



Minutes of the Faculty Senate

Date: 1-30-2024

Presiding: DeAnna Owens-Mosby (Instruction and Curriculum Leadership)

Secretary: Jeni Loftus (Sociology)

Senators Present: Lynda Black (Cecil C Humphreys School of Law), Kathryn Hicks (Anthropology), William Alexander (Chemistry), Reza Banai (City and Regional Planning), Sajjan Shiva (Computer Science), Esra Ozdenerol (Earth Sciences), Leah Windsor (Institute for Intelligent Systems & English), Alistair Windsor (Mathematical Sciences), David Gray (Philosophy), Sanjay Mishra (Physics and Materials Science), Stephanie Huetten (Psychology), Katie Norwood (School of Social Work), Melanie Conroy (World Languages and Literatures), Jennifer Thompson (Architecture), Brian Ruggaber (Theater & Dance), Michael Anderson Schults (Rudi E. Scheidt School of Music), Patrick Murphy (Counseling, Educational Psychology & Research), Edith Gnanadnass (Leadership), Mrs. Barbara Fitzgerald, Esq. (College of Professional & Liberal Studies), Deborah Moncrieff (School of Communication Sciences & Disorders), Andrew Hussey (Economics), Mark Sunderman (Finance, Insurance and Real Estate), Frances Fabian (Management), Zabihollah Rezaee (School of Accountancy), Jessica Jennings (Biomedical Engineering), Eddie Jacobs (Electrical and Computer Engineering), Genae Strong (Loewenberg College of Nursing), Fawaz Mzayek (School of Public Health), Gerald Chaudron (University Libraries), Coe Lapossy (Art), Daniel E. Millican (Military Sciences, Naval Sciences), Dursun Peksen (Political Science), Alistair Windsor (Mathematical Sciences), Amanda Young (Communication & Film); Jeni Loftus (Sociology), Gensheng Liu (Marketing & Supply Chain Management), Scott Marler (History), Ezra Ozdenerol (Earth Sciences), Timothy McCuddy (Criminology & Criminal Justice), Sanjay Mishra (Physics and Materials Science), Brian Janz (Business Information and Technology)

Senator Present by Proxy: Greg Hughes (William P. Travis – College of Health Sciences), Joel Nichols (Tori Cliff – Journalism & Strategic Media)

Senators Absent: Mihalis Golias (Civil Engineering), Gladius Lewis (Mechanical Engineering), Matthew Parris (Biological Sciences), Jennifer Thompson (Architecture)

Guests: Fernandez West (Associate Athletic Director), Amanda Rodino (DRS), Jaafar Al-Azzawi (DRS), Emily Swisher (Bookstore), Richard Evans (UMAR), Bill Hardgrave (President), Jeffrey Marchetta (Faculty Trustee), Sara K. Bridges (Ombudsperson), and Tierene Nichols (Admin Assoc).

The five hundred and second meeting of the University of Memphis Faculty Senate was held on Tuesday, January 1st, 2024, in the Senate Chamber of the University Center.

01.30.24.01 CALL TO ORDER (2:40 P.M.)

President DeAnna Owens-Mosby called the meeting to order at 2:40 pm with a quorum present.

01.30.24.02 APPROVAL OF AGENDA

The agenda was approved as written.

01.30.24.03 APPROVAL OF MINUTES

The minutes of the November 28th, 2023, Faculty Senate (FS) meeting were approved by acclamation.

01.30.24.04 PRESIDENT'S REPORT

Melinda Carlson will be adding the bookstore and the UC under her new responsibilities as the VP of Student Affairs.

Melinda Carlson (VP of student affairs) and her team went to Lambuth to discuss textbook issues on 1/12/24.

AI Policy –the motion was forwarded to the provost who accepted it to move forward. The policy was written. It is back in the provost's office. Once it is approved by his office it will move to the policy review board. Based on recommendations from the report, the AI taskforce will become a subcommittee under Academic Support and we will have an AI representative on TLAC. Committee on committees will assist with both of these.

COACHE Survey – Rolling out the first week of February. Will receive an email from provost. Let your faculty know it is coming. This is a faculty satisfaction survey.

Senator Elections – Notifications have gone out for senators coming up for re-election. Departments have until the end of March to do elections.

University Calendar – It was brought to President Owens-Mosby's attention that the university calendar is not aligning with spring breaks for children. The university consults a common calendar from TN board of regents so that we are aligned with them, specifically Southwestern. Reached out to Darla Keels' office as well as provost office, it is decided several years out, before the school districts set their schedules.

Barbara Fitzgerald (College of Professional & Liberal Studies),– I think the concern as that university schools does not align with UofM spring break this year.

David Gray (philosophy) – It would be nice if the university could work with Shelby County Schools to try to align their spring breaks.

DeAnna Owens-Mosby (Instruction and Curriculum Leadership) – It looks like next year we will be aligned. But it is a complicated process for setting our schedule.

Charges – The charges that were sent earlier are incorrect. A new charge log will be coming out. There are new charges to academic support and administrative policies. There is a charge for administrative policies to meet with the provost to create a timeline and an instrument to evaluate administration directors and deans. A new charge for academic support – putting ad hoc committee under them.

01.30.24.05 REPORTS

Standing Committee Reports

Committee on Committees: Chair, Alistair Windsor

President Owens-Mosby yielded to Committee on Committees Chair Alistair Windsor who reported that the Committee on Committees has nothing to report.

Academic Policies Committee: Chair, Edith Gnanadass

President Owens-Mosby yielded to Academic Policies Committee Chair Edith Gnanadass who reported that they have nothing to report.

Academic Support Committee: Chair, Dursen Peksen

President Owens-Mosby yielded to Academic Support Committee Chair Dursen Peksen who reported that one of their charges was to follow what was happening with the observer function on Canvas and we no longer have that. It has been replaced by new software – Dropout Detective.

Fernandez West (Associate Athletic Director)– We no longer have observer access. Have new software that can pull grades. That is all they can see now. Happy to meet with people to show what they can see.

Mark Sunderman (Finance, Insurance and Real Estate) – Will we see observers in our Canvas classes? Or have they all been removed?

Fernandez West – You should not see any observers

Mark Sunderman – Can you send out something about what is being observed so we can share that out.

Fernandez West – We can put something together.

Administrative Policies Committee: Chair, Stephanie Huet

President Owens-Mosby yielded to Administrative Policies Committee Chair Stephanie Huet who reported that they have nothing to report.

Budget and Finance Committee: Chair, Zabihollah Rezaee

President Owens-Mosby yielded to Budget and Finance Committee Chair Zabi Rezaee who shared a progress report. Last year the committee took the university's peer institution list and it was rejected by the senate. Motion was made to get faculty involved and the Budget and Finance Committee was charged with coming up with a new list. The committee has worked on identifying variables that should be included in identifying institutions. Sixty-two variables were given to the Office of Institutional Research who did analysis for us. Graph and tables in the report are the latest of what was received from Office of Institutional Research. The committee is generally happy with the analysis at this point. Seeking feedback from the faculty at this point. Please provide input by Feb 9th. Then the committee will meet and discuss and write a motion. Based on the list that the senate approves the committee will do faculty salary comparison with those peer institutions and faculty salary compression.

Committee Report Attached to the end of the minutes

Faculty Policies Committee: Chair, Lynda Black

President Owens-Mosby yielded to Faculty Policies Committee Chair Lynda Black who reported that the committee met with DeAnna Owens-Mosby and Jeff Marchetta about some updated revisions needed for faculty handbook. It is likely at the March meeting the proposed revisions will be presented for a vote.

Library Policies Committee: Chair, Frances Fabian

President Owens-Mosby yielded to Library Policies Committee Chair Frances Fabian who reported that the search for the new director of the library is ongoing with interviews scheduled to occur in February and March.

Research Policies Committee: Chair, Debbie Moncrief

President Owens-Mosby yielded to Research Policies Committee Chair Debbie Moncrief who reported that the committee had nothing to report.

01.30.24.06 NEW BUSINESS

Presentation on Tiger Smart Start – Emily Swisher (Manager of the Bookstore)

Presentation attached to the end of the minutes

Questions

Barbara Fitzgerald (College of Professional and Legal Studies) – will students have access to their books on campus if they have not fully paid

Emily Swisher – yes, they do have access if they are in Canvas.

Stephanie Huetten (Psychology) – It's the third week of classes now and my students in smart start do not have any of their materials yet. Don't have access in canvas. Have had them reach out and they have not gotten an answer.

Emily Swisher – Let's meet one on one.

Stephanie Huetten – Adding the course materials tab was not communicated to us and needs to be communicated a lot louder.

Emily Swisher – Absolutely, we will do better.

Scott Marler (History) – I put course materials tab in and it didn't work. The publisher rep helped me get it. If the textbook is physical the tab won't work? Digital access costs twice as much as rented.

Emily Swisher – Yes, the materials tab doesn't work with physical textbooks. Yes for some classes it will be more cost effective not to be in the program, but for most students, it is more cost effective to be in the program.

Melanie Conroy (World Languages) – You need to be more forceful with faculty. A lot of faculty don't understand it and may not be putting in the info on time not really understand the consequences.

Emily Swisher – Yes, can do that.

William Alexander (chemistry) – Realize that students have gotten much more info than faculty. We are more dumb about it than students. We need to know how all of that works. How and when does the bookstore decide how many physical textbooks to purchase. Enrollment is up higher in class and have a ton of students don't have materials they need. When is that decision made? Is there a way that we could get some kind of tracking or access to know that the bookstore has ordered a certain number and I need to call you if I see a problem.

Emily Swisher – First part of your question the system just ordered enrollment. Moving forward it orders from estimated sales and past sales. Second part, there's no way to allow you access to that but we can do that on an individual basis. You can call me and we can look into it.

William Alexander – You're ordering early and the reality six weeks later is very different. Can you run that report again and check your books vs enrollment?

Emily Swisher – Yes, any class that has sold through 75% of inventory we get flagged. But many students don't buy books until they start class. So we don't get flagged.

William Alexander – Can we get flagged when we are going to be short? We can help mitigate that with a short term situation.

Emily Swisher – Yes, I want to push for that.

Genae Strong (Nursing) – When the notice was sent out with the deadline, I did, when I pulled up courses I could not pull forward past adoptions. So I had to enter in 7-10 books per course. So I waited and tried again. Would still not allow me to. Now it was past the deadline. But didn't have any problems when the deadline was passed. Do you know how many might have had similar problem?

Emily Swisher – For any issues like that just reach out to us and we can put them in for you. If that's not working we need to fix it.

Patrick Murphy (Counseling, Educational Psychology & Research) – Highlighting a point you made for adjuncts adopting we have contract issues. Adjuncts sometimes get put in very late. So book adoptions aren't getting put in. Maybe have chairs force adoptions for those classes.

Emily Swisher – For adjuncts like that we suggest they go digital so we can change it quickly.

David Gray (Philosophy) – Confused by students wanting to have a hard copy for learning issues. Can they get a hardcopy? Is that free of charge?

Emily Swisher – Normally they would have to pay, but I don't charge them. We just have a handful of students doing this so it's manageable.

David Gray – If they wanted to go digital – how would they access it, would it be through Canvas or an ebook?

Emily Swisher – They would just get an ebook. But some publishers only offer digital if you require it. We recommend digital is required and physical recommended.

Coe Lapossy (Art) – this is all rental, right? Or do they keep the books?

Emily Swisher – yes it is a rental based program.

Sensus Access Presentation – Amanda Rodino (DRS) and Jaafar Al-Azzawi (DRS) (Digital and Learning Environment Accessibility Subcommittee)

Presentation on new tool in Canvas and on a web form called Sensus Access that can convert files into various formats for accessibility.

Presentation attached to the end of the minutes

Questions

Esra Ozdenerol (Earth Sciences) – mp3 can they be audio files for any text file?

Jaafar Al-Azzawi – can convert text to audio but not the opposite.

Esra Ozdenerol (Earth Sciences) – Is it like AI?

Jaafar Al-Azzawi – The company that does this said it uses AI. It uses OCR – optical character recognition.

Fawaz Mzayek (Public Health) – Where in canvas is it?

Amanda Rodino– Toward the bottom on the left hand side.

Jaafar Al-Azzawi – Does not appear for faculty immediately. You need to activate it.

Mandi Young (Communication and Film) – Do students at DRS know it is there and are they trained on how to use them?

Jaafar Al-Azzawi – Yes.

Amanda Rodino – It's very easy. We are happy to do training with them.

DeAnna Owens-Mosby (Instruction and Curriculum Leadership) – What about students who speak another language? Does it convert to their first language?

Jaafar Al-Azzawi – It does not translate.

Esra Ozdenerol (Earth Sciences) – for image files, like a map, when it is converted to an audio it talks about where things are on the map

Jaafar Al-Azzawi – It cannot do that.

Amanda Rodino – If the image had the alternative text in the file, Sensus can convert that to audio. But it cannot take a map and create alternative text and audio if it's not there.

Faculty Trustee Report

Jeff Marchetta I plan to make a power point for the February meeting.

Ombudsperson Report

The annual report for 2023 is completed and will be presented next meeting.

01.30.24.07 ANNOUNCEMENTS

New My Memphis Portal soft rollout needs faculty feedback.

01.30.24.08 ADJOURN

The meeting adjourned at 4:04 pm.

FA Progress Report to the Faculty Senate

Originator: Budget and Finance Committee

Subject: List of Peer Institutions

Date: January 22, 2024

1. Introduction and Charges

The sustainability of the human capital (staff, faculty, and administrators) at the University of Memphis (UoM) is essential to maintain UoM R1 status, grow and improve, and effectively implement the SRI/RCM model. Maintaining high-quality and enthusiastic faculty requires fairness and transparency when it comes to faculty compensation in comparison with peer institutions. Now that the UoM has achieved R1 status there is a need to reassess the UoM faculty salaries in comparison to R1 peer institutions. In addition, there is a concern about the difference in faculty salaries that are unrelated to differences in rank, experience, seniority, or academic performance. The benchmark for faculty salary levels and compression study is to identify a list of proper peer institutions that can be used for salary comparison analysis. Peers usually have common attributes such as similar resources, student headcount, faculty size, strategic plans, and institutional goals. The continuous update of a university's list of peer and aspirational institutions is necessary to reflect the change in attributes of the institution over time.

