had completed service-learning. Items are presented as statements for which respondents indicate agreement on five-point scales. Items for each measure are shown in the Appendix; as indicated, internal consistency estimates for each scale were adequate.

1. *Course Value.* Eight items asked students to evaluate how important or useful the material covered in the academic course for which they were completing the questionnaire had been. Students indicated on five-point scales their agreement or disagreement with statements such as, "It is important for me to learn what is being taught in this course."

2. *Learning about Academic Field.* Five items assessed the student's expected (pre-test) or reported (post-test) learning from, and interest in, the content of his/her academic course, such as understanding and application of course concepts, interest in the field, and understanding a professional's role in the

field of study represented by the course.

3. *Learning about the Community.* Five items assessed students' views of how much they expected to learn (pre-test) or had learned (post-test) about the community, different cultures, working with others effectively, and seeing social problems in a new way.

4. *Contribution to the Community.* Students who did service-learning completed four items at the end of the semester indicating perceptions of how useful their service activities had been to the community.

Social Desirability

Twelve items from Crandall, Crandall, and Katkovsky (1965), and Crowne and Marlowe (1960) were used to measure the extent to which the respondent attempted to present him/herself in a favorable manner, according to conventional social norms. This scale has been used in previous research with children and adults (Kirby, 1995; Moely, Santulli, & Obach, 1995). The internal consistency coefficient on the pre-test was .75, and on the post-test, .69 (N = 540 in both instances).

Procedure

Students completed a questionnaire during class sessions at the beginning and end of the semester. The questionnaire contained, randomly arranged items from the CASQ, Course Satisfaction measures,

and Social Desirability. Scale completion took approximately 20 minutes. Students were free to choose whether or not they wished to participate. In order to encourage participation, students who completed the surveys could submit their names in a gift certificate lottery for dinners at several popular local restaurants.

Results

Changes over the Semester in Self-Evaluations of Skills, Attitudes, and Intended Behaviors by Service-Learning and Non-Service-Learning Students

As indicated in Table 2, students who completed service-learning showed positive outcomes on the CASQ scales. Students who did service-learning, relative to those who did not, showed Self-Enhancement in ratings of their own Interpersonal and Problem-Solving Skills (Scale 2) and Leadership Skills (Scale 4), and tended also to increase in ratings of their own Political Awareness (Scale 3). They increased in Social Justice Attitudes (Scale 5), one component of Stukas et al.'s (1999) *Understanding of Self and World*, but not on Diversity Attitudes (Scale 6). Finally, service-learners increased in *Value-Expression*, as shown by scores on Scale 1, Civic Action. These conclusions are supported by analyses of covariance of pre- and post-test scores for each scale, controlling for social desirability responding, which yielded significant or near significant

Table 2

Means and Standard Deviations on the CASQ Scales for College Students Participating (N = 217) or not Participating (N = 324) in Service-Learning

	Pre-test		Post-test	
	M	SD	M	SD
1. Civic Action **				
Service-Learning	3.97	.65	4.17	.62
No Service-Learning	3.97	.68	3.84	.77
2. Interpersonal and Problem-Solving Skills *				
Service-Learning	4.21	.44	4.30	.41
No Service-Learning	4.27	.42	4.23	.46
3. Political Awareness #				
Service-Learning	3.46	.74	3.58	.71
No Service-Learning	3.46	.74	3.42	.74
4. Leadership Skills *				
Service-Learning	3.87	.68	3.96	.65
No Service-Learning	3.90	.66	3.78	.68
5. Social Justice Attitudes *				
Service-Learning	3.95	.52	4.12	.53
No Service-Learning	3.92	.52	3.94	.56
6. Diversity Attitudes				
Service-Learning	3.96	.65	3.96	.64
No Service-Learning	3.96	.63	3.90	.65

Note. ** Differential change by service-learning and non-service-learning students, reflected in an interaction of Group by Testing Time, at $p < .01$, according to analysis of covariance.
* Differential change as a result of service-learning participation at $p < .05$.
# Trend for differential change, at $p = .085$

Table 3

Means and Standard Deviations on Course Evaluation Scales for College Students Participating (N = 211) or not Participating (N = 322) in Service-learning

	Pre-test		Post-test	
	M	SD	M	SD
Course Value *				
Service-Learning	4.10	.62	4.14	.60
No Service-Learning	4.13	.60	3.96	.83
Learning about Academic Field **				
Service-Learning	4.08	.60	3.81	.81
No Service-Learning	4.11	.60	3.58	.78
Learning about Community ***				
Service-Learning	3.74	.91	3.84	.86
No Service-Learning	3.79	.89	3.03	.92

