

## Submissions Abstract Book - All Papers (Included Submissions)

0509

Reimagining Curricula: Effects of Cultural (In)Sensitivity of Curricula on Minority Ethnic Students' Engagement

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**Research Domain:** Learning, teaching and assessment (LTA)

**Abstract:** This study examined the relationship between university students' perceptions of the cultural sensitivity of their curriculum and their engagement (interactions with their teachers and interest in their programme of study). Students ( $N=262$ ) rated the cultural sensitivity of their curriculum, using a newly developed set of four Culturally Sensitive Curriculum Scales, their interactions with teachers, and their interest. Ethnic minority students ( $n=157$ ) perceived their curriculum as less culturally sensitive on all four dimensions, reported fewer academic interactions with teachers, and lower levels of interest than White students ( $n=100$ ). Each Scale was significantly related to academic interactions with teachers and interest. Regression analyses showed that all dimensions of cultural sensitivity mediated effects of ethnicity on interactions with teachers. Two dimensions of cultural sensitivity (Diversity Represented and Challenge Power) mediated effects of ethnicity on interest. Ensuring curricula are diverse and critical may support minority ethnic students' engagement may contribute to reducing achievement gaps.

**Paper:**

### Introduction

Calls to diversify HE curricula (Peters 2018; Thomas & Jivraj, 2020) have gained traction in England as the percentage of Black, Asian, and Minority Ethnic (BAME) students has risen (HESA, 2020) while racial disparities in experiences (Neves & Hewitt, 2021), and outcomes (Advance HE, 2020) remain. To reduce these inequalities, researchers have recommended making curriculum more culturally sensitive (Dale-Rivas, 2019; Mountford-Zimdars et al., 2015). Further research is needed on culturally sensitive curriculum and its relationship to students' engagement. While engagement is variously defined in HE, we focus on two key variables. First, interactions with teachers, as used here, refers to interaction between students and teachers on academic matters relating to their programme of study.

Positive interactions with teachers have been shown to be associated with attainment (Frings et al., 2020; Hu et al., 2008), particularly with BAME students (Lundberg & Schreiner, 2004). Yet BAME students in a predominantly White institution may face barriers in forming positive relationships with their teachers (Back, 2004; Woolf et al., 2008). Thus, we expected BAME students would report

fewer interactions with teachers and that more culturally sensitive curricula could improve these interactions.

Interest is defined as affective and cognitive engagement with a specific object (Renninger & Hidi, 2016; 2011) and affects many aspects of students' learning and performance (Ainley Hidi and Berndorff, 2002; Jansen, Lüdtke and Schroeders, 2016; Renninger & Hidi, 2016; Schiefele et al, 1992). Students' interest is higher when curricula are relevant (Crouch et al., 2013; Dohn et al., 2009; Quinlan, 2019; Rotgans & Schmidt, 2011). Thus, students who do not perceive the curricula as culturally sensitive were expected to have lower interest

## Research Questions

We developed a new set of Culturally Sensitive Curricula Scales (CSCS), drawing on Critical Race Theory (Ladson-Billings, 1998; Ladson Billings & Tate, 1995), and related instruments (Bryan-Gooden, Hester and Peoples, 2019; Holgate, 2016). Then, this study explored: 1) the extent to which students perceive their curriculum as culturally sensitive; and 2) the relationship between cultural sensitivity in curricula and students' engagement, defined as interactions with teachers and interest in the subject. To do so, we developed a new set of culturally sensitive curricular scales (CSCS).

## Methods

Students ( $N=262$ ; 157 BAME;100 White) enrolled in a diverse English university. Students completed a survey on which they gave demographic information and rated:

1. the cultural sensitivity of their curriculum on four scales (CSCS): *Diversity Represented*; *Positive Portrayals*; *Challenging Power*; and *Inclusive Classroom Interactions* (Table 1) (1=*strongly disagree*; 4=*strongly agree*).
2. Interactions with teachers (6 items;  $\alpha=.86$ ) (1=*never*; 4=*very often*) (e.g., 'Communicated with teaching staff about assignments outside of taught sessions').
3. Interest in their subject (11 items,  $\alpha=.88$ ) (Quinlan, 2019) (1=*strongly disagree*; 5=*strongly agree*) (e.g., 'I am curious about this field in general', 'Regularly I find myself thinking about ideas from lectures in this field when I'm doing other things').