Regarding this issue, the Budget and Finance Committee (BFC) of the Faculty Senate (FS) was charged to do the following tasks for the 2022/2023 and 2023/24 academic years:

1. "Develop a list of peer institutions in collaboration with senior administration, Director of OIR, and Associate Vice Provost for Strategic Analytics of R1 peer institutions,
2. Present the list to the Faculty Senate for discussion and approval,
3. Perform a comprehensive salary comparison with peer institutions that were approved by the Faculty Senate, and
4. Perform a salary comparison by rank between faculty in every department and access (assess?) compression/inversion."

2. The BFC Work in the 2023-2024 Academic Year

To fulfill the above charges, and with the help from Dr. Bridgette Decent of the OIR, the BFC has:

1. Identified a list of 62 variables/factors/indicators of higher education institutions' characteristics and used them for further analyses to identify peer institutions.
2. Reviewed the preliminary report OIR and made appropriate modifications and suggestions.
3. Reviewed, discussed, and approved the final report from OIR of the peer-institute list.

The BCF is submitting this report to the FS and asking senators to review and make recommendations and comments to the BFC by February 9, 2024. The BFC will consider your insights and decide whether to perform further analyses or prepare a motion regarding the list of peer institutions for consideration at the February 27, 2024, meeting of the FS. The BFC will work on the other two charges of faculty salary compression and comparison upon the approval of the list of peer institutions by the FS.

Appendix

Prepared by the Office of Institutional Research

Submitted to the Budget and Finance Committee of the Faculty
Senate

As of January 9, 2024

Using Algorithms to identify University of Memphis Peers for Faculty Senate

Introduction:

In this report, we present the results of a comprehensive clustering analysis conducted to identify peer and aspirant institutions for the University of Memphis. The analysis is based on data obtained from IPEDS, Carnegie, and US News Rankings, focusing on 130 public 4-year, large institutions with R1 or R2 Carnegie status, ranked in the US News National Universities survey, and excluding HBCUs and any institutions in U.S. territories (University of Puerto Rico-Rio Piedras). We aimed to create meaningful clusters using 47 variables covering student demographics, finances, institution finances, faculty, enrollment, and selectivity. We have provided detailed methodology, and we are open to offering insights or recommendations based on the analysis or accuracy metrics to assist the Faculty Senate in their decision-making process.

Table 1. Institutions List

U. Alabama, Birmingham	Louisiana State U., Baton Rouge	Miami University--Oxford
U. Alabama, Tuscaloosa	U. Louisiana, Lafayette	The Ohio State University
Auburn U., Auburn	U. Maryland, Baltimore County	Ohio University
U. South Alabama	U. Maryland, College Park	U. Toledo
Arizona State U.	U. Massachusetts, Lowell	Oklahoma State U., Stillwater
U. Arizona	U. Massachusetts, Boston	University of Oklahoma
Northern Arizona U.	Central Michigan U.	Oregon State U.
U. Arkansas, Fayetteville	Eastern Michigan U.	U. Oregon
U. California, Berkeley	U. Michigan, Ann Arbor	Portland State U.
U. California, Davis	Michigan State U.	U. Pittsburgh, Pittsburgh
U. California, Irvine	Oakland U.	Temple U.
U. California, Riverside	Wayne State U.	U. Rhode Island
U. California, Santa Barbara	Western Michigan U. and Homer Stryker M.D. School of Medicine	Clemson U.
San Diego State U.	U. Minnesota, Twin Cities	U. South Carolina, Columbia

U. Colorado Denver and Anschutz Medical Campus	U. Mississippi	East Tennessee State U.
U. Colorado Boulder	Mississippi State U.	University of Memphis
Colorado State U., Fort Collins	U. Southern Mississippi	U. TN-Knoxville
U. Delaware	U. Missouri, Columbia	U. Houston
U. Central Florida	Montana State U., Bozeman	U. North Texas, Denton
Florida Atlantic U.	U. Nebraska, Omaha	U. Texas Pan American
Florida International U.	U. Nebraska, Lincoln	Texas State U.
Florida State U.	U. Nevada, Las Vegas	Texas A&M U., College Station and Health Science Center
U. Florida	U. Nevada, Reno	U. Texas, Arlington
U. South Florida, Tampa	Rowan U.	U. Texas, Austin
Georgia Southern U.	Montclair State U.	U. Texas, Dallas
Georgia State U.	Rutgers, State U. New Jersey, New Brunswick	U. Texas, El Paso
U. Georgia	Rutgers, State U. New Jersey, Newark	U. Texas, San Antonio
U. Hawaii, Manoa	U. New Mexico	Texas Tech U.
Boise State U.	New Mexico State U.	Utah State U.
U. Illinois, Chicago	CUNY, City C.	U. Utah
U. Illinois, Urbana-Champaign	SUNY, Binghamton U.	George Mason U.
Illinois State U.	SUNY, U. Buffalo	Old Dominion U.
Northern Illinois U.	East Carolina U.	Virginia Polytechnic Institute and State U.
Ball State U.	U. North Carolina, Charlotte	Virginia Commonwealth U.
Indiana U.-Purdue U., Indianapolis	U. North Carolina, Greensboro	U. Virginia, Charlottesville
Indiana U., Bloomington	North Carolina State U.	Washington State U.
Iowa State U.	U. North Carolina, Wilmington	U. Washington, Seattle
U. Iowa	U. North Dakota	West Virginia U.
U. Kansas	The University of Akron	U. Wisconsin-Madison
Kansas State U.	Bowling Green State University	U. Wisconsin-Milwaukee
Wichita State U.	University of Cincinnati	U. Wyoming
U. Kentucky	Cleveland State U.	Purdue U., West Lafayette
U. Louisville	Kent State University	Kennesaw State U.
		The Pennsylvania State University--University Park

Table 2. Variables List

		Student Characteristics	Variable Name	Source
Academic Quality		1. First Year Freshmen Average High School GPA	HS_GPA_FTFYF	US NEWS
		2. Average ACT score (+adjusted SAT) of first-year freshmen	ACT Composite Avg_score	US NEWS
		3. Percent of applicants accepted	Acceptance rate	US NEWS
		4. Percent of accepted applicants that enrolled	calculate FTFYFenrollment/Number of applicants accepted	US NEWS
		5. Total undergraduate enrollment	Total_N_UG	US NEWS
		6. Total part-time enrollment	Part_time_enrollment	US NEWS
Demographics	Gender and Ethnic Diversity	7. UG % Black or Hispanic	calculate pct_UG Black or African American + pct_UG Hispanic	US NEWS
		8. UG % Female	pct_UG female	US NEWS
	Geographic Diversity	9. UG % International	pct_UG international	US NEWS
		10. Percent UG In State	pct_UG in-state	US NEWS
	Current Housing	11. Percent UG On Campus	pct_UG_on-Campus	US NEWS
Financial Need	Total	12. Percent of UG students with financial need	pct_UG_with_financial need	US NEWS
		13. Percent of UG with Pell grants	Pct_UG_pell grants	US NEWS
		14. Percent of UG needs met*	UG_pct_need was fully met	US NEWS
	First Year	15. Percent of First-year students with financial need	Students_w_financial need_FR	US NEWS
		16. Percent of First-year students with Pell Grants	calculate F_cohort_Pell_recipients/FTFYFenrollment	US NEWS
		17. Percent of First-year students with needs fully met.	Need_fully met_FR	US NEWS
Student Outcomes	UG Graduation Rates	18. The ratio of Pell Grant to Non-Pell Grant recipients	Diff_6yr_grad_rate_Pell_notPell	US NEWS
		19. Adjusted graduation rate 6-year (Pell grant percentage * Graduation rate of Pell Grant recipients) + ((1 – Pell grant percentage) * Graduation rate of non-pell grant recipients).	Calculated using variables SixYR_Grad_rate_Pell_RecientsR. SixYR_Grad_rate_Not_Pell	US NEWS
		20. First-year Freshmen One-Year Retention Rate	Avg_first year student retention	US NEWS
		21. Average indebtedness of graduating UG Class	Avg_indebtedness_Grad_Class	US NEWS

		22. Average federal indebtedness of UG graduating class	Avg_Fed_Indebtedness_Grad_Class	US NEWS
		23. Percentage of UG with federal loans	UG receiving federal loan	US NEWS
Instruction	Faculty Characteristics	24. Percent of Faculty with Terminal Degree	pct_FT_faculty_terminal_degree	US NEWS
		25. Number of Full Time Faculty	Full-time faculty	US NEWS
		26. Percent of faculty who are full-time	pct_faculty_full-time	US NEWS
		27. Percent of faculty who are minorities	calculate Minority faculty/Total Faculty	US NEWS
	Classroom Characteristics	28. Student-to-faculty ratio	Student_faculty ratio	US NEWS
		29. Percent of classes with 50 or more students	pct_classes_50 or more students	US NEWS
		30. Percent of classes with 20 or fewer students	pct_classes_fewer 20 students	US NEWS
Finances	Student Costs	31. Cost of Room and Board	Room and board	US NEWS
		32. In-State Tuition and Fees	In-state tuition and fees	US NEWS
		33. Out-of-State Tuition and Fees	OOS tuition and fees	US NEWS
	Non-State Revenue	34. Student Fees	Tui_Fee	IPEDS
		35. State funding (-State Formula Funding).	state_appropriation	IPEDS
		36. Endowment	Endowment_in millions_	US NEWS
		37. Annual Alumni giving	gift	IPEDS
		38. Land Grant University Status	land_grant_cat	IPEDS
	Expenditures	39. Academic Support Expenditures	Academic Support Expenditures_P	US NEWS
		40. Institutional support expenditures	Institutional Support Expenditure	US NEWS
		41. Public services expenditures	Public Service Expenditures_P	US NEWS
		42. Student Services Expenditures	Student Services Expenditures_P	US NEWS
		43. Educational expenditures per student*	ED_expenditures per student	US NEWS
		44. Research expenditures*	Research Expenditures_P	US NEWS
		45. Research expenditures in Non- science and Engineering	All Non-S&E Expenditures	US NEWS
		46. Need-Based Financial Aid Awarded to First-Year Freshmen	Avg_NBSH_aid award_FR	US NEWS
	Miscellaneous	47. Coalition of Urban Serving Institutions flag.	coalition_urban_serving	Carnegi

Methodology:

Our methodology involved several steps to ensure a robust clustering analysis:

Data Collection and Preprocessing: We gathered data from IPEDS, Carnegie, and US News Rankings, ensuring the latest available year for each metric. Missing data was addressed using the "replace" method in SAS, with statistics set to "median." Normalization was performed using the "range" method to ensure that all variables were on a consistent scale. The "range" method helped in transforming the data so that it was suitable for factor analysis and subsequent clustering.

Factor Analysis: In Python, we performed factor analysis after importing the preprocessed data. We dropped the binary variables (land_grant_cat and coalition_urban_serving) at this step since they will not work well with traditional factor analysis. FactorAnalyzer was utilized with the "promax" rotation method to create factors.

First, we employed the Kaiser-Meyer-Olkin (KMO) Test to assess the adequacy of the data for factor analysis. A value of 0.83 indicated that the variables were well-suited to factor analysis. We also used Bartlett's Test of Sphericity, which resulted in a high Chi-Square value (5363.947), and a p-value<0.001, indicating that the variables are related to each other and suggesting that factor analysis could be appropriate for these variables (Table 3. KMO & Table 4. Bartlett).

Table 3. KMO

Overall KMO	0.83
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Table 4. Bartlett's Test of Sphericity

Variable	KMO
Adj_grad_rate_6Y	0.89
actfinal	0.92
All_Non_S_E_Expenditures	0.87
HS_GPA_FTYF	0.91
Acceptance_rate	0.91
acc_app_enr_rate	0.71
Total_N_UG	0.75
Part_time_enrollment	0.66
pct_UG_black_hispanic	0.87
pct_UG_female	0.74
pct_UG_international	0.86
pct_UG_in_state	0.64
pct_UG_on_Campus	0.87
pct_UG_with_financial_need	0.86
Pct_UG_pell_grants	0.90
UG_pct_need_was_fully_met	0.69
Students_w_financial_need_FR	0.86
Per_F_stud_Pell	0.92
Need_fully_met__FR	0.68

Diff_6yr_grad_rate_Pell_notPell	0.78
Avg_first_year_student_retention	0.88
Avg_indebtedness_Grad_Class	0.67
Avg_Fed_Indebtedness_Grad_Class	0.82
UG_receiving_federal_loan	0.81
pct_FT_faculty_terminal_degree	0.50
Full_time_faculty	0.86
pct_faculty_full_time	0.78
Per_fac_minor	0.80
Student_faculty_ratio	0.72
pct_classes_50_or_more_students	0.79
pct_classes_fewer_20_students	0.66
Room_and_board	0.82
In_state_tuition_and_fees	0.66
OOS_tuition_and_fees	0.87
Endowment_in_millions	0.85
Academic_Support_Expenditures_P	0.87
Institutional_Support_Expenditur	0.90
Public_Service_Expenditures_P	0.74
Student_Services_Expenditures_P	0.83
ED_expenditures_per_student	0.81
Research_Expenditures_P	0.89
Avg_NBSH_aid_award_FR	0.55
Tui_Fee	0.87
state_appropriation	0.79
gift	0.89

Chi-Square Value	P-Value
5370.04	<0.001

Next, we determined the optimal number of factors as ten factors using Eigenvalues (Table 5) and Scree Plot (Figure 1).

