

**The Role of the College Marching Band
in Facilitating the Primary Objectives of a Higher Education**

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Overview

Items and scales from the National Survey of Student Engagement (NSSE) were administered to marching band members ($n=1,882$) at 20 participating universities with National Collegiate Athletic Association (NCAA) Division-I football programs. Data were compared with a sample of general undergraduate (non-band) responses ($n=6,095$) from the same institutions provided by the NSSE Institute. Findings suggest band students are more engaged with diverse peers ($p<.01$; Cohen's $d=0.26$), more reflective in their learning ($p<.01$; Cohen's $d=0.19$), and more likely to express a range of characteristics associated with personal social responsibility ($p<.01$; Cohen's $d=0.36$) than their non-band peers. Most notably, after controlling for 20 pre-college and co-existing variables, marching band participation remained the single strongest predictor of a student's likelihood of exhibiting the desirable personal social responsibility characteristics ($\beta=0.172, p<.01$).

Engagement with Diversity ($\alpha=0.848$)

- Had serious conversations with students of a different race or ethnicity than your own
- Had serious conversations with students who are very different from you in terms of their religious beliefs, political opinions, or personal values

Reflective Learning ($\alpha=0.796$)

- Tried to better understand someone else's views by imagining how an issue looks from her perspective
- Examined the strengths and weaknesses of your own views on a topic or issue
- Learned something that changed the way you understand an issue or topic

Personal Social Responsibility ($\alpha=0.878$)

- Developing a personal code of values and ethics
- Understanding yourself
- Understanding people of other racial and ethnic backgrounds
- Learning effectively on your own
- Voting in local, state, or national elections
- Contributing to the welfare of your community
- Solving complex real-world problems

Independent Samples t-tests for All Band v. Non-Band Students on Target Scales

Scale	<i>n</i>	Mean	SD	Sig. (2-tailed)	Cohen's <i>d</i>
Engagement with Diversity					
Band	1858	2.93	0.89	**	0.26
Non-Band	5631	2.69	0.93		
Reflective Learning					
Band	1796	2.92	0.73	**	0.19
Non-Band	5485	2.78	0.73		
Personal Social Responsibility					
Band	1606	2.92	0.69	**	0.36
Non-Band	5143	2.66	0.73		

Note. 4-point Likert scale from 1 (Never/Very little) to 4 (Very often/Very much). Equal variances assumed. ** $p<.01$

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Regression Analyses for All Variables Predicting Target Scales (All Students)

	Engagement with Diversity	Reflective Learning	Personal Social Responsibility
Pre-college	Beta	Beta	Beta
Female			0.028
Student of Color	0.076 **	0.009	
First Generation			
International Student	-0.045 **		
ACT/SAT	0.098 **	0.031 *	-0.082 **
College			
Learning Community	0.073 **	0.084 **	0.126 **
Volunteer Work	0.075 **	0.082 **	0.122 **
Research w/ Faculty	0.113 **	0.133 **	0.085 **
Internship	0.052 **	0.047 **	0.037 *
Study Abroad		0.022	
Athletic Team			
Fraternity/Sorority	-0.037 *		0.048 **
Major			
Humanities	0.096 **	0.134 **	
Science/Engineering			-0.058 **
Business			
Education	0.045 *	0.054 **	
Professional			
Music & Music Ed.	0.018	0.021	-0.012
Undecided			
Band Membership	0.082 **	0.074 **	0.172 **

Note. Final Beta values provided; negative sign (“-”) indicates inverse relationship; ** $p < .01$; * $p < .05$

Implications

Student engagement facilitates an array of positive developmental outcomes during the undergraduate years (Astin, 1993; Pascarella & Terenzini, 2005). Under the supervision of caring mentors who provide challenge and support (Sanford, 1967), students learn to integrate diverse ideas and perspectives to achieve higher levels of understanding (Chickering & Reisser, 1993) and develop a greater appreciation for their interconnectedness (Bronfenbrenner, 1993). Positive engagement in collaborative and educationally purposeful out-of-class activities has also been shown to lead to gains in critical thinking, problem-solving, and interpersonal skills (Kuh, 1995). In addition, students who engage with culturally or ideologically diverse peers may develop a greater sense of civic responsibility and be more likely to perform service work in their communities (Milem, 2000).

Benefits associated with ensemble music participation include the development of community ethics (Miksza, 2010), opportunities for the exchange of ideas in meeting group objectives (Kokotsaki & Hallam, 2007), and the ability to work cooperatively with others who do not necessarily share a common cultural heritage or set of ideological beliefs (Dagaz, 2010). Students in the college marching band devote more than 200 hours in a single semester learning to collaborate with diverse peers and navigate an array of cognitive, expressive, and physical challenges. Despite significant institutional investments in other engagement offerings such as learning communities and volunteer programs, no other characteristic identified in this study is a more powerful predictor of achieving the fundamental objectives of a higher education than participation in the college marching band.