Note. *** Differential change by service-learning and non-service-learning students, reflected in an interaction of Group by Testing Time, at $p < .001$, according to analysis of covariance. ** $p < .01$ * $p < .05$.

interactions of Service-Learning Participation by Time of Test (pre-test vs. post-test) for the following scales: Interpersonal and Problem-Solving Skills: $F(1, 526) = 7.68$, $p < .01$; Leadership: $F(1, 528) = 6.48$, $p < .05$; Political Awareness: $F(1, 527) = 2.97$, $p = .085$; Social Justice: $F(1, 522) = 4.23$, $p < .05$; and Civic Action: $F(1, 530) = 15.79$, $p < .001$. These interaction effects indicate that the change in scores from the beginning to the end of the semester is different for service-learners than for students who are not doing service-learning. As indicated in Table 2, the two groups of students did not differ in scores shown at the beginning of the semester, but by the end of the semester service-learners were higher on most CASQ scales than students not engaged in service-learning, who showed little change or a slight drop in mean scores over the semester.

Changes over the Semester in Course Evaluations By Service-Learning and Non-Service-Learning Students

On several scales indexing students' course satisfaction (Course Value, Learning about Academic Field, and Learning about the Community), students doing service-learning maintained more positive attitudes over the semester than those not engaged in service-learning, as indicated in Table 3. Analyses of covariance, controlling for Social Desirability, were used to assess change from the beginning to the end of the semester for service-learners and students not engaged in service-learning. Interactions between Service-Learning Participation and Time of Test were shown for each measure: for Course Value: $F(1, 527) = 4.99$, $p < .05$; for Learning about Academic Field: $F(1, 528) = 8.86$, $p < .01$; and for Learning about the Community, $F(1, 527) = 58.23$, $p < .001$.

Ratings on these scales at the beginning of the semester indicate all students' positive course expectations, with mean scores for both Course Value and Learning about Academic Field near a maximum

level (over 4 points on a scale with a maximum of 5.00), with slightly less positive initial expectations for Learning about the Community. By the end of the semester, the two groups show differential change: for students not engaged in service-learning, evaluations decrease on each scale, indicating that their initial optimism was not maintained over time. Service-learning students, on the other hand, maintained their positive initial view for Course Value, declined only slightly on evaluations of Learning about Academic Field, and increased in their ratings for Learning about the Community.

Service-Learning Students' Course and Service Evaluations Predicting CASQ Scores

As indicated above, students in service-learning maintained or increased their course satisfaction over the semester. Within the service-learning group, students who reported greater satisfaction would be expected to show higher scores on the post-test CASQ measures that deal with community issues, especially Scale 1 (Civic Action), Scale 5 (Social Justice Attitudes) and Scale 6 (Diversity Attitudes). In order to investigate these relationships, regression analyses were run on post-test scores for all of the CASQ scales, to see if they were predicted by students' evaluations of their service-learning courses at the end of the semester.

As shown in Table 4, course evaluations were predictive of post-test scores on four of the CASQ scales, accounting for 15-19% of the variance in scores. The CASQ Civic Action Scale was predicted from students' evaluations of Learning about the Academic Field and their feelings of having made a Contribution to the Community through service. Students who obtained high scores on Social Justice Attitudes were higher in Course Value and in their reports of Learning about the Community. Students who expressed interest in Diversity were positive

Table 4

Course Value Measures as Predictors of CASQ Scale Scores for Service-Learning Students

Predictor	Standardized Regression Coefficients (Beta)		
	Civic Action	Social Justice	Diversity Attitudes
Social Desirability	.10	-.06	.14*
Course Value	.13	.37***	.17
Learning about Academic Field	.20*	-.20	.12
Learning about Community	.07	.26**	.10
Contribution to Community	.16*	.03	.15*
R	.21	.42	.44
Adjusted R^2	.19***	.15***	.17***

Note. *F* statistic for prediction model for each scale: Scale 1: $F(5,193) = 10.47, p < .001$, Scale 5: $F(5,190) = 8.11, p < .001$, Scale 6: $F(5,190) = 9.10, p < .001$

about their Contribution to the Community. Thus, the more the students value their service-learning courses, the more likely they are to show positive attitudes toward community issues and involvement.