Table 5. Eigenvalues

Eigenvalue	Selected Factors
13.51	Factor 1
5.31	Factor 2
3.31	Factor 3

2.65	Factor 4
2.50	Factor 5
1.68	Factor 6
1.46	Factor 7
1.23	Factor 8
1.13	Factor 9
1.09	Factor 10
0.95	Factor 11
0.86	Factor 12
0.77	Factor 13
0.75	Factor 14
0.64	Factor 15

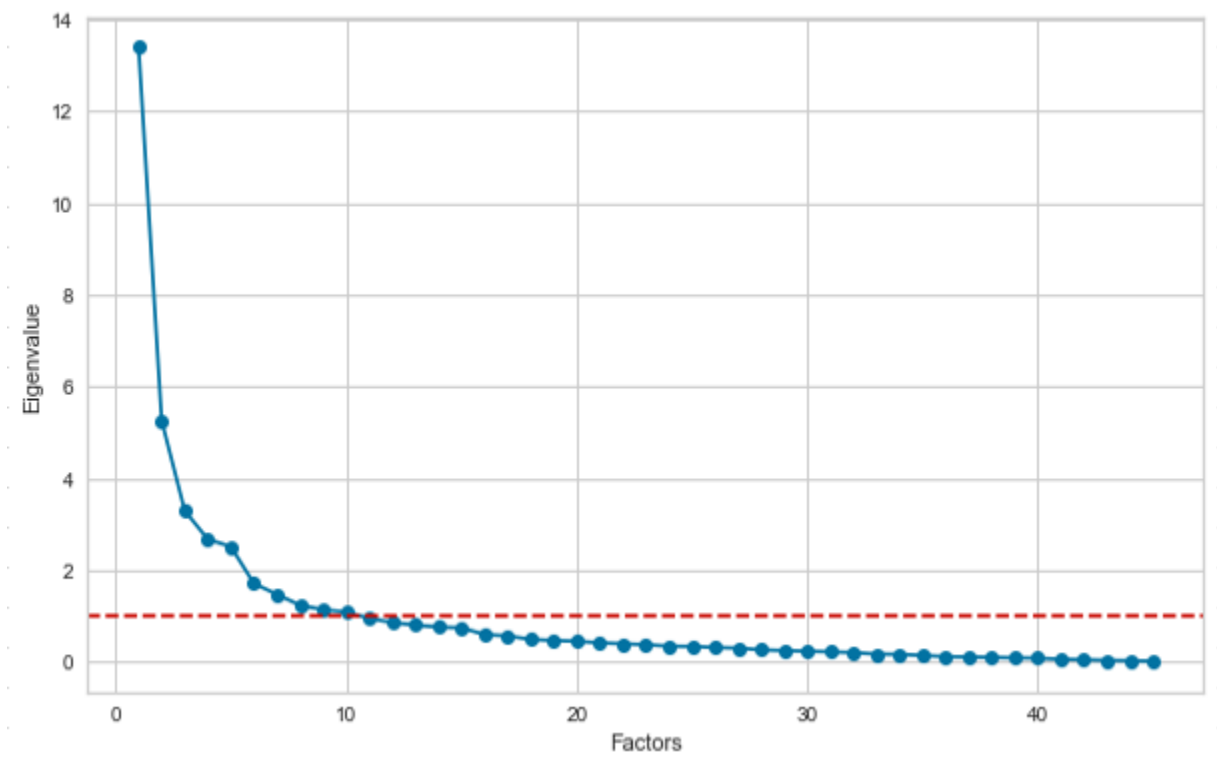


Figure 1. Scree Plot

To describe the factors, we identified the top 10 contributing variables to each factor separately by calculating the sum of absolute factor loadings for each variable, and the top 10 variables overall based on highest absolute factor loadings across all factors (Table 6).

Table 6. Variables with highest contributions to each factor

Factor 1	F1 Loading	Factor 2	F2 Loading
Academic_Support_Expenditures_P	0.97	Pct_UG_pell_grants	0.87
Research_Expenditures_P	0.89	pct_UG_with_financial_need	0.84
Institutional_Support_Expenditur	0.86	Per_F_stud_Pell	0.82
Student_Services_Expenditures_P	0.85	Students_w_financial_need_FR	0.79
Full_time_faculty	0.79	pct_UG_black_hispanic	0.70
Endowment_in_millions_	0.74	Per_fac_minor	0.58
Tui_Fee	0.72	pct_UG_in_state	0.45
Total_N_UG	0.64	pct_UG_female	0.39
gift	0.63	Diff_6yr_grad_rate_Pell_notPell	0.32
All_Non_S_E_Expenditures	0.57	UG_receiving_federal_loan	0.27
Factor 3	F3 Loading	Factor 4	F4 Loading
Adj_grad_rate_6Y	0.82	UG_receiving_federal_loan	0.99
Avg_first_year_student_retention	0.79	Avg_Fed_Indebtedness_Grad_Class	0.86
HS_GPA_FTYF	0.76	Avg_indebtedness_Grad_Class	0.73
Acceptance_rate	-0.70	ED_expenditures_per_student	-0.40
pct_UG_on_Campus	0.47	pct_UG_on_Campus	0.36
state_appropriation	0.39	In_state_tuition_and_fees	0.35
actfinal	0.36	pct_UG_international	-0.33
Diff_6yr_grad_rate_Pell_notPell	0.30	Diff_6yr_grad_rate_Pell_notPell	-0.31
Room_and_board	0.24	Room_and_board	-0.29
Students_w_financial_need_FR	-0.24	Per_F_stud_Pell	0.25
Factor 5	F5 Loading	Factor 6	F6 Loading
pct_classes_fewer_20_students	-0.96	In_state_tuition_and_fees	0.83
pct_classes_50_or_more_students	0.95	Room_and_board	0.58
Student_faculty_ratio	0.71	OOS_tuition_and_fees	0.58
Total_N_UG	0.41	acc_app_enr_rate	-0.53
Part_time_enrollment	0.36	pct_UG_international	0.4
Per_fac_minor	0.31	Part_time_enrollment	-0.37
pct_faculty_full_time	0.3	ED_expenditures_per_student	0.33
pct_UG_female	-0.26	Avg_indebtedness_Grad_Class	0.3
pct_UG_black_hispanic	0.25	state_appropriation	-0.24
Acceptance_rate	0.24	Tui_Fee	0.23
Factor 7	F7 Loading	Factor 8	F8 Loading
Need_fully_met_FR	0.95	pct_faculty_full_time	0.73

UG_pct_need_was_fully_met	0.87	pct_classes_50_or_more_students	0.54
Avg_NBSH_aid_award_FR	0.54	Part_time_enrollment	-0.34
UG_receiving_federal_loan	0.20	Diff_6yr_grad_rate_Pell_notPell	-0.30
Endowment_in_millions	0.14	ED_expenditures_per_student	0.25
Full_time_faculty	-0.13	Student_Services_Expenditures_P	-0.24
Acceptance_rate	-0.13	OOS_tuition_and_fees	0.22
acc_app_enr_rate	0.12	acc_app_enr_rate	0.21
pct_classes_fewer_20_students	0.10	pct_UG_on_Campus	0.21
gift	0.10	pct_classes_fewer_20_students	-0.20
Factor 9	F9 Loading	Factor 10	F10 Loading
pct_FT_faculty_terminal_degree	0.50	state_appropriation	0.58
Tui_Fee	-0.41	Public_Service_Expenditures_P	0.40
Avg_indebtedness_Grad_Class	0.35	pct_UG_in_state	0.35
Per_F_stud_Pell	-0.29	All_Non_S_E_Expenditures	-0.28
Avg_first_year_student_retention	0.25	OOS_tuition_and_fees	-0.50
pct_UG_international	-0.24	ED_expenditures_per_student	0.19
Public_Service_Expenditures_P	0.24	Per_F_stud_Pell	0.18
Institutional_Support_Expenditur	0.23	Avg_indebtedness_Grad_Class	-0.17
Avg_NBSH_aid_award_FR	-0.20	Research_Expenditures_P	0.17
pct_faculty_full_time	-0.18	Adj_grad_rate_6Y	0.16

The last step in the Factor Analysis was to interpret the factors based on the variable loadings in Table 6. Below are OIR's interpretations of each factor.

Factor 1: Resource Allocation: Variables related to expenditure, faculty numbers, endowment, and financial support.

Factor 2: Financial Need & Diversity: Variables associated with financial aid, Pell grants, minority representation, and financial need indicators.

Factor 3: Academic Performance & Acceptance: Variables indicating academic performance metrics and acceptance rates.

Factor 4: Financial Indebtedness: Variables related to student debt, federal loans, and some tuition and fee aspects.

Factor 5: Class Sizes & Enrollment: Variables reflecting class sizes, student-faculty ratios, and enrollment characteristics.

Factor 6: Tuition & Fees: Variables related to tuition, fees, and some aspects of enrollment.

Factor 7: Financial Aid Fulfillment: Variables associated with meeting financial aid needs and awards.

Factor 8: Faculty Composition & Expenditures: Variables related to faculty characteristics, expenditures, and student services.

Factor 9: Academic Support & International Presence: Variables indicating academic support, international presence, and financial aid.

Factor 10: Institutional Support & Expenditure: Variables related to institutional support, research expenditures, and financial allocation.

Clustering Analysis

We explored two scenarios: one using the factors identified through factor analysis, and the other using all variables.

General notes on clustering methodology:

Five clustering methods were applied: KMeans, Ward, GMM, Birch, and MiniBatch KMeans. To find the optimal number of clusters for each clustering method, we employed the Elbow Method with Ward linkage, Silhouette scores, and BIC scores. We conducted clustering analysis with 4, 5, and 6 clusters, with 5 clusters proving to be the optimum choice in most cases as seen in the sample figures.

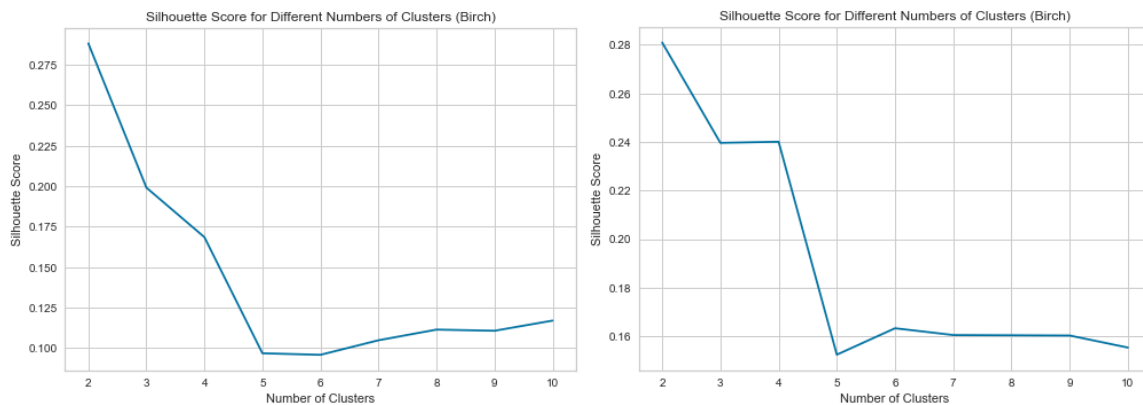


Fig. 2. Finding optimal number of clusters for Birch method using Silhouette scores (Left: All variables, Right: Factors)

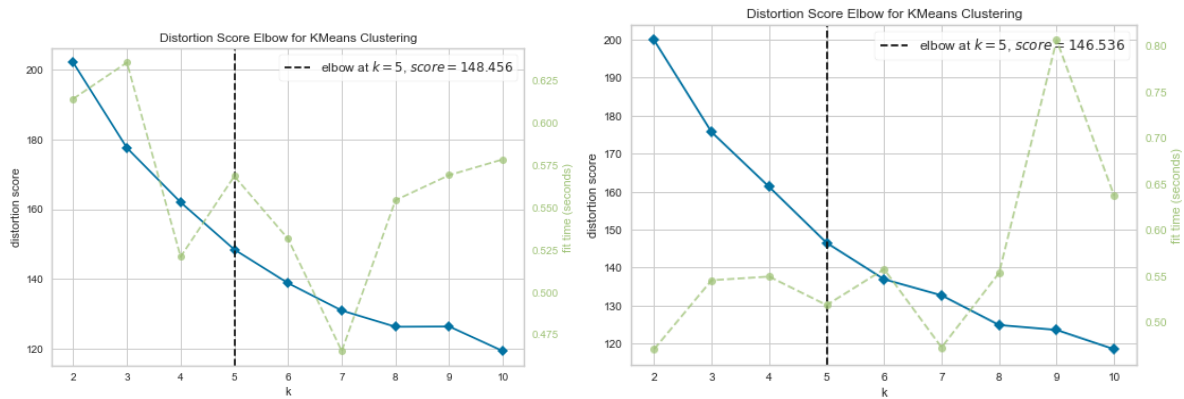


Fig. 3. Finding optimal number of clusters for Kmeans method using elbow method (Left: All variables, Right: Factors)

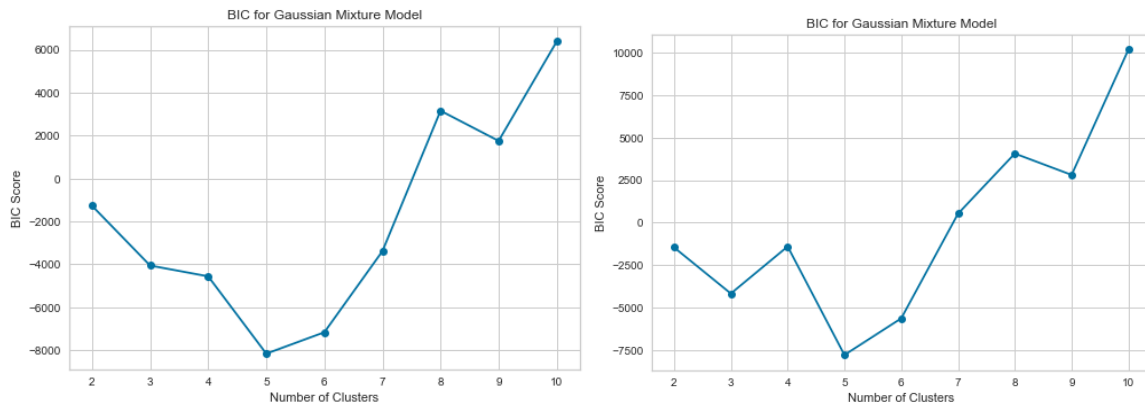


Fig. 4. Finding optimal number of clusters for GMM method using BIC score (Left: All variables, Right: Factors)

Consensus Clustering: To create a final clustering based on results from all five methods, we used the consensus matrix. It measures the degree of agreement between data points across different clustering methods. Hierarchical clustering on the consensus matrix provided the definitive clustering labels.

