

Form 201BC: Assessment Report Form for Instructional Programs

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Part I - GEOG 1000: Societies and Environments

Outcomes

General Education Outcome #5: apply the basic methods, questions, and vocabularies of the social sciences.

While the broad discipline of geography comprises both social and natural sciences, at Chicago State University geography is classified as a social science. Map skills and the ability to analyze and interpret spatial information are among the basic methods of this spatial, social science. General Education Outcome #5 fits with some specific outcomes of the introductory geography course, especially to “describe locations on the earth’s surface in absolute and relative terms”, and to “demonstrate basic map reading and interpretation skills.” The assessment of the general education outcomes coincides with the assessment of the specific outcomes of the course within the discipline of Geography.

General Education Outcome #8: Demonstrate an understanding of the interaction among human beings, human cultures, and the natural environments within which they live. This general education outcome also addresses some of the specific outcomes of the course, namely to “describe physical and human characteristics of places” and to “analyze human-environment interactions.” The transformation of the earth’s surface by human activity and the development of diverse cultural, social and economic strategies to deal with variegated environments form the basis of much geographic study. This general education outcome is well-matched with the geographic theme.

Method of Assessment

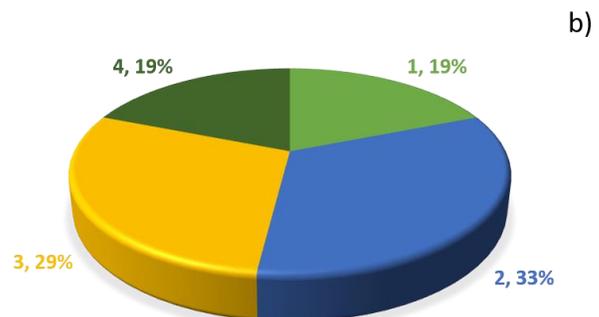
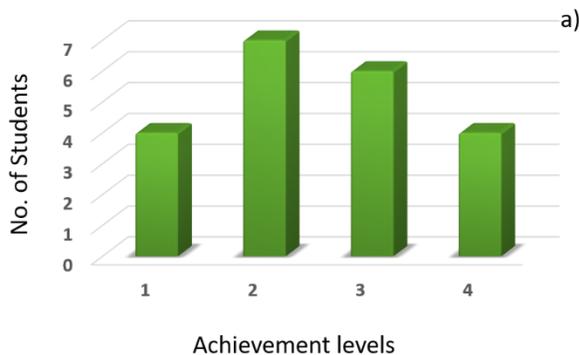
The assessment instrument that addresses these outcomes is a comprehensive map skills and map interpretation assignment, divided into two parts and completed by the students. Part I assesses students basic skill in map reading such as determining geographic coordinates of places, distances using geographic coordinates and elevation and relief using contours; converting map scale from representative fraction to verbal scale and the use of a graphic scale; identifying places with primary latitudinal and longitudinal lines and natural and man-made features, including built-up areas, land use and transportation using standard symbolism used by USGS. Part II assesses students’ ability to interpret thematic maps. Accordingly students would write a paragraphs which explain the theme and purpose of a series of maps, including a description of the type of symbolism used; interpret the distribution of demographic, climatic, environmental and human condition patterns and suggest significant findings of the map, interpreted from the spatial information provided. The assessment was based on the following grading rubric.

SCORES	ACHIEVEMENT LEVEL
4	The student demonstrates a clear understanding of the maps, answers all questions correctly using his or her own words, and uses spatial information effectively in the answer.
3	The student satisfies all criteria for a “4” answer, although there may be minor errors in the use of spatial information.
2	The student’s answers demonstrate a limited understanding of the maps and/or the information portrayed. The answers are generalized and with partial reference to spatial information. Or, the student has answered only parts of the questions.
1	There are substantial parts missing in the student’s answers to the questions. The answers demonstrate a lack of basic understanding of the material.