Discussion

Students who participated in service-learning showed expected changes in civic attitudes and rating their own skills for community engagement, as well as expressing plans to be involved in civic activities in the future. A second group of students, similar to the first group in demographics but not involved in service-learning during the semester, showed little change in scores on any of these scales. Our findings are consistent with those of previous studies (Eyler & Giles, 1999; Stukas et al., 1999), showing service-learning's benefits on personal conceptualizations of self, others, and societal issues.

How might the service-learning experience contribute to such increases? Service-learning gave students many opportunities to interact with people different in age, social class and race from those they see every day, providing opportunities for development of social and problem-solving skills including communication, role-taking, and conflict resolution. The service experience required students to show initiative, creativity, and flexibility in dealing with new or unexpected situations, gave them responsibility for determining the most effective way to accomplish their service goals, and thus, helped develop their leadership skills. Increase in a social justice perspective indicates increased awareness of social institutions, customs, and power distributions that contribute to poverty and inequities in our society. About half of the service-learners in this study worked in educational settings, in a community with a public educational system that consistently ranks low in high school graduation rates and student achievement. Service-learning gave these students many opportunities to see how communities are affected by the quality of major institutions such as the public educational system, thus increasing their

awareness of *social justice* issues.

The *Diversity Attitudes* scale did not show change from the first to the second testing, for either of the groups, even though many service-learners were working with individuals who differed from them in race and social class background. A failure to reject the null hypothesis can occur for many reasons, including two obvious ones that should be considered: the assessment tool's limitations or a weak influence of the service-learning program on student attitudes toward diversity. Each explanation is worth considering.

Evidence for the value of the Diversity Attitudes scale is mixed. Moely et al. (2002) showed that the measure has reasonable internal consistency, in the range of .70, and that it is related to the Modern Racism scale (partial $r = -.39$ to $-.44$), which measures the individual's tendency to agree with racist comments worded in socially benign ways (McConahay & Hough, 1976). Post-test scores on the Diversity Attitudes scale were related to students' views of their Contributions to the Community (Table 4). This finding is consistent with a report by Schmidt (2002), who showed that college students high on Diversity Attitudes felt they were more effective in their service activity. The service-learners in Schmidt's study were from a small, highly diverse private university in California. For their service-learning experience, they tutored second- through sixth-grade Hispanic children. Schmidt also showed that tutors with high scores on the Diversity Attitudes scale received more positive evaluations from the children they tutored. Interest in persons from different backgrounds, reflected in this scale, may enable service-learners to establish positive interpersonal relationships in the community so that they will feel free to develop creative ways to contribute that will be well-received by the persons with whom they work. These findings suggest construct validity for the Diversity Attitudes scale.

On the other hand, students who gave us feedback on this scale felt that the items may not be

sensitive enough to assess changes in conceptualizations of race, social class, and personal identity (Tatum, 1997) students experience through their community work. Additional work to elaborate scale items so as to measure more aspects of racial awareness and identity would help to clarify the measurement question.

However, the failure to find service-learning effects may reflect a service-learning program limitation rather than a measurement problem. Race and social class differences are difficult to discuss and therefore, difficult to learn about. At the time these data were collected, the training and reflection sessions did not systematically deal with race and social class—students received some information on educational inequities for children of different race and class groups, or learned about problems of communication between university and community. But the discussions did not deal with societal institutions that maintain group inequities, or with personal issues of identity, so well presented by Tatum (1997). Further, service-learning experiences often maintain the power dynamic between white college students and the individuals with whom they work (tutoring elementary or secondary students from low-income, African American families, for example). Thus, students might not have been sufficiently encouraged either at the university or in their service experiences to think about race and class, and what diversity means in their personal interactions.

Service-learning students showed high satisfaction with their courses (Course Value scale) and gave high ratings to their learning about the academic field and the community. Elyer and Giles (1999) report similar findings—students enjoy their service-learning courses, report substantial learning from them, and make efforts to seek out further service experiences. We also found relationships between student satisfaction and CASQ scale scores at the end of the semester: the four course satisfaction items, as a set, predicted post-test scores for service-learners on three CASQ scales (Table 4). Changes in civic attitudes through service-learning depend upon a course in which students can learn and will feel that they have contributed to the community.

Eyler, Giles, and Braxton (1997) found that students who chose to participate in service-learning were different from those who did not in their citizenship values and skills, personal efficacy in bringing about community change, and views of social justice. In the present study, students choosing service-learning did not differ from those not doing service-learning in demographic characteristics, initial levels of CASQ, or course satisfaction measures. Deliberate efforts were made to find a comparison group that was similar to the service-learning group, so that we would be better able to assess change over the semester in attitudes and course evaluations.

