



Age-Friendly Inventory and Campus Climate Survey

Manual for Administration, Analysis, and Action

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The Call For More Age-Inclusive Campuses in Higher Education

Historic changes in age demographics are reshaping societies and challenging institutions of higher education to consider how they can respond to aging populations through new approaches to teaching, research, and community engagement (Bowen, et al., 2024; Montepare, 2019; Silverstein et al., 2022). Further, previous research suggests that ageism remains a largely invisible issue in higher education that impacts students, faculty, and staff (Whitbourne & Montepare, 2017). Thus, educators in the aging field are calling attention to why institutions should be looking to serve adults of all ages and operate as an age-diverse, age-inclusive learning and work environment (Morrow-Howell et al., 2020).

Several contemporary initiatives have provided guiding frameworks for how institutions can be more age-inclusive to address the growing needs of our age-diverse world. The Age-Friendly University (AFU) initiative (www.afugn.org/), launched by Dublin City University, Arizona State University, and University of

Strathclyde, offers a set of 10 principles for how institutions can support older students through lifelong learning, intergenerational exchange, aging-focused research and education.

Building on the AFU principles, the Age Inclusivity Domains of Higher Education (AIDHE) model (Silverstein, et al., 2022) extends the framework of age inclusivity by advocating that campus practices, programs, and policies be viewed across seven core institutional domains: Teaching and Learning, Student Affairs, Personnel, Outreach and Engagement, Physical Environment, Research, and Services and Resources. The AIDHE model also takes into consideration the interests and experiences not only of age-diverse students, but also faculty, and staff.

Any initiative to advance age inclusivity warrants an empirical lens to identify assets, gaps, and opportunities on a campus. Using a systems-level, campus-wide approach, the Age-Friendly Inventory and Campus Climate Survey (ICCS) provides a means by which campuses can evaluate both the nature of age-friendly practices and the perceptions of these practices by students, faculty, and staff. As illustrated below, the ICCS measurement approach reflects a social ecological theoretical framework (Moos & Moos, 1983) and assesses the “objective” features of a campus (with a self-assessment Inventory), the “subjective” features of the campus, or how individuals view and experiences these practices (with a Campus Climate Survey), and the “match” between these features that reflects the extent to which specific practices are not only are in place, but are also recognized and valued by campus members.



Self-Assessment Inventory uses reports by department representatives to identify which age-friendly practices are in place.



Match between practices and perceptions quantifies whether campus members are aware of campus efforts to promote age inclusivity.



Campus Climate Survey assesses how students, faculty, and staff, perceive the age-friendliness of the campus.



Getting Started

Instructions For Using the Age-Friendly Inventory and Campus Climate Survey (ICCS) to Assess Campus Age Inclusivity

Watch the Webinar

Get oriented by watching the webinar: How Age-Inclusive is Your Campus? Use the [Age-Friendly Inventory and Campus Climate Survey \(ICCS\)](#) to find out.

Gathering Tools

You will need access to Excel (for the Inventory component), Qualtrics (for the Climate Survey Component), and SPSS (for data analyses). While other electronic survey programs could be used, you would need to recreate the [Climate Survey](#) from the [Qualtrics](#) file provided as part of this manual.

Assembling Your Team and Organizing Logistics

- Choose a data collection coordinator or “Champion” to head your research team. Involve faculty, staff, and administrators from across campus to either be directly involved or who will endorse your efforts and encourage participation. This is also a good opportunity for students to participate in your research.
- Inform your Institutional Review Board. As the administrators who complete the factual information on existing age-friendly practices, do so in their official capacity, data collection is likely to be exempt from review.
- The sections of the Inventory can be shared with the individual department representatives to complete on their own, or it could be handled in a phone, in-person, or virtual interview. In some cases, the person interviewed may not have all the responses and will need to check with others in the department. The Climate Survey, however, may raise some questions that you will need to provide assurances for as to how the data will be stored and used if potentially identifying information is collected.
- The Champion ensures that relevant administrators complete the appropriate section of the Inventory and coordinates the distribution of the Campus Climate Survey link to the campus community. The Excel Sheets could be hidden so that the representatives could only see the sheet relevant to their department.
- It is recommended that the request to complete the Campus Climate Survey and the link be sent through your institution’s leadership office (e.g., the Provost, University President, College Deans) because the aim is to gather data from a campus-wide sample. Include a deadline in the request and arrange for reminder emails to be sent in accordance with your campus policies for survey administration. Promoting the survey in campus newsletters and other outlets can also be useful drawing your sample.