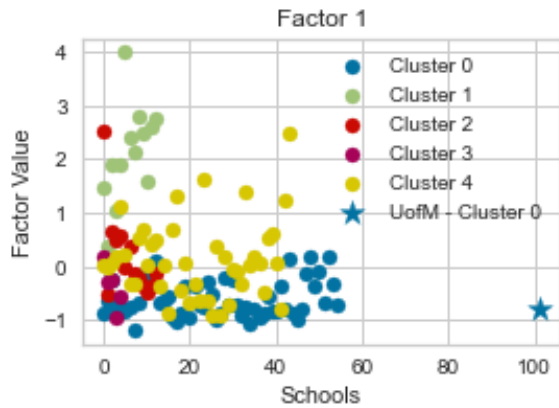
*

Results for Cluster Analysis using Factors:

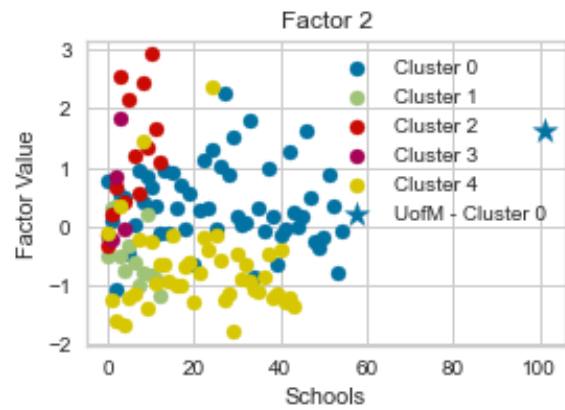
Peers are in cluster 0. Aspirants are in clusters 4 & 1.

Factor scores were calculated using a weighted combination of each item's factor loadings, or more specifically the scaled score for each item was multiplied by the factor loading of each item and then summed. In the visual below, the Y axis represents the factor scores. The X-axis is a random institution

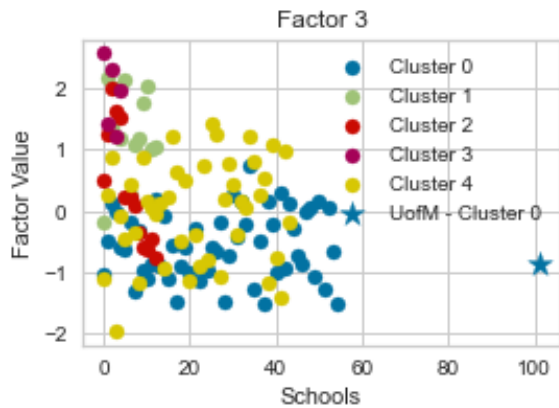
number and has no meaning. The Y-axis factor scores can have a wider range than factor loadings and comparing them relatively helps visualize how institutions are distributed across different clusters.



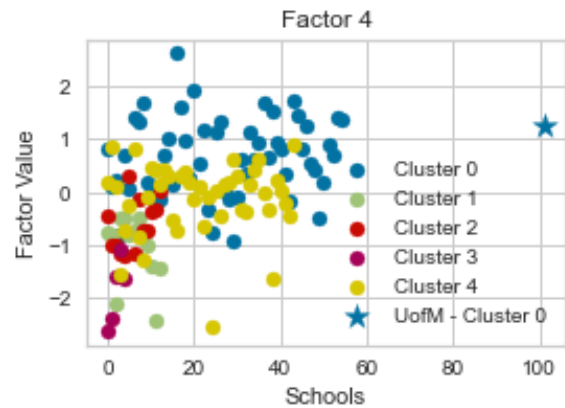
Resource Allocation 1



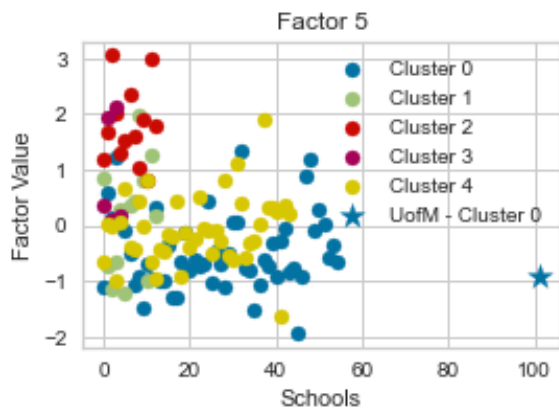
Financial Need & Diversity 1



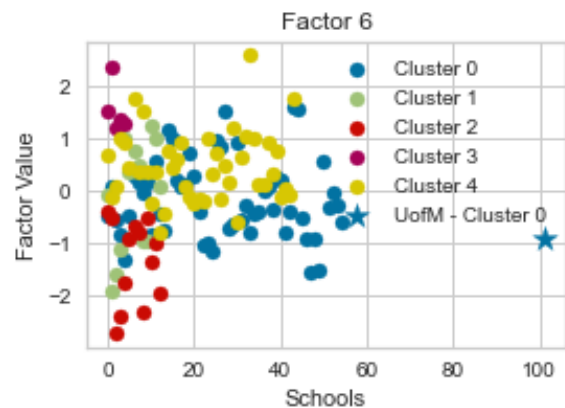
Financial Indebtedness 1



Class Sizes & Enrollment 1



Academic Performance & Acceptance 1



Tuition & Fees 1

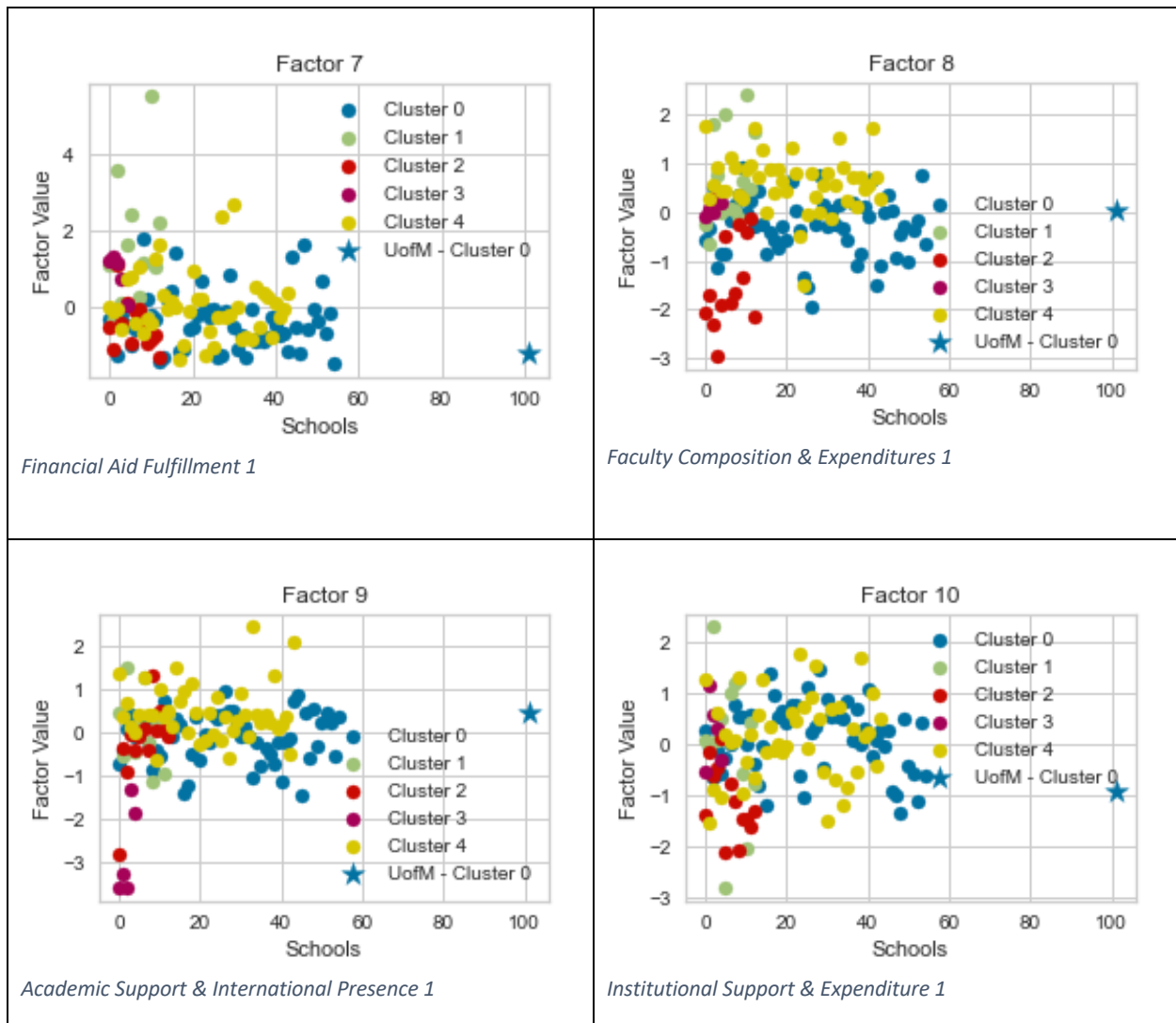


Figure 5. Factor Value Plots

Diagnostics for the cluster analysis using factors are in Tables 7a, 7b, and 7c.

The maximum distance from observations to the cluster centroid is a measure of the variability of the observations within each cluster. A higher maximum value, especially in relation to the average distance, indicates an observation in the cluster that lies farther from the cluster centroid.

Table 7a. Diagnostics for Cluster Analysis Using Factors.

Cluster Number	Observations	Within Cluster Sum of Squares	Avg Distance from Centroid	Max Distance from Centroid
0	55	230.31	1.98	3.34
1	44	123.95	2.90	5.28

2	13	77.31	2.31	4.05
3	13	19.14	1.92	2.62
4	5	226.90	2.13	4.72

Table 7b. Cluster Centroids:

Factors/Clusters	0	1	2	3	4
1	-0.61	2.10	0.18	-0.38	0.13
2	0.36	-0.51	1.30	0.45	-0.73
3	-0.60	1.31	0.35	1.89	0.01
4	0.66	-1.06	-0.62	-1.88	-0.12
5	-0.47	0.10	1.78	0.94	-0.08
6	-0.15	-0.14	-1.34	1.54	0.45
7	-0.35	1.43	-0.45	0.90	0.04
8	-0.31	0.68	-1.48	0.11	0.61
9	-0.10	0.07	-0.22	-2.73	0.48
10	0.12	0.05	-1.11	0.24	0.14

Table 7c. Distances Between Cluster Centroids:

Clusters	0	1	2	3	4
0	0				
1	4.37	0			
2	3.65	4.68	0		
3	5.10	4.48	5.14	0	
4	2.12	3.00	4.22	4.67	0

Cluster 0 shows a balanced profile without distinct prominent factors.

Cluster 1 stands out with high values in Factors 1, 3, and 7.

Cluster 2 is characterized by high values in Factors 2, 5, 8, and 10.

Cluster 3 exhibits high values in Factors 3, 4, and 6.

Cluster 4 distinguishes itself with low values in Factor 2 and high values in Factors 7 and 9.

Table 8 lists the institutions that are in cluster 0, the same cluster as the University of Memphis.

Table 8. List of Peers Using Factors.

Cluster Analysis Using Factors, Cluster 0
Ball State U.
Boise State U.
Bowling Green State University

Central Michigan U.
Cleveland State U.
East Carolina U.
East Tennessee State U.
Eastern Michigan U.
Florida Atlantic U.
George Mason U.
Georgia Southern U.
Illinois State U.
Indiana U.-Purdue U., Indianapolis
Kent State University
Louisiana State U., Baton Rouge
Mississippi State U.
Montclair State U.
New Mexico State U.
Northern Arizona U.
Northern Illinois U.
Oakland U.
Ohio University
Oklahoma State U., Stillwater
Old Dominion U.
Portland State U.
Rowan U.
Rutgers, State U. New Jersey, Newark
SUNY, U. Buffalo
Temple U.
Texas State U.
Texas Tech U.
The University of Akron
U. Arkansas, Fayetteville
U. Louisiana, Lafayette
U. Louisville
U. Massachusetts, Boston
U. Massachusetts, Lowell
U. Nebraska, Omaha
U. Nevada, Las Vegas
U. New Mexico
U. North Carolina, Charlotte
U. North Carolina, Greensboro
U. North Carolina, Wilmington
U. Rhode Island

U. South Alabama
U. Southern Mississippi
U. Toledo
U. Wisconsin-Milwaukee
University of Memphis
Utah State U.
Virginia Commonwealth U.
Wayne State U.
West Virginia U.
Western Michigan U. and Homer Stryker M.D. School of Medicine
Wichita State U.