Ranges: 45-50 = 4 38-44 = 3 31-37 = 2 <31 = 1

Assessment Findings/Interpretations/Conclusion

Part I



Part II

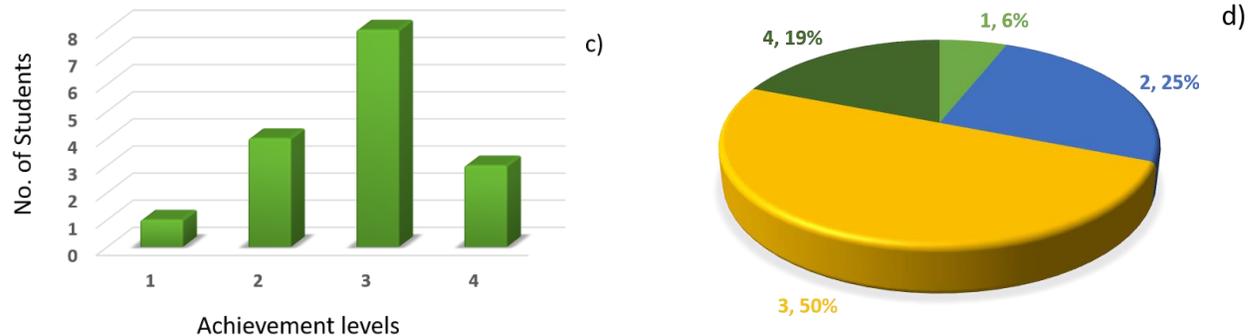


Figure 1: Students assessment scores a) and b) shows student population in the categories of assessment levels for part I and part II assessment tools, respectively; and c) and d) shows percent students distribution in each categories of part I and part II assessments, respectively.

A total of 21 students participated in the assessment tools targeting students' understanding of basic map skills, while 16 students participated in reading and interpretation of thematic maps. Students population participated in maps interpretation is 23% less than those participated in the basic map test. According to the assessment data (Figure 1a,b,c&d), the median achievement for the basic map skills is score level 2 (i.e., B) (fig. 1a) whereas for interpretation of thematic maps, it is level 3 (i.e., B) (Fig. 2c). Sixty nine percent of the students attained an achievement level of 3 and above in thematic maps interpretation; while only 48% of the students achieved the same level for basic map skills (Fig 1b&d). Few students obtained the achievement level 1 (i.e., D) in thematic map reading than in basic map skill test; indicating again the strength of students' performance in thematic map interpretations vis-a-vis basic map skill test. The lower scores of students in basic map skills is, perhaps, a demonstration of students' poor know-how in map reading at the beginning of the semester and progresses there-off, as evidenced by their scores of subsequent assessment, which conducted at later in the semester.

Part I: GEOG 1100: Globalization and Diversity

Outcomes

General Education Outcome #8: Demonstrate an understanding of the interaction among human beings, human cultures, and the natural environments within which they live. This general education outcome also addresses some of the specific outcomes of the course, namely to "describe physical and human characteristics of places" and to "analyze human-environment interactions." The transformation of the earth's surface by human activity and the development of diverse cultural, social and economic strategies to deal with variegated environments form the basis of much geographic study. Also pertaining to the interaction of human beings and human cultures, the course reviews processes of colonialism and imperialism, as well as other geopolitical relationships and their impacts in cultural production and development possibilities.

General Education Outcome #17: Demonstrate knowledge of philosophical, religious, ethical, political and scientific ideas of diverse cultures. To achieve learning outcome #17, the course visits a set of themes within the major regions of the world. These themes include environment, geopolitics, culture, population and social/economic development. Covering these themes allows the instructor to review the major points of identity, conflict and cohesion, be they philosophical, religious, political or economic ideas and institutions have been shared between regions, and how these exchanges have often been accompanied by conflict.

Method of Assessment

A pre-/post-test is administered to assess student knowledge of a set of key concept and facts that the course covers, as per general education outcomes #8 and #17. 11 multiple choices and 10 short answers and definitions was used for assessing the pre/post. Each multiple choice question was made to have 1 point, while definition will have 2 points if it is fully answered; 1 if it is partially answered and 0 if it is not answered or incorrectly answered. Students who answered all the question will achieve a total of 31 points and to designate their achievement level on a score of 1 – 4, the following schematics is adopted:

- 4 (A) = 27 - 31 points
- 3 (B) = 24 – 26 points
- 2 (C) = 21 – 23 points
- 1 (D) = fewer than 21 points.

Each question from the pre-/post-test addresses a representative and important topic and/or concept that is key to the terrain of the learning outcomes. The test is administered at the start of the course and then at the end, in order to assess the degree to which the students have successfully achieved the learning outcomes.

Two further assessments were included. These are Population Movements and the Social, Economic and Cultural Impacts and thematic map reading and interpretation assessment. The former assessment evaluates students' ability to explain the concepts and metrics used to document changes in global population and settlement patterns, interaction between globalization and the world's cultural geographies, global geopolitics and identify the concepts and data important to documenting changes in the economic and social development of more and less developed countries. The latter assessment evaluates students' ability to read thematic map bases on themes on topics covered in class (i.e. economic development; population and social development), where students were asked a series of short-answer questions about the maps. The assessment was based on the following grading rubric.

SCORES	ACHIEVEMENT LEVEL
4	The student demonstrates a clear understanding of the maps, answers all questions correctly using his or her own words, and uses spatial information effectively in the answer.
3	The student satisfies all criteria for a "4" answer, although there may be minor errors in the use of spatial information.
2	The student's answers demonstrate a limited understanding of the maps and/or the information portrayed. The answers are generalized and with partial reference to spatial information. Or, the student has answered only parts of the questions.
1	There are substantial parts missing in the student's answers to the questions. The answers demonstrate a lack of basic understanding of the material.