Administering and Scoring the Inventory

Administering the Inventory in Excel

The *Inventory* is organized in an Excel file according to campus departments. All yes-no-don't know items are given in a drop-down menu and are currently scored automatically, so if there is a change in a scored cell, this will affect the coding in SPSS. If such changes are made, please be sure to adjust the Inventory syntax accordingly.

Here is an example of an Inventory sheet in the area of Teaching and Learning:

A	B	C	D	E	F
CTL	Item #	Please answer yes or no to each of the following questions:	Response	Score	Name
	2	Interactive webinars.			
	3	Visits to departments by teaching/learning staff specifically on resources for older adults.			
	4	Website links to relevant online resources.			
	4				
		Which resources are offered by your campus to help encourage faculty to offer courses with relevance to aging as a subject of study?			
	5	Workshops offered on a regular basis (i.e. at least once per year) to expose faculty to aging-related content that could be integrated			
	6	Regular series with invited speakers to discuss aging-related curricular material.			
	7	Incentives in the form of course releases or small stipends to help faculty develop aging-related content for their courses.			
	8	Informal conversation hours among existing faculty to discuss ideas for integrating aging-related content into existing courses.			
	9	Referrals to faculty to content experts on campus who can advise on incorporating age-related content into courses.			
	5				
		What types of professional mentoring program does your office support between early-career and long-term faculty?			
	10	A formal faculty-to-faculty mentoring program with regularly scheduled meetings and events.			
	11	A website faculty "match" service which faculty can register for both as mentors and mentees			
	12	Informal faculty lunches hosted by the office.			
	3				
		Which of the following statements applies to courses offered on your campus? (Please answer yes or no to each)			
	13	Faculty are encouraged to consider diversity with regard to age along with other major areas of diversity.			
	14	Courses within the General Education curriculum address issues of aging.			
	15	Aging is included as part of diversity requirements students fulfill through General Education courses.			
	16	There is a gerontology department or other academic program that focuses specifically on aging.			
	4				
	16	COUNT OF ALL ITEMS			

To show how the drop-down menus work, this sample segment from the above Inventory sheet shows the scores assigned to Yes, No, and Don't Know responses:

Item #	Please answer yes or no to each of the following questions:	Response	Score
	Which resources do you provide to help faculty deliver teaching materials in formats specifically geared toward older learners?		
1	Information sessions held at least once per semester	Yes	1
2	Interactive webinars.	No	0
3	Visits to departments by teaching/learning staff specifically on resources for older adults.	Don't know	0
4	Website links to relevant online resources.	No	0
4			
	Which resources are offered by your campus to help encourage faculty to offer courses with relevance to aging as a subject of study?		
5	Workshops offered on a regular basis (i.e. at least once per year) to expose faculty to aging-related content that could be integrated	No	0
6	Regular series with invited speakers to discuss aging-related curricular material.	No	0
7	Incentives in the form of course releases or small stipends to help faculty develop aging-related content for their courses.	Yes	1
8	Informal conversation hours among existing faculty to discuss ideas for integrating aging-related content into existing courses.	Don't know	0
9	Referrals to faculty to content experts on campus who can advise on incorporating age-related content into courses.	No	0

Scoring the Inventory in SPSS

As noted on the previous page, the Inventory items are each individually scored, and this is reflected in the Inventory syntax file. If any changes were made in the Inventory itself, the syntax will not run properly. Also, any changes in the Inventory could have an impact on the Match score process discussed later, so if this is the case, ensure that it will still be possible to compute a Match score (though such changes should be avoided).

This shows how the SPSS file appears before and after you transfer the Excel data into it for your campus:

Before:

Campus_Name	Campus	CTL_0 1	CTL_0 2	CTL_0 3	CTL_0 4	CTL_0 5	CTL_0 6	CTL_0 7	CTL_0 8	CTL_0 9
	. Your campus

After:

Campus_Name	Campus	CTL_0 1	CTL_0 2	CTL_0 3	CTL_0 4	CTL_0 5	CTL_0 6	CTL_0 7	CTL_0 8	CTL_0 9
	Your campus	1	0	0	0	0	0	1	0	0

Administering and Scoring the Climate Survey

Administering the Climate Survey in Qualtrics

The Climate Survey is administered via Qualtrics. After importing the .QSF file into Qualtrics, you will want to revise the first question ("Consent") to include your own institution-approved consent language, to which respondents must agree before proceeding with the survey.