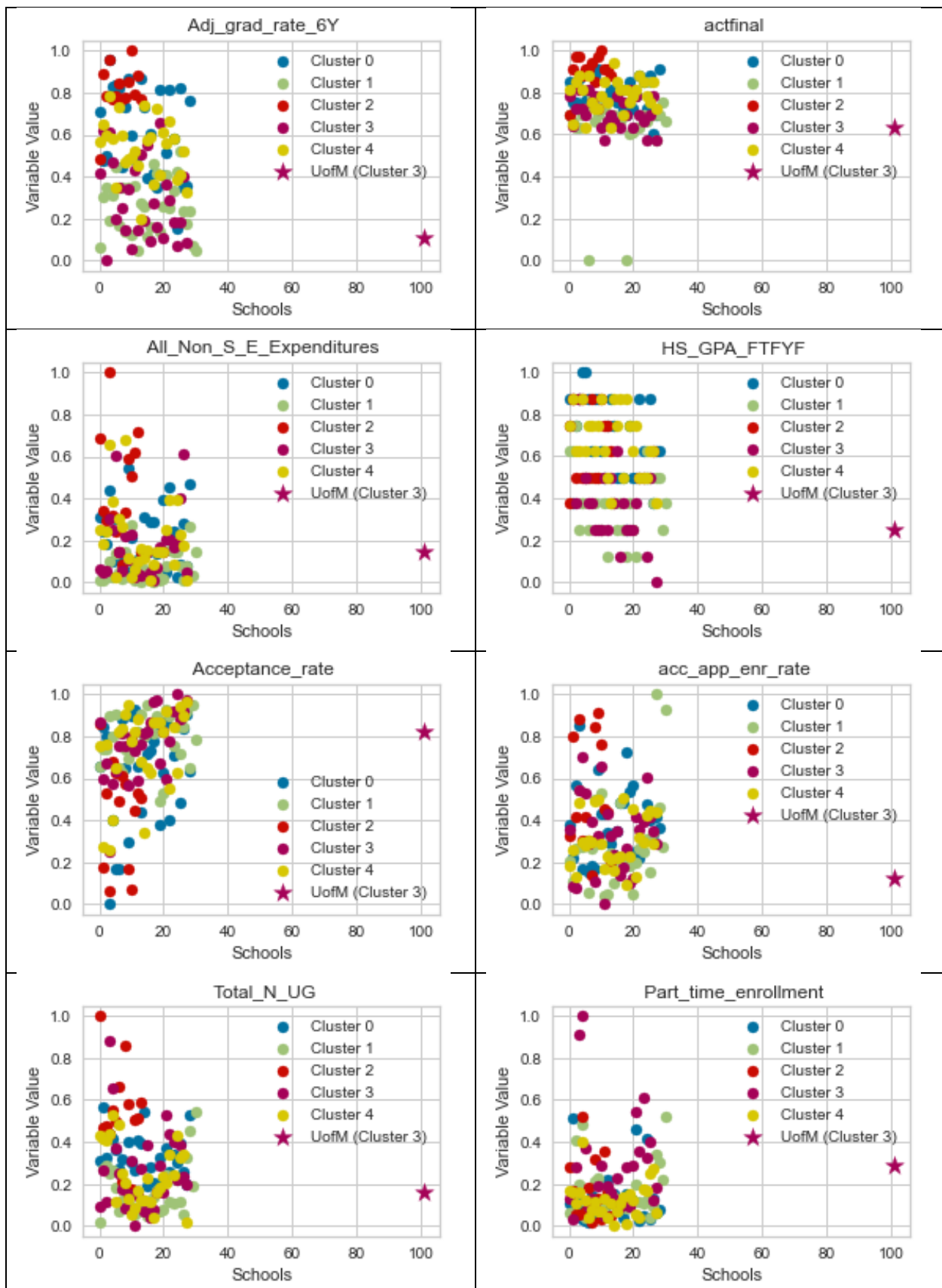
Results for Cluster Analysis Using All Variables:

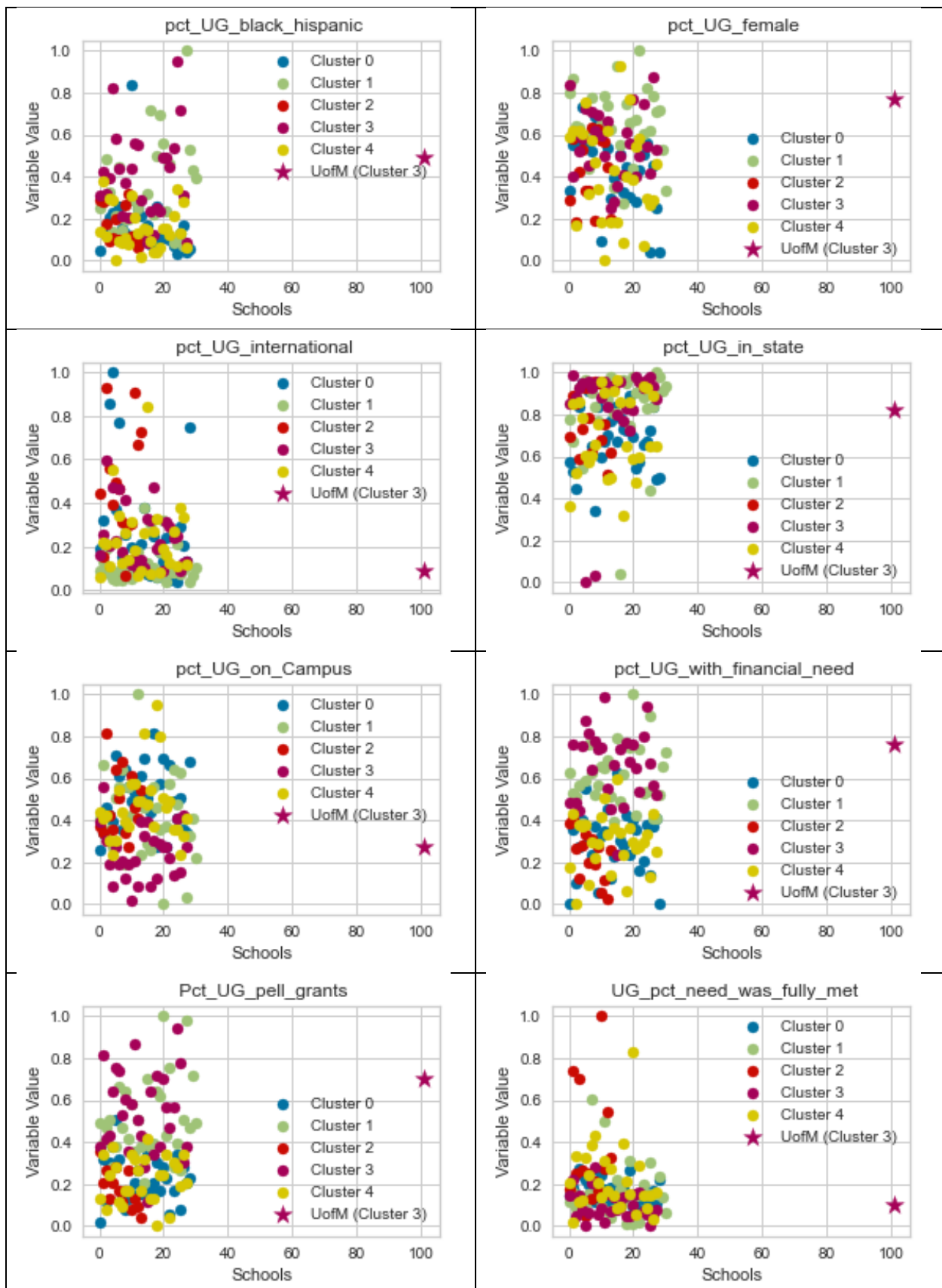
We calculated the Silhouette Score and the Davies-Bouldin Index to compare the accuracy of different clustering cases and provide additional insights into the performance of each method. A higher Silhouette Score indicates better-defined clusters. It measures how similar an object is to its own cluster (cohesion) compared to other clusters (separation). Higher values (closer to 1) are preferable. A lower Davies-Bouldin Index indicates better clustering. It quantifies the average similarity between each cluster and its most similar cluster, where smaller values are better. A lower Davies-Bouldin Index suggests more distinct clusters.

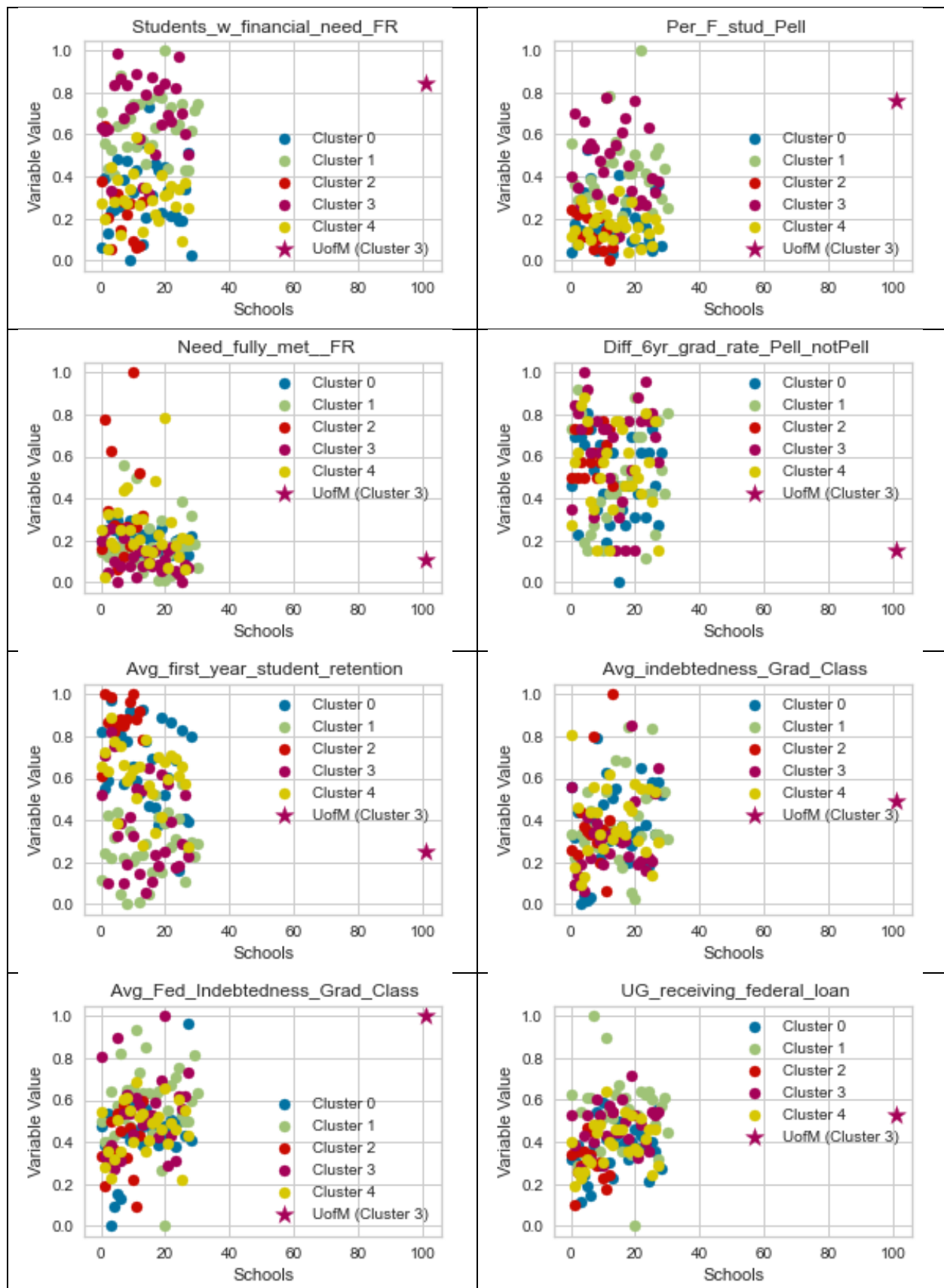
Table 9. Accuracy Measures

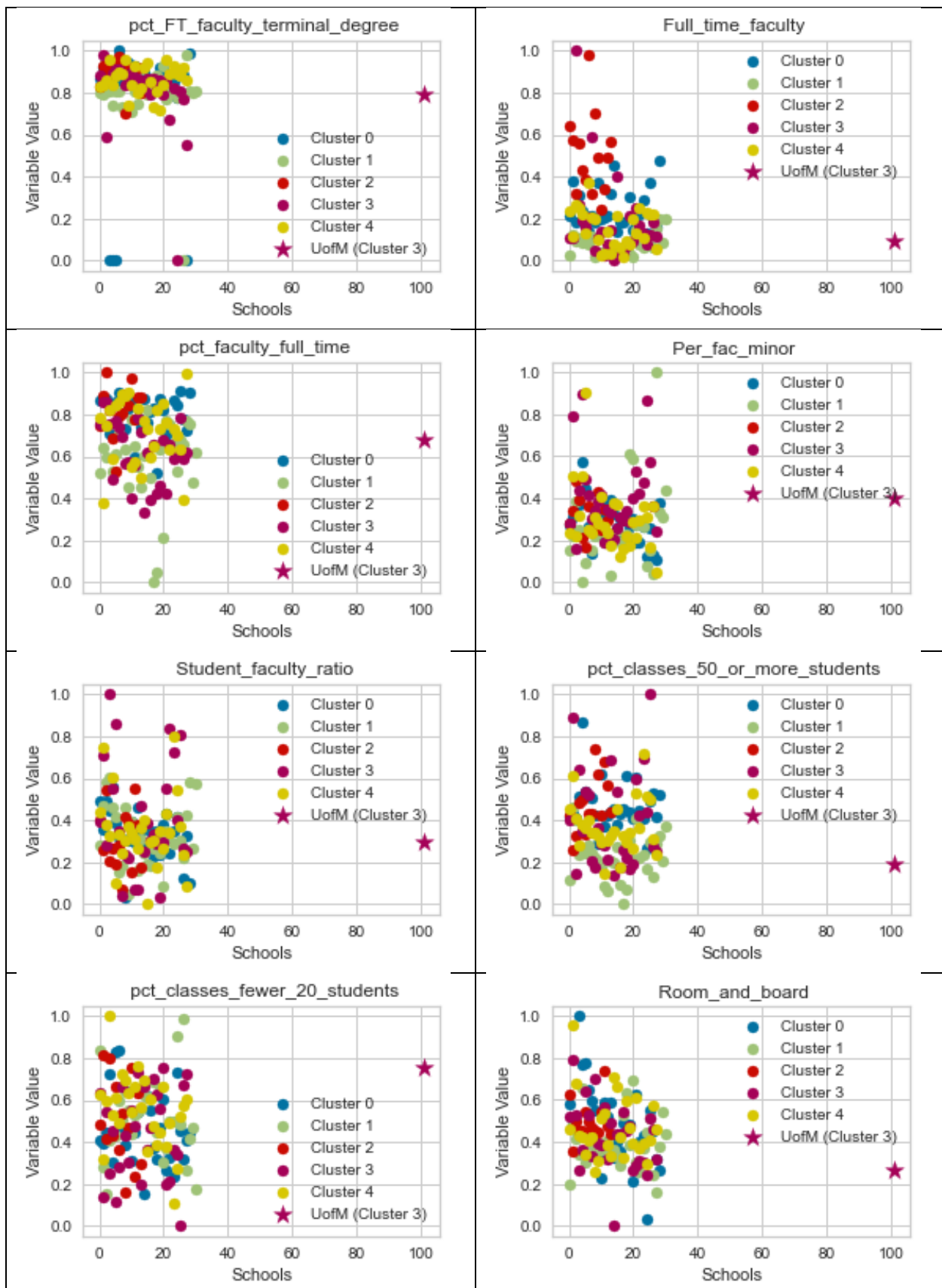
Cluster	Silhouette Score			Davies-Bouldin Index		
	4	5	6	4	5	6
All Variables	0.13	0.15	0.16	1.8	1.81	1.65
Factors	0.16	0.18	0.18	1.72	1.56	1.46