## Findings

BAME students rated the curriculum as less culturally sensitive on all four CSCS dimensions, reported significantly fewer academic interactions with their teachers and lower interest in the subject than White students (Table 2). Each CSCS dimension was positively correlated with (Table 3) and

significantly predicted students' interactions with teachers (Table 4) and interest (Table 5). Each CSCS component mediated the relationship between ethnicity and interaction with teachers. Only the *Diversity Represented* and *Challenging Power* CSCS components mediated the relationship between ethnicity and interest.

## Discussion

BAME students perception of their curricula as culturally insensitive is consistent with a central Critical Race Theory claim that the curriculum is normatively White (Ladson-Billings 1998) and qualitative reports of the persistent Whiteness of the curriculum and its effects (Arday et al., 2020; Harper, 2013; Harper et al., 2018; Meda, 2020; UUK, 2019; Thomas and Jivraj, 2020).

All dimensions of the CSCS were associated with students reporting more frequent academic interactions with their teachers. That is, when students experienced the curriculum as culturally sensitive, they were also more likely to report interacting with their teachers. BAME students' experience of the curriculum as less culturally sensitive partially explained their lower interactions with teachers and interest.

All dimensions of the CSCS also were associated with higher interest. This finding was partially explained by perceptions of the cultural (in)sensitivity of the curriculum, particularly lack of representations of diversity (DR) and failures to challenge power structures and inequities (CP). These two dimensions may be particularly important for academics to attend to in course design.

The development and validation of new measurement scales for cultural sensitivity of HE curricula (CSCS) is a significant contribution, enabling further research on culturally engaging campus environments that focuses specifically on curricula (Museus, 2014). These findings support calls for academics to improve their cultural competence (Gabriel, 2017; Purnell, 2000) and diversify their curricula (Peters, 2018).

## References:

## References

Advance HE. (2020). *Equality + higher education: Students statistical report*. [https://s3.eu-west-2.amazonaws.com/assets.creode.advancehe-document-manager/documents/advance-he/2020-08-AdvHE\\_stats\\_report\\_students\\_FINAL\\_12mb\\_1603451622.pdf?X-Amz-Content-Sha256=UNSIGNED-PAYLOAD&X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=AKIATYAY](https://s3.eu-west-2.amazonaws.com/assets.creode.advancehe-document-manager/documents/advance-he/2020-08-AdvHE_stats_report_students_FINAL_12mb_1603451622.pdf?X-Amz-Content-Sha256=UNSIGNED-PAYLOAD&X-Amz-Algorithm=AWS4-HMAC-SHA256&X-Amz-Credential=AKIATYAY)

Ainley, M., Hidi, S., & Berndorff, D. (2002). Interest, learning, and the psychological processes that mediate their relationship. *Journal of Educational Psychology, 94*, 546–561.

Arday, J., Belluigi, D. Z., & Thomas, D. (2020). Attempting to break the chain: reimaging inclusive pedagogy and decolonising the curriculum within the academy. *Educational Philosophy and Theory*.

<https://doi.org/10.1080/00131857.2020.1773257>

Back, L. (2004). Ivory Towers? The Academy and Racism. In I. Law, D. Phillips, & L. Turney (Eds.), *Institutional Racism in Higher Education* (pp. 1–6). Trentham Books.

Bryan-Gooden, J., Hester, M., & Peoples, L. (2019). *Culturally responsive curriculum scorecard*. Metropolitan Centre for Research on Equity and the Transformation of Schools, New York University.