The item numbers are set so that they correspond to the SPSS syntax used for analyzing the scale. Any changes to the survey should be noted, as this will change the scoring of the items. Similarly, any changes to existing item choices will alter the scoring. Therefore, you will need to keep your own separate file of changes made as this will affect the scoring.

Items can be added for separate analysis according to the interests and needs of a specific campus. The scoring of these items can then be added to the syntax files. Open-ended questions can be added without necessitating a change in scoring. Additions should be made at the end of sections so as not to disturb the syntax.

Here is an example of the syntax in the area of Teaching:

```
/*Compute Teaching sum scale*/
COMPUTE Teaching= SUM(TEA_AcSupport_Tot + TEA_Classroom_Tot + TEA_Curriculum_Tot + TEA_Service_Tot+ TEA_Life_Tot).
EXECUTE.

VARIABLE LABELS Teaching 'Teaching and learning sum'.
EXECUTE.

FORMATS Teaching (F2.0).
/*Compute Inventory sum*/
COMPUTE Inventory_sum= SUM (OutEng,Personnel, PhysEnv, Research,Services,StudentAffairs,Teaching).
EXECUTE.
FORMATS Inventory_sum (F2.0).
EXECUTE.

VARIABLE LABELS
Inventory_sum 'Inventory total'.
EXECUTE.
```


A Closer Look at the Campus Climate Survey Scales

Campus Age-Friendliness (AF) Scale (1-5, agree-disagree)

Variable Name	Item
AF_1	The campus is easy to navigate for those with physical mobility limitations
AF_2	The campus is easy to navigate for those with cognitive mobility limitations
AF_3	Campus signage makes it easy to navigate campus
AF_4	Older people from community feel welcome
AF_5	Students seem to value older faculty as mentors
AF_6	Students seem to value older faculty as instructors
AF_7	Students seem to value older staff as advisors seem to value older staff as advisors
AF_8	Older faculty members and staff seem to receive respect from students
AF_9	Those with caregiving issues know where to turn for help
AF_10	Overall, the campus is age-friendly

Personal Beliefs (PB) Scale (1-5, agree-disagree)

Variable Name	Item
PB_1	I would sign up to learn more about aging.
PB_2	I think that the topic of aging is relevant to my disciplinary expertise.
PB_3	I think having more non-traditional-age students (age 25+) on campus would be beneficial.
PB_4	I think having more older faculty on campus would be beneficial.
PB_5	I think having more older staff on campus would be beneficial.
PB_6	I think having more intergenerational interactions on campus would be beneficial.
PB_7	I feel that ageism (or bias against older people) is a serious problem on my campus.
PB_8	I feel that ageism (or bias against older people) is a serious problem in society.

Scoring the Climate Survey in SPSS

After exporting the survey data from Qualtrics into SPSS, it is necessary to run the Climate Survey syntax from SPSS. Just open the file and click “Run”. This syntax will result in labeling all variables as well as their values. Because SPSS differentiates various punctuation marks in ways that might not seem obvious, it is important to ensure that all such marks are correctly used. Any errors will appear in red in the syntax file, so if these are found, the corrections should be made. An error could be something as minor as missing a period or a comma. The labeling and notation should make it obvious what is being done within each section of the syntax (e.g., labeling, taking into account missing data, other miscellaneous recoding), but if not clear, please note this as a question to ask the authors. Umass.afustudy@umb.edu

Data Cleaning

The Climate Survey also comes with syntax to use to eliminate careless or inattentive respondents. The criteria for this elimination are preset but can be altered if they appear too rigorous or too lax by changing the exclusion instructions (e.g., variance < .21). In our research (Whitbourne, et al., 2024), “careless or inattentive respondents” were respondents who had an excessive amount of missing data, operationalized as not completing 5 to 25% of items depending on scale length; or “straightlining” in which respondents answer all questions with the same or virtually the same response. Save the cleaned file separately from the original so that any alterations can be made back on the original file.