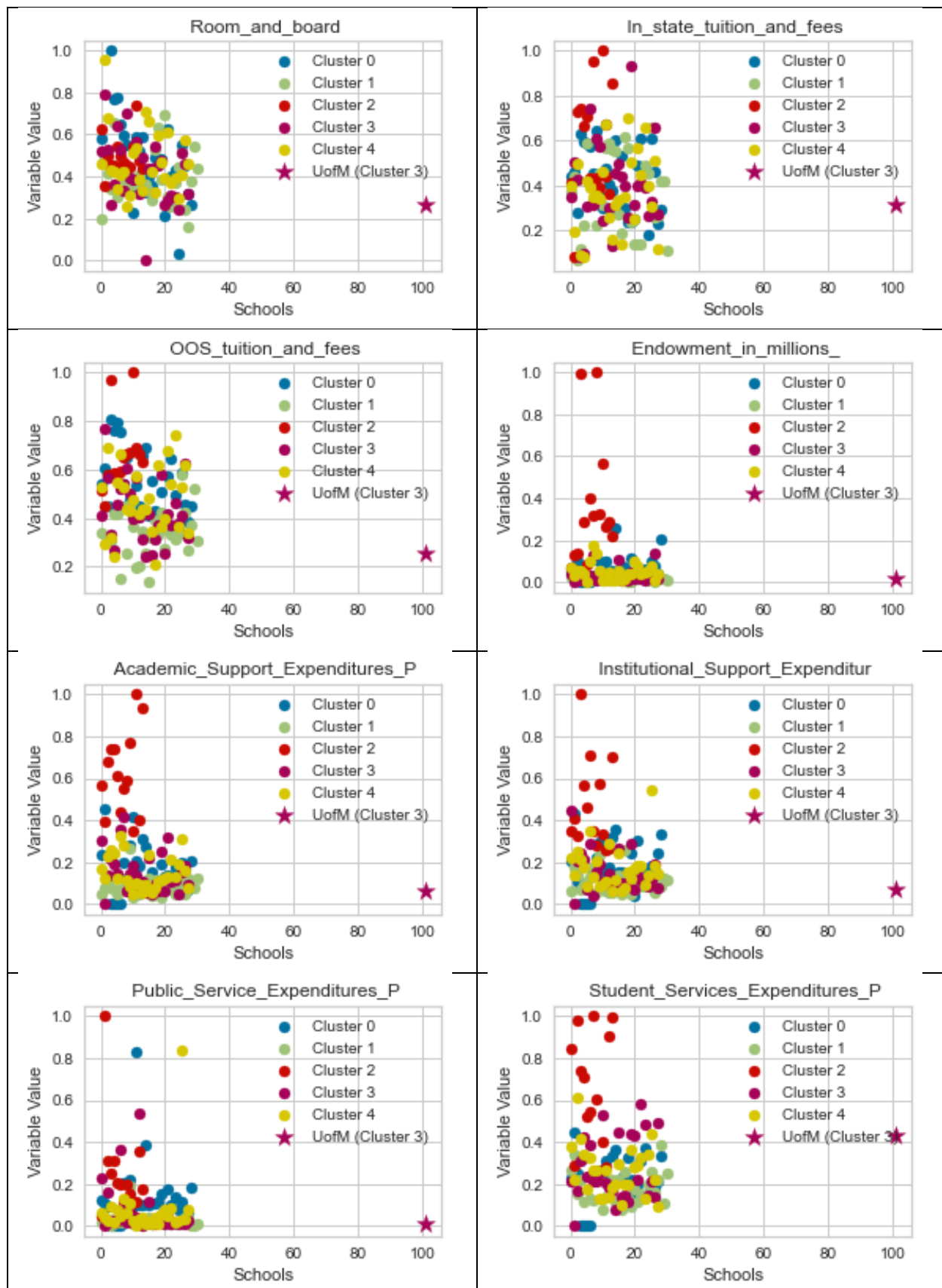
The plots below help visualize how UofM's Y-axis value compared to other institutions for each variable. Again, the X-axis is a random number assigned to each school and is meaningless. Peers are in cluster 3. Aspirants are in cluster 2.











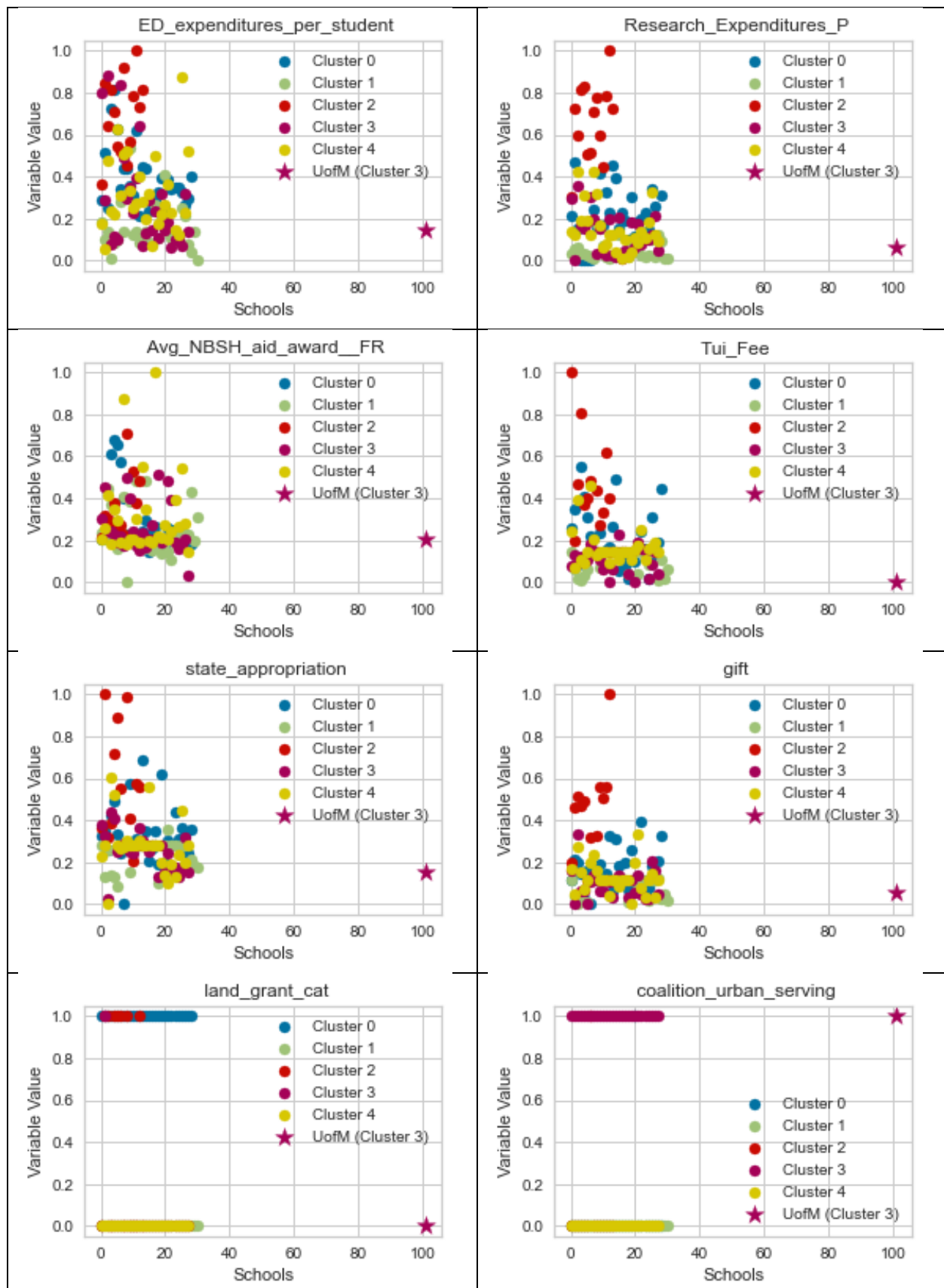


Figure 6. Variable Value Plots

Diagnostics for the cluster analysis using all variables are in Tables 10a, 10b, and 10c.

The maximum distance from observations to the cluster centroid is a measure of the variability of the observations within each cluster. A higher maximum value, especially in relation to the average distance, indicates an observation in the cluster that lies farther from the cluster centroid.

Table 10a. Diagnostics for Cluster Analysis Using All Variables

Cluster Number	Observations	Within Cluster Sum of Squares	Avg Distance from Centroid	Max Distance from Centroid
0	29	38.54	0.99	1.84
1	31	28.25	0.92	1.61
2	14	25.55	1.33	1.72
3	28	36.20	1.10	1.77
4	28	25.00	0.93	1.31

Table 10b. Cluster Centroids

Variables / Cluster	0	1	2	3	4
Adj_grad_rate_6Y	0.61	0.26	0.81	0.29	0.53
actfinal	0.79	0.65	0.91	0.71	0.79
All_Non_S_E_Expenditures	0.22	0.07	0.43	0.17	0.21
HS_GPA_FTYF	0.68	0.39	0.64	0.42	0.67
Acceptance_rate	0.63	0.78	0.45	0.76	0.73
acc_app_enr_rate	0.39	0.30	0.51	0.32	0.30
Total_N_UG	0.33	0.16	0.54	0.26	0.24
Part_time_enrollment	0.12	0.16	0.17	0.27	0.12
pct_UG_black_hispanic	0.16	0.32	0.16	0.39	0.15
pct_UG_female	0.43	0.65	0.42	0.56	0.42
pct_UG_international	0.26	0.13	0.48	0.24	0.23
pct_UG_in_state	0.69	0.84	0.75	0.84	0.70
pct_UG_on_Campus	0.50	0.43	0.48	0.24	0.47
pct_UG_with_financial_need	0.29	0.61	0.23	0.66	0.29
Pct_UG_pell_grants	0.22	0.51	0.18	0.54	0.22
UG_pct_need_was_fully_met	0.17	0.16	0.36	0.10	0.22
Students_w_financial_need_FR	0.31	0.64	0.24	0.69	0.30
Per_F_stud_Pell	0.19	0.43	0.13	0.46	0.16
Need_fully_met__FR	0.20	0.18	0.37	0.11	0.24
Diff_6yr_grad_rate_Pell_notPell	0.48	0.49	0.60	0.63	0.54

Avg_first_year_student_retention	0.67	0.26	0.88	0.37	0.60
Avg_indebtedness_Grad_Class	0.37	0.39	0.37	0.31	0.39
Avg_Fed_Indebtedness_Grad_Class	0.44	0.58	0.39	0.53	0.47
UG_receiving_federal_loan	0.36	0.53	0.32	0.46	0.39
pct_FT_faculty_terminal_degree	0.76	0.79	0.89	0.80	0.87
Full_time_faculty	0.24	0.08	0.50	0.18	0.15
pct_faculty_full_time	0.79	0.59	0.82	0.62	0.72
Per_fac_minor	0.28	0.27	0.31	0.40	0.30
Student_faculty_ratio	0.33	0.32	0.30	0.40	0.35
pct_classes_50_or_more_students	0.47	0.23	0.47	0.39	0.37
pct_classes_fewer_20_students	0.47	0.51	0.50	0.44	0.55
Room_and_board	0.48	0.40	0.50	0.42	0.47
In_state_tuition_and_fees	0.43	0.36	0.59	0.40	0.37
OOS_tuition_and_fees	0.54	0.34	0.66	0.43	0.47
Endowment_in_millions	0.07	0.02	0.36	0.03	0.05
Academic_Support_Expenditures_P	0.16	0.08	0.63	0.15	0.15
Institutional_Support_Expenditur	0.17	0.11	0.47	0.15	0.17
Public_Service_Expenditures_P	0.13	0.03	0.25	0.07	0.07
Student_Services_Expenditures_P	0.21	0.19	0.65	0.27	0.26
ED_expenditures_per_student	0.39	0.15	0.69	0.28	0.32
Research_Expenditures_P	0.21	0.05	0.67	0.12	0.15
Avg_NBSH_aid_award_FR	0.28	0.24	0.34	0.26	0.32
Tui_Fee	0.21	0.10	0.43	0.11	0.16
state_appropriation	0.33	0.23	0.54	0.25	0.28
gift	0.16	0.09	0.41	0.10	0.13
land_grant_cat	1.00	0.00	0.50	0.04	0.00
coalition_urban_serving	0.03	0.00	0.07	1.00	0.00

Table 10c. Distances Between Cluster Centroids

Clusters	0	1	2	3	4
0	0				
1	1.52	0			
2	1.35	2.16	0		
3	1.73	1.13	2.15	0	
4	1.06	0.99	1.51	1.40	0

In the scenario that used all variables for clustering, to find the top 10 variables that had the most contribution to final clustering, we used feature importance methods from machine learning algorithms like Random Forest. These methods can provide us with an indication of the importance of each variable in predicting cluster labels. Feature importance in Random Forest is based on the reduction in impurity (Gini impurity or entropy) achieved by splitting on a particular feature across all the decision trees in the

forest. Features that lead to greater impurity reduction when used for splits are considered more important because they contribute more to the separation of data into different classes or clusters.