Additional Observations

Parent Education

Survey participants were asked to indicate the highest level of education completed by their parents. Response options were provided on a seven-point scale ranging from “Did not finish high school” to “Completed a doctoral degree (Ph.D., J.D., M.D., etc.)” where a Mean value of 4 corresponds to the completion of an associate’s degree and a Mean value of 5 corresponds to the completion of a bachelor’s degree. According to the results of independent samples *t*-tests, both the mothers ($M=4.42$, $SD=1.48$) and fathers ($M=4.41$, $SD=1.66$) of marching band students achieved higher levels of education than the mothers ($M=4.12$, $SD=1.61$) and fathers ($M=4.17$, $SD=1.77$) of non-band students ($p<.01$).

Standardized Test Scores

According to the results of an independent samples *t*-test, marching band students reported higher standardized test scores (ACT and converted SAT) than non-band students. Summary data are provided below:

ACT and Converted SAT Independent Samples *t*-test

Band (n)	Band Mean	Band SD	Non-Band (n)	Non-Band Mean	Non-Band SD	<i>t</i>	<i>df</i>	Sig. (2-tailed)
1281	27.72	4.14	3951	25.61	4.29	15.43	5230	**

Note. SAT scores converted to ACT equivalent ranging from 1-36. Equal variances assumed. ** $p<.01$

Co-Curricular Engagement

On an 8-point scale with 2 indicating “1-5 hours,” 3 indicating “6-10 hours,” and 4 indicating “11-15 hours,” marching band students ($M=3.57$, $SD=1.74$) reported spending more time each week than non-band students ($M=2.44$, $SD=1.59$) participating in co-curricular activities including: organizations, campus publications, student government, fraternity or sorority, intercollegiate or intramural sports, etc. ($p<.01$).

Student Satisfaction

Independent samples *t*-test comparisons of band and non-band students on a student satisfaction scale ($\alpha=0.742$) identified through factor analysis suggested that band students ($M=0.196$, $SD=0.643$) are more satisfied than their non-band peers ($M=-0.058$, $SD=0.772$) with their overall college experience ($p<.01$).

Student Satisfaction Items

Item	Band (n)	Band Mean	Band SD	Non-Band (n)	Non-Band Mean	Non-Band SD	Sig. (2-tailed)
Relationships with other students	1737	5.92	1.08	5383	5.66	1.31	**
Relationships with faculty	1706	5.42	1.21	5389	5.29	1.31	**
Entire educational experience	1611	3.54	0.60	5178	3.29	0.70	**
Would attend same institution	1607	3.58	0.63	5193	3.35	0.78	**

Note. Responses to items 1 and 2 were provided on a 7-point Likert scale where 1 indicated “Unfriendly, Unsupportive, Sense of alienation” and 7 indicated “Friendly, Supportive, Sense of Belonging.” Responses to item 3 were provided on a 4-point Likert scale where 1 indicated “poor” and 4 indicated “excellent.” Responses to item 4 were provided on a 4-point Likert scale where 1 indicated “Definitely no” and 4 indicated “Definitely yes.” ** $p<.01$

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National Survey of Student Engagement

Since its first administration in 2000, the National Survey of Student Engagement (NSSE) has been administered to more than 3 million undergraduate students at hundreds of four-year colleges and universities to assess student development and provide informative profiles of the ways students spend their time and what they are learning (NSSE, 2012). Over the course of the past decade, dozens of studies have been conducted to evaluate characteristics of undergraduate student engagement utilizing NSSE data (NSSE, 2014). These studies have targeted a range of curricular and co-curricular offerings ranging from student athletics (Umbach, Palmer, Kuh, & Hannah, 2006) to Greek life (Hayek, Carini, O'Day, & Kuh, 2002) to learning communities (Zhao & Kuh, 2004) and engagement with diversity (Kuh & Umbach, 2005). However, none has evaluated the benefits of participation in the largest and most visible student organization on campus: the college marching band.

Participants for this study were selected from among the 37 colleges and universities that administered the NSSE to their undergraduate students in spring 2012 *and* offered marching band participation to support a Division-I football program. Each of the 37 marching band directors at these institutions was invited to participate in the study. From those 37 invitations, the following 20 marching bands agreed to participate:

<i>Institution</i>	<i>Director</i>
Auburn University	Dr. Corey Spurlin
Boise State University	Dr. Joe Tornello
Clemson University	Dr. Mark Spede
Indiana University, Bloomington	Prof. David Woodley
Mississippi State University	Dr. Clifton Taylor
Northern Illinois University	Dr. Thomas Bough
Syracuse University	Prof. Justin Mertz
University of Arizona	Prof. Scott Matlick
University of Georgia	Dr. Michael Robinson
University of Houston	Dr. Troy Bennefield
University of Illinois, Urbana-Champaign	Prof. Barry Houser
University of Kentucky	Dr. Scott Atchison
University of Louisiana, Lafayette	Dr. Brian Taylor
University of Louisville	Dr. Amy Acklin
University of Miami	Dr. Thomas Keck
University of Missouri	Dr. Brad Snow
University of Oregon	Dr. Eric Wiltshire
University of South Carolina, Columbia	Dr. Rebeca Phillips
University of Wyoming	Dr. Brad Williamson
Western Kentucky University	Dr. Jeff Bright

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