The approach taken in the present study summarizes student attitudes over a number of courses involving several different liberal arts disciplines and different kinds of community service activity. Positive changes for such a broad sampling of students, courses, and sites may reflect the manner in which service-learning is implemented at this University, with strong staff support connecting faculty, students, and community agencies. However, this research approach has limitations. In particular, the detailed description and clear understanding of the service-learning experience that could be gained by focusing on a single course (e.g., Kellogg, 1999; Kendrick, 1996) is lost. Further, while questionnaire data can be useful in giving an overview of service-learning outcomes, qualitative measures from reflective journals and focus groups, and information about real-world outcomes for students (retention at college, career choices, and continued community involvement) would be useful in determining the strength and duration of service-learning effects. Future investigations using more varied measures to characterize constructs of interest (Gelmon, 2000) can focus on the specific aspects of academic courses and service-learning placements that contribute to student satisfaction and attitude change. Finally, specific student characteristics (Clary et al., 1998; Morton, 1995), and how these interact with course and community service characteristics, are important to consider in future examinations of service-learning outcomes.

Notes

References

Clary, E. G., Snyder, M., Ridge, R. D., Copeland, J., Stukas, A. A., Haugen, J., et al. (1998). Understanding and assessing the motivations of volunteers: A functional approach. *Journal of Personality and Social Psychology, 74*(6), 1516-1530.

Crandall, V. C., Crandall, V. J., & Katkovsky, W. (1965). A Children's Social Desirability Questionnaire. *Journal of Consulting Psychology, 29*(1), 27-36.

·Crowne, D. P., & Marlowe, D. (1960). A new scale of Social Desirability independent of psychopathology. *Journal of Consulting Psychology, 24*(4), 349-354.

Eccles, J., Adler, T., Futterman, R., Goff, S., Kaczala, C., Meece, J., et al. (1983). Expectancies, values, and academic behaviors. In J. Spence (Ed.), *Achievement and achievement motives* (pp. 75-146). San Francisco: Freeman.

Eyler, J., & Giles, D. E., Jr. (1999). *Where's the learning in service-learning?* San Francisco: Jossey-Bass.

Eyler, J., Giles, D. E., Jr., & Braxton, J. (1997). The impact of service-learning on college students. *Michigan Journal of Community Service-learning, 4,* 5-15.

Gelmon, S.B. (2000). Challenges in assessing service-learning [special issue]. *Michigan Journal of Community Service-learning, Fall 2000,* 84-90.

Kellogg, W. A. (1999). Toward more transformative service-learning: Experiences from an urban environmental problem-solving class. *Michigan Journal of Community Service-learning, 6,* 63-73.

Kendrick, J. R., Jr. (1996). Outcomes of service-learning in an Introduction to Sociology course. *Michigan Journal of Community Service-learning, 3,* 72-81.

Kirby, J. K. (1995). *Influences on academic achievement: Goal orientation, strategy use, and self-regulation in university students.* Unpublished master's thesis, Tulane University, New Orleans, LA.

McConahay, J., & Hough, J., Jr. (1976). Symbolic racism. *Journal of Social Issues, 32*(2), 23-45.

Moely, B. E., Santulli, K. A., & Obach, M. S. (1995). Strategy instruction, metacognition, and motivation in the elementary school classroom. In F. Weinert & W. Schneider (Eds.), *Memory performance and competencies: Issues in growth and development (pp. 301-321).* Hillsdale, NJ: Erlbaum.

Moely, B. E., Mercer, S. H., Ilustre, V., Miron, D., & McFarland, M. (2002). Psychometric properties and correlates of the Civic Attitudes and Skills Questionnaire (CASQ): A measure of students' attitudes related to service-learning. *Michigan Journal of Community Service-learning, 8*(2), 15-26.

Morton, K. The irony of service: Charity, project and social change in service-learning. *Michigan Journal of Service-learning, 2,* 19-32.

Schmidt, A. (2002, April). *Tutor characteristics predictive of tutoring outcomes: The view from three sides (tutors, teachers, and children).* Paper presented at the annual meeting of the American Educational Research Association, New Orleans, LA.

Stukas, A. A., Jr., Clary, E. G., & Snyder, M. (1999). Service-learning: Who benefits and why. *Social Policy Report, Society for Research in Child Development, 13,* No. 4.

Tatum, B. D. (1997). *Why are all the Black kids sitting together in the cafeteria? And other conversations about race.* New York: Basic Books.

Yates, M., & Youniss, J. (1996). Community service and political-moral identity in adolescents. *Journal of Research in Adolescence, 6*(3), 271-284.

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