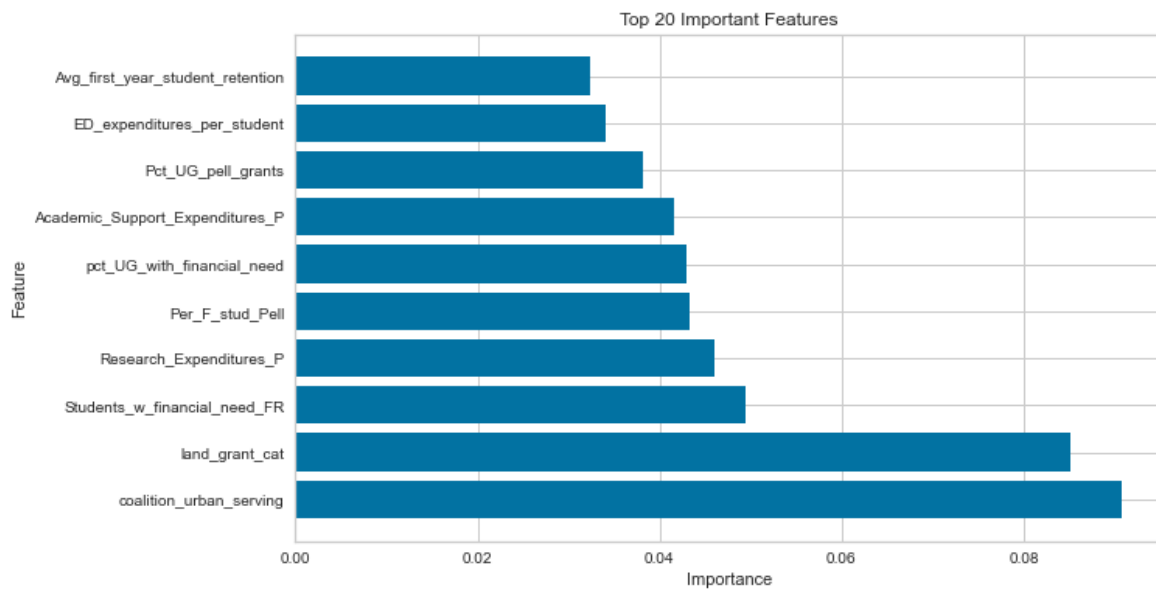


Fig. 7. Feature importance using random forest based on the final clustering results in case of 5 clusters

Another common approach is to use feature selection techniques such as Mutual Information method. Mutual Information (MI) is a statistical measure that quantifies the degree of dependence or information shared between two random variables. In the context of feature selection, MI is used to assess the relationship between a feature (independent variable) and the target variable (dependent variable), helping you determine how much information a feature provides about the target.

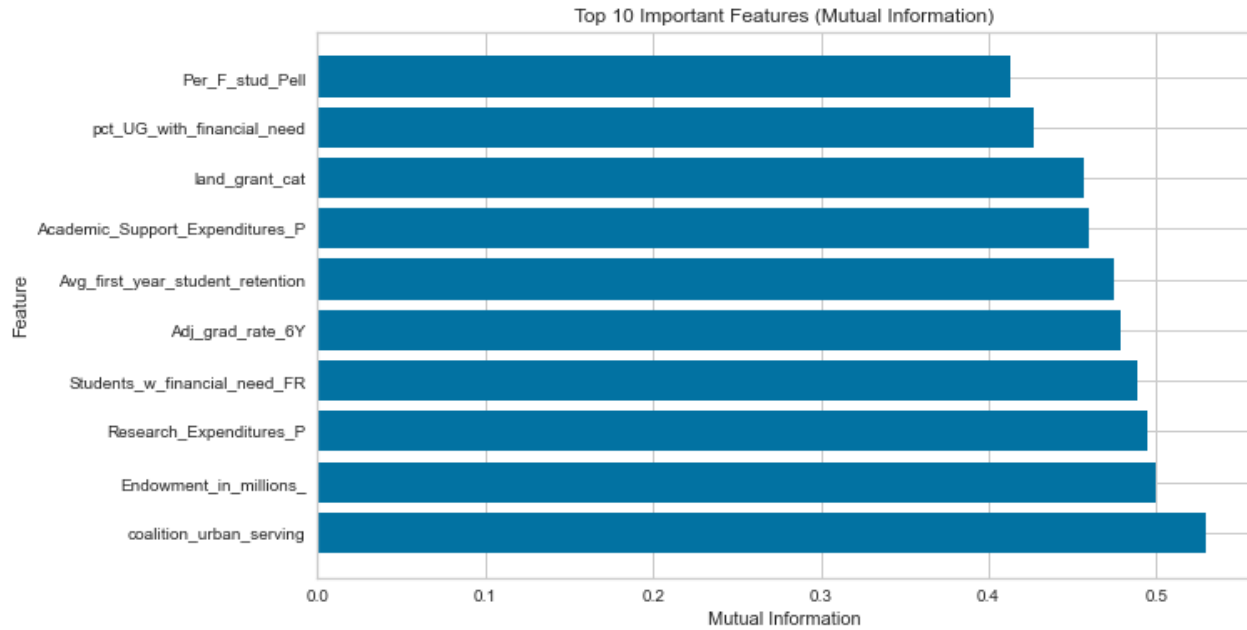


Fig. 8. Feature importance using mutual information method based on the final clustering results of 5 clusters

Using PCP as another way of finding top variables leads to these top 10 variables: land_grant_cat, coalition_urban_serving, Student_Services_Expenditures_P, Diff_6yr_grad_rate_Pell_notPell, In_state_tuition_and_fees, pct_classes_fewer_20_students, In_state_tuition_and_fees, pct_UG_international, pct_faculty_full_time and pct_FT_faculty_terminal_degree.

Table 11 contains a list of institutions in the same cluster as the University of Memphis (cluster 0).

Table 11. List of Peers Using All Variables.

5 clusters
Cleveland State U.
Florida International U.
Georgia State U.
Indiana U.-Purdue U., Indianapolis
Portland State U.
Rutgers, State U. New Jersey, Newark
Temple U.
The University of Akron
U. Alabama, Birmingham
U. California, Riverside
U. Central Florida
U. Colorado Denver and Anschutz Medical Campus

U. Houston
U. Illinois, Chicago
U. Massachusetts, Boston
U. Nevada, Las Vegas
U. New Mexico
U. North Carolina, Charlotte
U. North Texas, Denton
U. Texas, Arlington
U. Texas, El Paso
U. Texas, San Antonio
U. Toledo
U. Wisconsin-Milwaukee
University of Cincinnati
University of Memphis
Virginia Commonwealth U.
Wayne State U.

Conclusion:

The clustering analysis identified two sets of potential peer institutions for the University of Memphis, based on rigorous data analysis and careful consideration of variables. These results are essential for the Faculty Senate to make an informed decision about selecting peer institutions. We applied various clustering methods to ensure a comprehensive evaluation. Five clusters were typically the preferred choice by optimum method searches and accuracy measures. The faculty senate can now use these lists to select peers for their needs.

In case it is useful, here is a list of institutions that appeared in both the clustering model using Factors and the clustering model using All Variables:

Table 12. List of Peer Institutions in Common in Both Clustering Models

Peer Institutions in both Clustering Models
Cleveland State U.
Indiana U.-Purdue U., Indianapolis
Portland State U.
Rutgers, State U. New Jersey, Newark
Temple U.
The University of Akron
U. Massachusetts, Boston
U. Nevada, Las Vegas
U. New Mexico
U. North Carolina, Charlotte

U. Toledo
U. Wisconsin-Milwaukee
University of Memphis
Virginia Commonwealth U.
Wayne State U.



TIGERS SMARTSTART

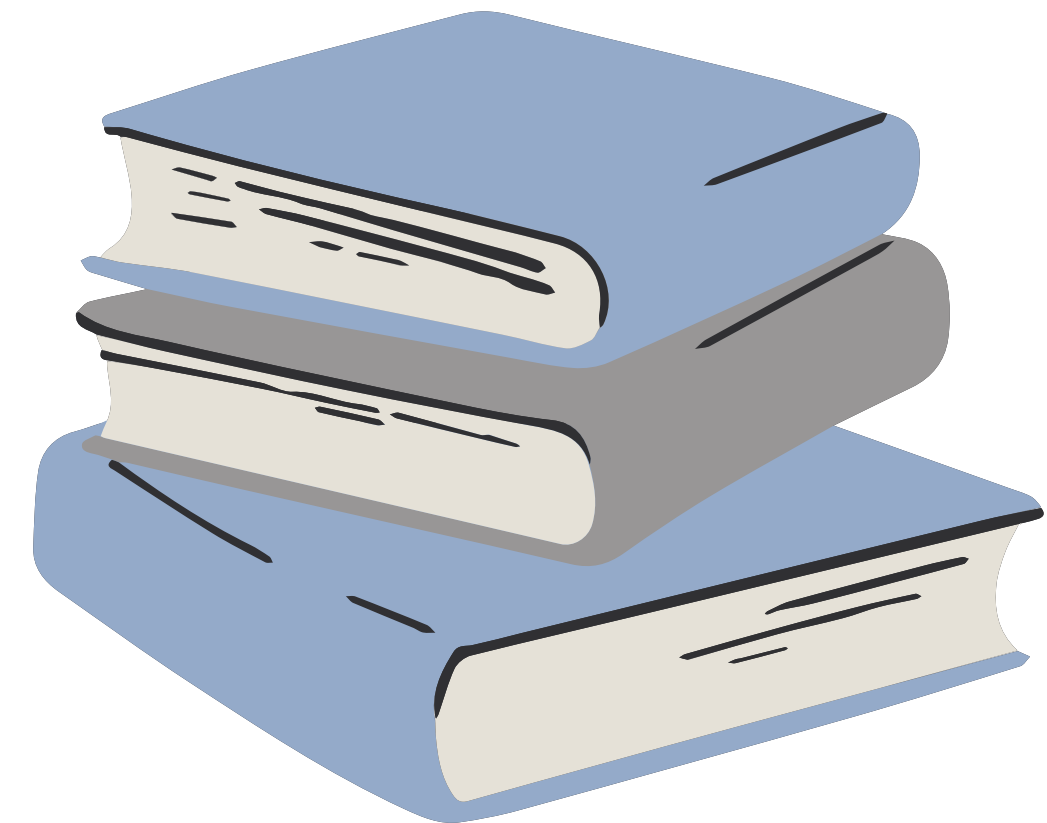
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RECEIVE YOUR TEXTBOOKS

An e-mail notification will be sent when their order is ready for pickup or when it ships. Digital materials will be delivered in Canvas on the first day of classes.

PRICE BREAKDOWN



Freshman | 16 Hours

Class	TSS Charge	Regular Charge
• ECON 2020	\$72	Used Rental \$143.25
• BIOL 1011	\$72	\$124.70
• SPAN 1010	\$96	\$143.94
• ENGL 1010	\$72	Digital \$40.99
• ACAD 1100	\$72	Used Rental \$24.85
Total:	\$384	\$479.13 + tax

Sophomore | 10 Hours

Class	TSS Charge	Regular Charge
• HIST 2020	\$72	Used Rental \$32.95
• BIOL 2020	\$72	Used Rental \$103.93
• BIOL 2021	\$24	\$205.13
• MUS 1030	\$72	\$169.14
Total:	\$240	\$511.15 + tax

TIGERS SMARTSTART FALL 2023



- 10,588 students are in the Tigers SmartStart program for Fall 2023
- Almost 3,500 courses did not have an adoption submitted before the deadline at the main campus alone
- 3,527 course adoptions were changed or submitted from May 16th-September 9th
- 526 digital materials adopted and available on August 28th
 - As of September 15th, digital materials increased to 691
- **819** adoptions from August 1st-September 8th, many adopted from student-provided syllabi

IDENTIFIED DIFFICULTIES



- Adoption challenges
- Designation of recommended and required coursework
- Turning on access to digital products in Canvas
- Course material not available through B&N
- Adjunct faculty changing adoptions from what was initially adopted

SUMMER & FALL 2024



Adoptions are due March 1, 2024

- Faculty can put in adoptions at www.aip.bncollege.com
- Fall 2024 SIS file will go live a few weeks after classes start
- One-click adoption will be available to re-adopt from Fall 2023
- If you run into adoption challenges, please reach out to Emily Swisher



STUDENT SURVEY



Overall

	Digital Textbooks	No Preference	Physical Textbooks	Total
Count	400	134	318	852

Digital Textbooks	No Preference	Physical Textbooks
47%	16%	37%

p<0.05 significant

There is a significant difference in preference of textbook format among undergraduate students. 852 responses provides a 3.25% margin of error with a significance level of .05. Thus, you can conclude that between 44% and 50% of students prefer digital, between 34% and 40% prefer physical, and between 13% and 19% have no preference.

Student Class Level

Class	Digital Textbooks	No Preference	Physical Textbooks	Total
Freshman	111	28	85	224
Sophomore	100	31	73	204
Junior	105	34	84	223
Senior	84	41	76	201
Total	400	134	318	852

Digital Textbooks	No Preference	Physical Textbooks
50%	13%	38%
49%	15%	36%
47%	15%	38%
42%	20%	38%

p=.40 not significant

There is no significant difference in preference of textbook format among different class levels.

STUDENT SURVEY



College

Combined CSD and Nursing due to low CSD responses.