Crouch, C. H., Wisittanawat, P., Ming, C., & Renninger, A. K. (2013). Initial Interest, Goals, and Changes in CLASS Scores in Introductory Physics for Life Sciences. *2013 Physics Education Research Conference*. <https://doi.org/10.1119/perc.2013.pr.014>

Dale-Rivas, H. (2019). *Report 120 The white elephant in the room: ideas for reducing racial inequalities in higher education*. <https://www.hepi.ac.uk/wp-content/uploads/2019/09/The-white-elephant-in-the-room-ideas-for-reducing-racial-inequalities-in-higher-education.pdf>

Dohn, N. B., Madsen, P. T., & Malte, H. (2009). The situational interest of undergraduate students in zoophysiology. *Advanced Physiology Education*, *33*(1), 196–201.

Douglas, T.-R. M., Shockley, K. G., & Toldson, I. (Eds.). (2020). *Campus uprisings: How student activists and collegiate leaders resist racism and create hope*. Teacher College Press.

Frings, D., Gleibs, I., & Ridley, A. (2020). What moderates the attainment gap? The effects of social identity incompatibility and practical incompatibility on the performance of students who are or are not Black, Asian or Minority Ethnic. *Social Psychology of Education*, *23*, 171–188. <https://doi.org/doi.org/10.1007/s11218-019-09531-4>

Gabriel, D. (2017). Pedagogies of social justice and cultural democracy in media higher education. *Media Education Research Journal*, *8.1*.

Harper, S. R. (2013). Am I My Brother's Teacher? Black Undergraduates, Racial Socialization, and Peer Pedagogies in Predominantly White Postsecondary Contexts. *Review of Research in Education*, *37*(1), 183–211. <https://doi.org/10.3102/0091732X12471300>

Harper, Shaun R, Smit, E. J., & Davis, C. H. F. (2018). A Critical Race case analysis of black undergraduate student success at an urban university. *Urban Education*, *53*(1).

Higher Education Statistical Agency. (2020). *Higher Education Student Statistics: UK, 2018/19*.

Holgate, H. (2016). *Development and initial validation of a culturally responsive classroom climate scale*. Purdue University.

Hu, S., Kuh, G., & Li, S. (2008). The Effects of Engagement in Inquiry-Oriented Activities on Student Learning and Personal Development. *Innovative Higher Education*, *2*, 71–81.

Jansen, M., Lüdtke, O., & Schroeders, U. (2016). Evidence for a positive relation between interest and achievement: Examining between-person and within-person variation in five domains. *Contemporary Educational Psychology*, *46*, 116–127.

Ladson-Billings, G. (1995). Towards a theory of culturally relevant pedagogy. *American Education Research Journal*, 32(3), 465–491.

Ladson-Billings, G. (1998). Just what is critical race theory and what's it doing in a nice field like education? *International Journal of Qualitative Studies in Education*, 11(1), 7–24. <https://doi.org/10.1080/095183998236863>

Ladson Billings, G., & Tate, W. (1995). Towards a critical race theory in education. *Teachers College Record*, 1(97).

Lundberg, C., & Schreiner, L. (2004). Quality and frequency of faculty-student interaction as predictors of learning: An analysis by student race/ethnicity. *Journal of College Student Development*, 45(5), 545–569.

Meda, L. (2020). Decolonising the curriculum: Students' Perspectives. *Africa Education Review*, 17(2).

Mountford-Zimdars, A., Sabri, D., Moore, J., Sanders, J., & Hiagham, L. (2015). Causes of Differences in Student Outcomes. *Higher Education Funding Council for England (HEFCE)*, July, 132. <https://doi.org/10.1080/03075079.2011.585710>

Museus, S. D. (2014). The culturally engaging campus environments (CECE) Model: A new theory of college success among racially diverse student populations. *Higher Education: Handbook of Theory and Research*, 29. [https://doi.org/10.1007/978-94-017-8005-6\\_5](https://doi.org/10.1007/978-94-017-8005-6_5)

Neves, J., & Hewitt, R. (2021). *Student Academic Experience Survey*.

Peters, M. A. (2018). Why is my curriculum white? A brief genealogy of resistance. In J. Arday & H. S. Mirza (Eds.), *Dismantling race in higher education: Racism, whiteness and decolonising the academy* (pp. 253–270). Palgrave Macmillan.