Producing Matching Scores

Combining the Climate Survey and Inventory SPSS Files

To give all respondents a score on the Inventory that can be used to proceed to a Match score, it will be necessary to merge with the “Add Variables” instruction. Everyone from the same campus will have the same Inventory scores as a result, but they will eventually differ in the Match scoring based on their Climate Survey responses.

Computing Match Scores

The Match Score is a measure of how well the existence or non-existence of age-friendly practices (as indicated by the Inventory) is perceived by students, faculty, and staff who completed the Climate Survey.

This is the trickiest part of the process, as the Match syntax file is written specifically for the exact combination of Climate and Inventory variables originally written into the instruments. The syntax file comes with instructions within it to show what is being scored. The basic framework is that a “CP” (Climate Campus Practice) item becomes compared to its corresponding Inventory item. However, because students, faculty, and staff responded to slightly different CP items in some cases, for example, students were not asked questions related to age-friendly personnel practices, it is important that the scoring is based on campus role.

The logic of the Match file is as follows:

Score individual Matches from 1 to 6 reflecting this matrix:

- 1 = Yes on Inventory and Yes on Survey
- 2 = No on Inventory and No on Survey
- 3 = Yes on Inventory and No on Survey
- 4 = No on Inventory and Yes on Survey
- 5 = Yes on Inventory and Don't Know on Survey
- 6 = No on Inventory and Don't Know on Survey

Next, the 1-6 scale is converted to Match counted as 1 or 2, and Non-match as >2. These scores have the form "Match_1" and ends at "Match_67." Then, the numbered match scores are labeled with their content (e.g., "Tickets for retirees at reduced prices").

I N V E N T O R Y		
Climate Survey response	Practice Present ("Yes")	Practice Not Present ("No")
"Yes"	Match (1)	No match (4)
"No"	No match (3)	Match (2)
"Don't know"	No match (5)	No match (6)

Because each group answers slightly different questions, average Match scores by domain are calculated separately for each group, as can be seen with the "DO IF" statements at the end. These instruct SPSS to provide averages based on the number of items each group had presented to them in the survey.

```
DO IF (Role_5=1).
COMPUTE Match_Mean= Match_Fac.
END IF.
EXECUTE.

DO IF (Role_5=2).
COMPUTE Match_Mean=Match_Staff.
END IF.
EXECUTE.

DO IF (Role_5=3).
COMPUTE Match_Mean=Match_Stud.
END IF.
EXECUTE.
```

Recommendations for Using the Data

How to Use the Data

There are many ways that all or some of the data can be used for information purposes, strategic planning, program development, and more. There are also many ways to present and discuss the data.

- Generate a report of findings to inform your work within or across departments and share with colleagues, campus leaders, and others interested in advancing age-inclusivity on your campus.
- Create infographics with demographic data (e.g., “How old is our campus”) as well as key findings across and/or within domains to distribute to administrators, department representatives (who completed the Inventory), faculty, and interested others.
- Create “At-a-Glance” summaries to describe what you learned about age-friendly practices within each domain (Teaching and Learning, Student Affairs, Personnel, Outreach and Engagement, Physical Environment, Research, Services and Resources).
- Prepare a presentation of study highlights for your faculty assembly, schools, departments, and/or other program units.

- Organize a discussion group. In advance of your meeting, provide each person with information about the findings and questions such as:
 - What key findings stood out the most to you in the report?
 - What did you learn about the perceptions of age-friendliness held by faculty, staff, and students?
 - What strengths or assets did the report indicate about our campus’s age-friendliness?
 - What gaps or shortfalls did the report reveal about our campus’s age-friendliness?
 - Were there any findings that you found surprising? Why were they surprising?
 - What findings would you like to know more about and examine in more detail? How might you go about doing this?
 - What did you think of the recommendations that were suggested?
 - Did any other age-friendly opportunities come to mind as you read the report?
 - Are there other aspects of age-friendliness on our campus that were not captured in the present report? How might you go about assessing them?
 - What is one specific way we can use these findings to advance age inclusivity on our campus?

Moving Forward

Among the many recommendations you might explore, consider these options suggested by other campuses who have used the ICCS.

1

Organize an age-inclusivity task force.