Combined Health Sciences and Public Health due to low Public Health responses

College	Digital Textbooks	No Preference	Physical Textbooks	Total
Comm Sciences Disorders and College of Nursing	13	8	28	49
Coll of Prof & Liberal Studies	24	11	30	65
College of Education	15	8	16	39
Health Sciences and Public Health Colleges	44	20	44	108
Communication and Fine Arts	37	7	38	82
Wilson School of Hospitality	8	5	4	17
Herff College of Engineering	30	16	17	63
Academic Advising Center	39	13	28	80
College of Arts and Sciences	108	30	75	213
Fogelman Col of Bus and Econ	82	16	38	136
Total	141	59	160	360

Digital Textbooks	No Preference	Physical Textbooks
27%	16%	57%
37%	17%	46%
38%	21%	41%
41%	19%	41%
45%	9%	46%
47%	29%	24%
48%	25%	27%
49%	16%	35%
51%	14%	35%
60%	12%	28%

p<0.05 significant

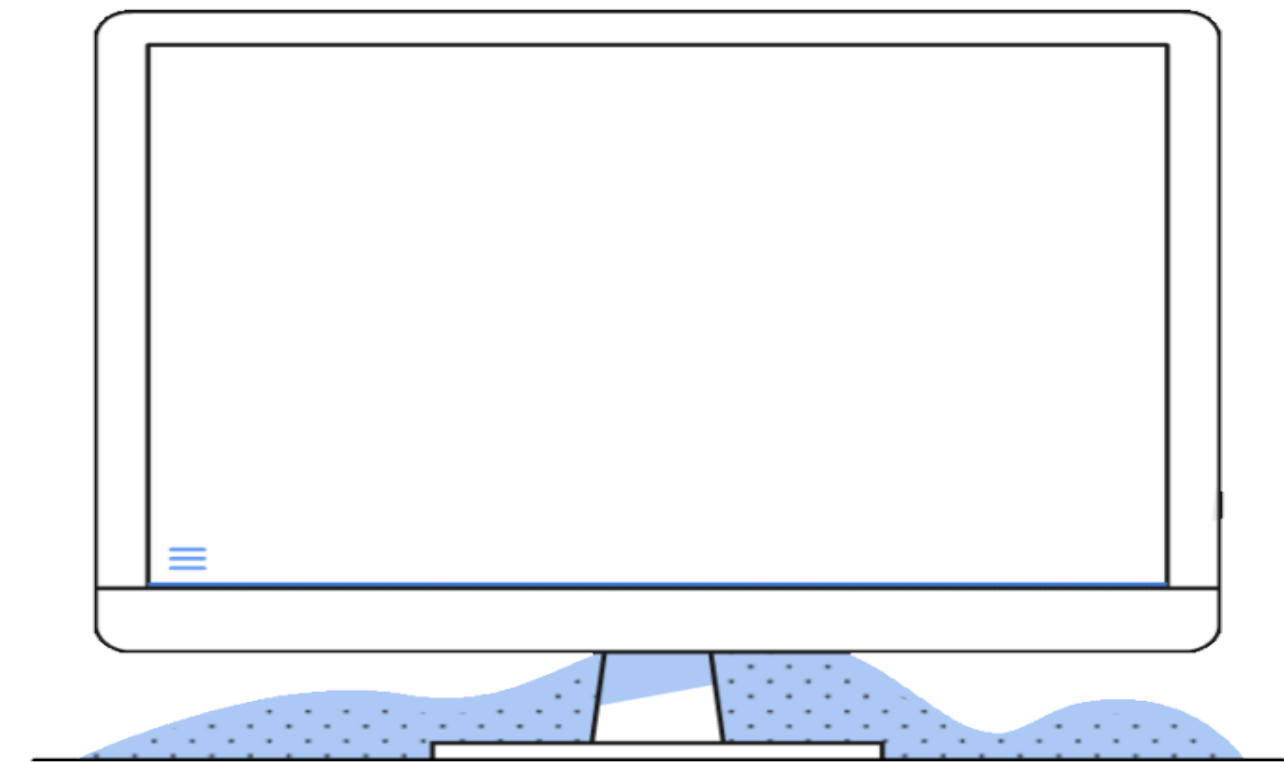
There is a significant difference in preference of textbook format among colleges. Students in the Colleges of Nursing, Communication Sciences & Disorders, and Professional & Liberal Studies prefer physical textbooks, while students in Wilson School of Hospitality, Herff College of Engineering, Academic Counseling Center, Arts & Sciences, and Fogleman College of Business prefer digital.

DIGITAL GUIDE FOR FACULTY



Best Practices:

- Adopting digital with a physical recommended version (or vice versa)
- Pulling the Course Materials tab to Active Navigation early
- If using courseware, making sure your course is set up on publisher side



QUESTIONS WE ARE ASKING



Is my printed title an old edition or out of print?

If so, please let us know soon so that we can provide options (eBook or a professor copy of the newest edition)

Do I want to move forward with digital items? (courseware, eBooks, Packback, CampusKnot, etc)

If so, please reach out to Emily Swisher and your publishing rep so we can begin this process early to ensure instant access to students by the first day of class

Is my printed title a print on demand title?

If so, please submit this adoption before the deadline as we have run into issues with printing and timely delivery from publishing companies.

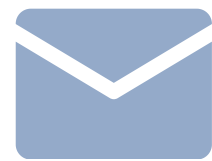
For Spring, the bookstore ordered many of the books during a time when most publishing companies began to close for the holiday season. Order fulfillment started December 11, so many adoptions that have been changed/input after this deadline will cause delays for students next week.

FAQ PAGE



Check out the University of Memphis Tigers
SmartStart FAQ page @ **memphis.edu/smartstart**

CONTACT US



Store Manager

Emily Swisher

eswisher@bncollege.com



uofmbookstore@memphis.edu



THANK YOU & QUESTIONS



DIGITAL ACCESSIBILITY AND SENSUSACCESS

UAC Digital and
Learning
Environment
Subcommittee

Digital and Learning Environment Subcommittee



The Digital and Learning Environment Subcommittee of the University Accessibility Committee:

- seeks to increase accountability
- ensure a campus-wide culture of meeting Universal Design for Learning (UDL) and digital accessibility standards

Our work promotes several goals of the ASCEND Strategic Plan.

The subcommittee membership and resources can be located on our [website](#).



What is Accessibility?

Accessibility means that a person with a disability is afforded the opportunity to acquire the same information, engage in the same interactions, and enjoy the same services as a person without a disability in an equally effective and equally integrated manner with substantially equivalent ease of use.

Achieving accessibility requires knowledge of accessibility standards, being aware of the needs of people with disabilities, and addressing barriers to access for individuals with disabilities.

Legal Context

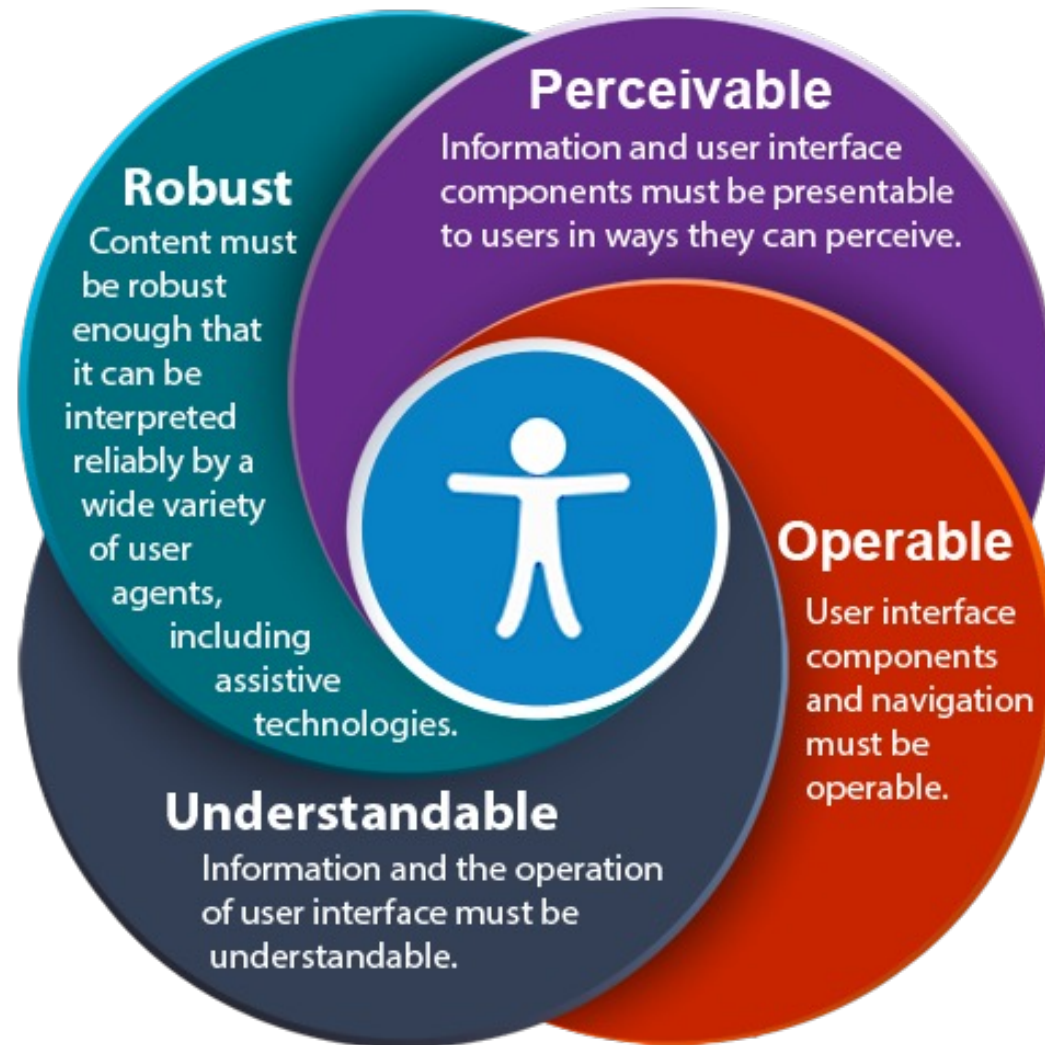


Americans with Disabilities (1990)
and Amendments (2008) Acts

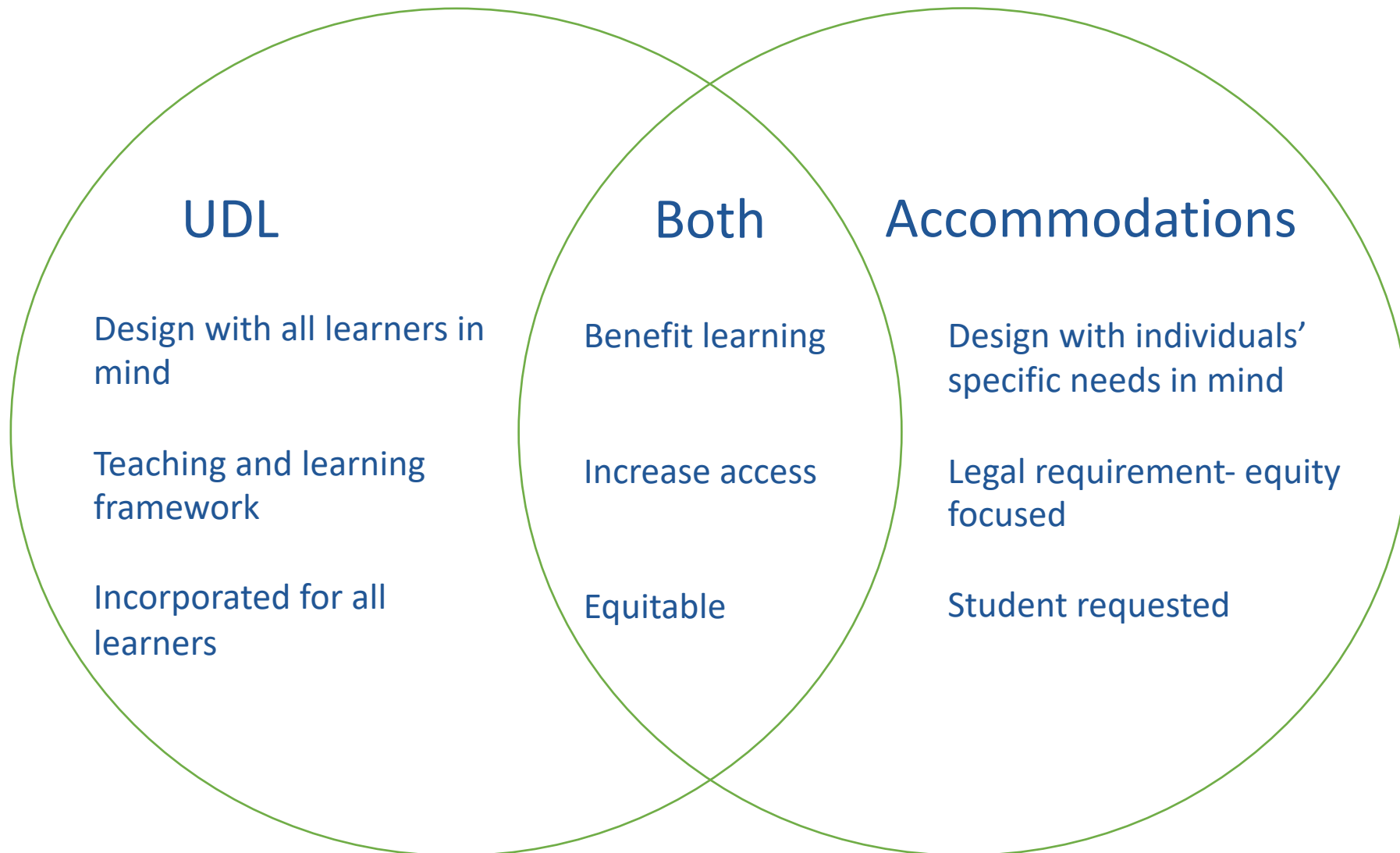
Section 504 of the Rehabilitation
Act (1973)



Digital Accessibility Guidelines



UDL & Accommodations



What is SensusAccess?

- SensusAccess is an online document conversion service that converts text and image-based files into more accessible formats. It can also be used to transform text and image-based files into different outputs including audio, Braille, or e-text formats.
- SensusAccess is available via [webform](#) and in Canvas.
- SensusAccess is available to anyone with a UofM email address.

Supported Formats

- Produce MP3 files out of text documents
- Produce DAISY format out of text documents
- Produce eBook out of text documents
- Produce digital Braille out of text documents
- Convert inaccessible and tricky documents into more accessible documents

SensusAccess Demonstration and Resources



- Webform Video
- Canvas Integration Video
- Digital and Learning Environment Subcommittee Website Overview