Purnell, L. (2000). A Description of the Purnell Model for Cultural Competence. *Journal of Transcultural Nursing*, 11(1), 40–46.

Quinlan, K. (2019). What triggers students' interest during higher education lectures? personal and situational variables associated with situational interest. *Studies in Higher Education*, 44. <https://doi.org/https://doi.org/10.1080/03075079.2019.1665325>

Renninger, A. K., & Hidi, S. E. (2016). *The power of interest for motivation and engegement*. Routledge.

Renninger, K. A., & Hidi, S. (2011). Revisiting the conceptualization, measurement, and generation of interest. *Educational Psychologist*, 46(3), 168–184. <https://doi.org/10.1080/00461520.2011.587723>

Rotgans, J., & Schmidt, H. (2011). Situational interest and academic achievement in the active-learning classroom. *Learning and Instruction*, 21(1), 58–67.

Schiefele, U., Krapp, A., & Winteler, A. (1992). Interest as a predictor of academic achievement: A meta-analysis of research. In K. A. Renninger, S. Hid, & A. Krapp (Eds.), *The Role of Interest in Learning and Development* (pp. 183–211). Erlbaum.

Thomas, D. S. P., & Jivraj, S. (Eds.). (2020). *Towards decolonising the university: A kaleidoscope for empowered action*. Counterpress.

UUK. (2019). *Black, Asian and minority ethnic student attainment at UK universities: #CLOSINGTHEGAP*. <https://www.universitiesuk.ac.uk/policy-and-analysis/reports/Documents/2019/bame-student-attainment-uk-universities-closing-the-gap.pdf>

Woolf, K., Cave, J., Greenhalgh, T., & Dacre, J. (2008). Ethnic stereotypes and the underachievement of UK medical students from ethnic minorities: qualitative study. *Bmj*, 337(aug18 1), a1220–a1220. <https://doi.org/10.1136/bmj.a1220>

**Table 1. Culturally Sensitive Curricula Scales (CSCS): Constructs, Items and Scale Reliabilities**

Scale	Variable #/Item	Scale Description	
Diversity Represented (8 items; $\alpha=.87$ )	<b>DR1</b>	The curriculum features people from diverse backgrounds.	focuses on how people from diverse backgrounds are referenced within the curriculum.
	<b>DR2</b>	The curriculum references different ethnic and cultural traditions, languages, religions and/or clothing.	
	<b>DR3</b>	Diverse ethnicities and nationalities are portrayed	
	<b>DR4</b>	Diverse family structures (i.e. single parents, adopted or fostered children, same-sex parents, other relatives living with family, etc.) are portrayed.	
	<b>DR5</b>	Differently-abled people are represented.	
	<b>DR6</b>	People of diverse ethnicities are represented as researchers or professionals, not just as participants in research, clients, consumers, customers, etc.	
	<b>DR7</b>	The curriculum respects that different cultures may have different understandings, skills and/or philosophies.	
	<b>DR8</b>	The curriculum addresses problems that are of concern to marginalized people/communities.	
Positive Portrayals (3 items; $\alpha=.81$ )	<b>PP1</b>	When social problems (e.g. crime, violence) are presented, people of colour are usually considered the problem. (R)	focuses on redressing the assumptions, perceptions and considerations of people from diverse backgrounds that may distort how they are considered by society
	<b>PP2</b>	When interpersonal conflicts are presented, people of colour are usually considered the problem. (R)	
	<b>PP3</b>	When people of colour have problems, white people are usually presented as being able to solve those problems. (R)	
Challenge Power (5 items; $\alpha=.88$ )	<b>CP1</b>	The curriculum raises critical questions about power and/or privilege that are usually taken for granted.	focus on the curriculum's ability to provoke critical thought and challenge dominant ideologies
	<b>CP2</b>	The curriculum encourages students to challenge existing power structures in society.	
	<b>CP3</b>	The curriculum encourages students to critique unearned privilege.	
	<b>CP4</b>	The curriculum encourages students to connect learning to social, political or environmental concerns.	
	<b>CP5</b>	The curriculum encourages students to take actions that fight inequity or promote equity.	
Inclusive Classroom Interactions (3 items; $\alpha=.83$ )	<b>ICI1</b>	My instructors make an effort to pronounce everyone's name correctly.	focuses on the development of a learning environment accepting of cultural differences and respectful of different perspectives
	<b>ICI2</b>	My instructors encourage students to be mindful of other students' perspectives.	
	<b>ICI3</b>	My instructors encourage students to respect other students' perspectives.	