Your institution's administration might consider assembling a multigenerational task force of members from a variety of campus units to review these ICCS results and collectively devise a strategic plan for maintaining and increasing awareness of its current age-friendly practices. Additionally, toward achieving new benchmarks of an age-inclusive campus, the task force could identify priorities of additional age-friendly practices and make recommendations to the appropriate campus unit(s) to sponsor and implement those practices. Because the negative effects of ageism are not experienced equally across gender, race, ability, and socioeconomic status, it is also strongly recommended that the task force explore age inclusivity in concert with other diversity, equity, and inclusion (DEI) efforts.

2

If you are an Age-Friendly University (AFU) partner, increase awareness of your institution's (AFU) status.

Many AFU campuses have found that the campus community was not aware of the AFU network, nor the institution's membership in that network. We recommend featuring the AFU logo on your institution's website and in other promotional and recruitment materials. A webpage describing the AFU initiative with links to campus units that can provide further information for age-diverse learners would also be of value.

3

Increase scope and awareness of age-friendly practices already in place.

Although your campus may be engaged in many age-friendly practices, comparison of the Inventory and Campus Climate Survey results might reveal that faculty, staff, and students often are unaware of those practices. Explore how these practices can be promoted better through information sessions and related notices.

4

Consider developing additional age-friendly campus practices.

Your assessment might suggest opportunities to develop and pursue additional age-friendly practices that have not yet been implemented on your campus. Explore these opportunities by considering the extent to which each is a priority, will be impactful, is feasible, and likely to be implemented.

5 Increase efforts to address lack of age-friendliness perceived by staff members.

Your findings may reveal that, compared with faculty and students, staff are less likely to perceive the campus as age-friendly. To increase the age-inclusive experience of staff members, departments might consider actively training personnel committees to recognize “soft ageism” in hiring and promotion practices.

Additionally, all campus units might consider exploring age diversity along with other forms of diversity, equity, and inclusion (DEI) efforts. To this end, it also would be useful to review what images and language are being used on the institution’s website to be sure that age diversity is also represented. Diversity and related statements should also be checked to be sure that age is included in the descriptions.

6 Support faculty development for designing courses and materials to support the needs of age-diverse learners.

While campuses that support age-inclusivity offer explicit instruction on issues related to aging throughout the curriculum, they also design all courses to be inclusive of age-diverse student populations. Because many non-traditional-aged students may feel excluded in classroom contexts, campus administrators might consider further identifying and supporting professional development opportunities to assist faculty with adapting pedagogical practices and course material designs to accommodate age-diverse learners.

7 Take steps to address ageism on your campus.

Consider bringing programs to campus such as the [Gerontological Society of America’s \(GSA\) Ageism First Aid](#) and [AARPs Disrupt Aging Classroom](#).

8 Re-assess in five years.

The ICCS assessment is intended as a baseline rather than a finish line. After taking steps toward upholding and increasing age-friendly practices, it is recommended that a campus plans to re-assess in five years – using some or all of the ICCS components, or other empirical strategies directed toward specific practices.



Additional Resources

Tools and Initiatives

Tools for Advancing Age Inclusivity in Higher Education

The Gerontological Society of America (GSA) and its Academy for Gerontology in Higher Education (AGHE) designed this toolkit, with support from AARP, to provide resources to advance age inclusivity in institutions of higher education. The suite of tools can be used by faculty, students, administrators, and other campus leaders.

What's Hot Higher Education and Aging: The Age-Friendly Movement - Building a Case of Age-Inclusivity (2019)

An overview of the Age-Friendly University (AFU) initiative with examples of how different institutions have been advancing age inclusivity on their campuses.

For more information about the AFU Initiative and members of the AFU global network, visit: [*Age-Friendly University Global Network*](#)

Read about age-inclusivity issues in higher education and how campuses are working to be more age-inclusive in the newsletter [*Age Inclusivity in Higher Education*](#), published by the Gerontological Society of America (GSA) and its Academy for Gerontology in Higher Education (AGHE).

Publications

Bowen, L. M., Silverstein, N., Whitbourne, S.K., Montepare, J. M., Lin, Y., & Xu, S. (2024). Evidence-based strategies for creating age-inclusive campuses. *Journal of Diversity in Higher Education*. Pending publication.

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