**Table 2.** Independent Samples T-test for CSCS - Ethnicity (BAME vs White Students)

Sub Scale	BAME Mean	White Mean	BAME SD	White SD	MD	t	Cohen's d
Diversity Represented (DR)	2.661	3.106	.745	.530	-.445	-5.580***	.664
Positive Portrayals (PP)	2.200	2.964	.735	.662	-.764	-8.293***	1.080
Challenge Power (CP)	2.740	3.278	.878	.638	-.538	-5.294***	.678
Inclusive Classroom Interactions (ICI)	3.018	3.683	.786	.486	-.665	-8.380***	.970
Interactions with Teachers (AIT)	2.957	3.250	.638	.652	-.293	-3.559***	.455
Interest	3.592	3.935	.599	.500	-.343	-4.766***	.610

\*\*\* $p < .001$ ; \*\* $p < .01$  (2-tailed); \* $p < .05$   
 MD=differences in means between BAME and White students

**Table 3.** Pearson Product-Moment Correlations for the Study Variables

	1	2	3	4	5	6	7
1 Ethnicity	1						
2 Diversity Represented	.306 <sup>-</sup>	1					
3 Positive Portrayals	.446 <sup>-</sup>	.459 <sup>-</sup>	1				
4 Challenge Power	.306 <sup>-</sup>	.574 <sup>-</sup>	.417 <sup>-</sup>	1			
5 Inclusive Classroom Interactions	.381 <sup>-</sup>	.372 <sup>-</sup>	.332 <sup>-</sup>	.450 <sup>-</sup>	1		
6 Interactions with Teachers	.217 <sup>-</sup>	.187 <sup>-</sup>	.217 <sup>-</sup>	.228 <sup>-</sup>	.248 <sup>-</sup>	1	
7 Interest	.305 <sup>-</sup>	.214 <sup>-</sup>	.223 <sup>-</sup>	.226 <sup>-</sup>	.207 <sup>-</sup>	.330 <sup>-</sup>	1

\*\*  $p < .01$  (2-tailed)

**Table 4.** Effects of Ethnicity on Interactions with Teachers: Mediation by Cultural Sensitivity of Curriculum

	B (SE)	Model 1 (dv: AIT) β	t	95% CI for b	Model 2 (dv: CSCS Mediator) B (SE)	β	t	95% CI for b	Model 3 (dv: AIT) B (SE)	β	t	95% CI for b
Diversity Represented as a Mediator												
Constant	2.691 (.115)		23.472 ***	[2.446;2.917]	2.267 (.118)		19.161***	[2.034;2.500]	2.406 (.177)		13.602***	[2.058;2.755]
Ethnicity	.271 (.076)	.217	3.581 ***	[.122;.420]	.404 (.078)	.306	5.180***	[.251;.558]	.220 (.079)	.176	2.788***	[.065;.376]
Diversity Represented									.126 (.060)	.133	2.105*	[.008;.243]
R <sup>2</sup>	.047				.094				.063			
Positive Portrayals as a Mediator												
Constant	2.691 (.115)		23.472 ***	[2.446;2.917]	1.564 (.129)	.446	12.150***	[1.311;1.818]	2.496 (.147)		16.956***	[2.206;2.785]
Ethnicity	.271 (.076)	.217	3.581 ***	[.122;.420]	.667 (.085)	.306	7.852***	[.500;.834]	.187 (.086)	.150	2.181**	[.018;.357]
Positive Portrayals									.125 (.057)	.150	2.179**	[.012;.238]
R <sup>2</sup>	.047				.199				.062			
Challenge Power as a Mediator												
Constant	2.691 (.115)		23.472 ***	[2.406;2.917]	2.275 (.140)	.306	16.207***	[1.998;2.551]	2.368 (.160)		14.763***	[2.052;2.684]
Ethnicity	.271 (.076)	.217	3.581 ***	[.122;.420]	.479 (.093)	.306	5.177***	[.297;.662]	.203 (.078)	.162	2.587**	[.048;.357]
Challenge Power									.142 (.050)	.178	2.844**	[.044;.241]
R <sup>2</sup>	.047				.093				.076			
Inclusive Classroom Interactions as a Mediator												
Constant	2.691 (.115)		23.472 ***	[3.059;3.450]	2.505 (.124)	.381	20.240***	[2.262;2.749]	2.265 (.181)		12.498***	[1.908;2.622]
Ethnicity	.271 (.076)	.217	3.581 ***	[.210;.468]	.542 (.082)	.381	6.641***	[.382;.703]	.179 (.081)	.143	2.217**	[.020;.337]
Inclusive Classroom Interactions									.170 (.057)	.194	3.008**	[.059;.282]
R <sup>2</sup>	.047				.145				.079			

**Table 5. Effects of Ethnicity on Interest: Mediation by Cultural Sensitivity of Curriculum**

	Model 1 (dv: Interest)				Model 2 (dv: CSCS Mediator)				Model 3 (dv: Interest)			
	B (SE)	B	t	95% CI for b	B (SE)	$\beta$	T	95% CI for b	B (SE)	$\beta$	t	95% CI for b
<b>Diversity Represented as a Mediator</b>												
Constant	3.254 (.099)		32.777 ***	[3.059;3.450]	2.267 (.118)		19.161***	[2.034;2.500]	1.753 (.266)		6.585***	[1.229;2.227]
Ethnicity	.339 (.065)	.305	5.173 ***	[.210;.468]	.404 (.078)	.306	5.180***	[.251;.558]	.351 (.081)	.265	4.309***	[.190;.511]
Diversity Represented									.158 (.073)	.133	2.153*	[.013;.303]
R <sup>2</sup>	.093				.094				.109			
<b>Positive Portrayals as a Mediator</b>												
Constant	3.254 (.099)		32.777 ***	[3.059;3.450]	1.564 (.129)		12.150***	[1.311;1.818]	3.129 (.128)		25.342***	[2.928;3.421]
Ethnicity	.339 (.065)	.305	5.173 ***	[.210;.468]	.667 (.085)	.446	7.852***	[.500;.834]	.285 (.075)	.257	3.618***	[.120;.406]
Positive Portrayals									.080 (.050)	.108	1.685	[-.014;.179]
R <sup>2</sup>	.093				.199				.097			
<b>Challenge Power as a Mediator</b>												
Constant	3.254 (.099)		32.777 ***	[3.059;3.450]	2.275 (.140)		16.207***	[1.998;2.551]	3.019 (.140)		21.637***	[2.744;3.293]
Ethnicity	.339 (.065)	.305	5.173 ***	[.210;.468]	.479 (.093)	.306	5.177***	[.297;.662]	.289 (.068)	.261	4.242***	[.155;.423]
Challenge Power									.103 (.043)	.146	2.379**	[.018;.189]
R <sup>2</sup>	.093				.093				.113			
<b>Inclusive Classroom Interactions as a Mediator</b>												
Constant	3.254 (.099)		32.777 ***	[3.059;3.450]	2.505 (.124)		20.240***	[2.262;2.749]	3.047 (.159)		19.188***	[2.734;3.359]
Ethnicity	.339 (.065)	.305	5.173 ***	[.210;.468]	.542 (.082)	.381	6.641***	[.382;.703]	.294 (.071)	.265	4.164***	[.155;.433]
Inclusive Classroom Interactions									.083 (.050)	.106	1.669	[-.015;.180]
R <sup>2</sup>	.093				.145				.103			