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Assessment Findings/Interpretations/Conclusion

Pretest and post-test:

The results include one set of data based on solely on multiple choice questions.

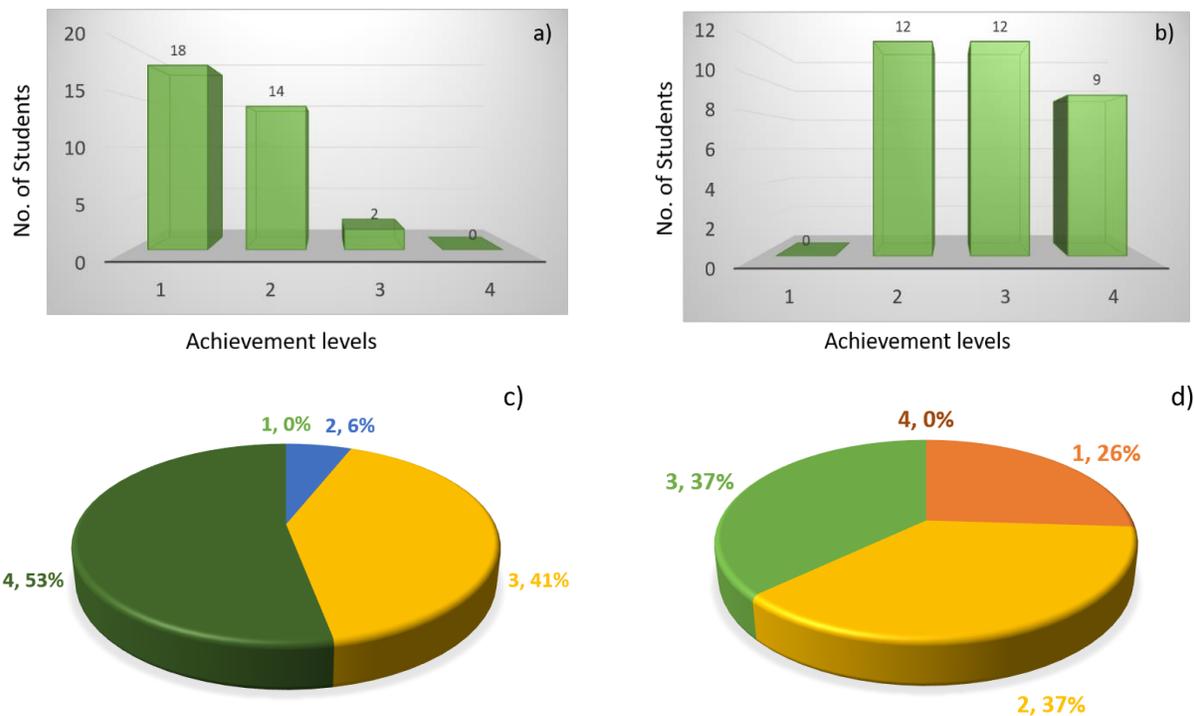


Figure 2: Students assessment scores a) and b) shows student population in the categories of assessment levels for pre and post-tests, respectively; and c) and d) shows percent students distribution in each categories of pre-and post-tests respectively.

Thirty-four students took part in pretest assessment, while only 30 students participated in the post-test assessment. This means 72% and 63% of the total student enrolled in the course have participated in the pre and post-test assessments, respectively. There were 4 less students (12.5%) participated in post-test assessment as compared with pretest. According to the assessment data (Figure 2a,b,c&d), the median achievement level of the student in the pretest is level 1, which implies D, and none student obtained achievement level 4 (i.e., A) (Fig 2a). The majority of the students were either at level 1 or 2. On the other hand, the median achievement level of students in the post-test assessment is level 3 (i.e., B), which constitute 37% of the student population. While no student was found in achievement level 1 during post-test assessment, 9 students, i.e., 26% of the students are in the level 4 (i.e., A). Sixty-three students obtained the assessment level of 3 and above.

The data indicates progresses in students learning during the semester. For example, during the pre-test assessment 94% of the students were at the assessment level of 2 and lower; whereas during the post-test assessment only 37% of the students fall in this category (Fig 2b&c). This is 61% reduction in the number of students obtained C grade and below in the assessment. Similarly, during the pre-test assessment only 6% of the students obtained the assessment level of B and above; while 64% of the students obtained during the post-assessment(Fig 2b&c). The number of students who obtained B and above grades increased by almost 10 folds indicating progresses in the students learning as evidence by post-test scores, which is the test students at the end of the semester.

Population Movements and the Social, Economic and Cultural Impacts and thematic map reading and interpretation

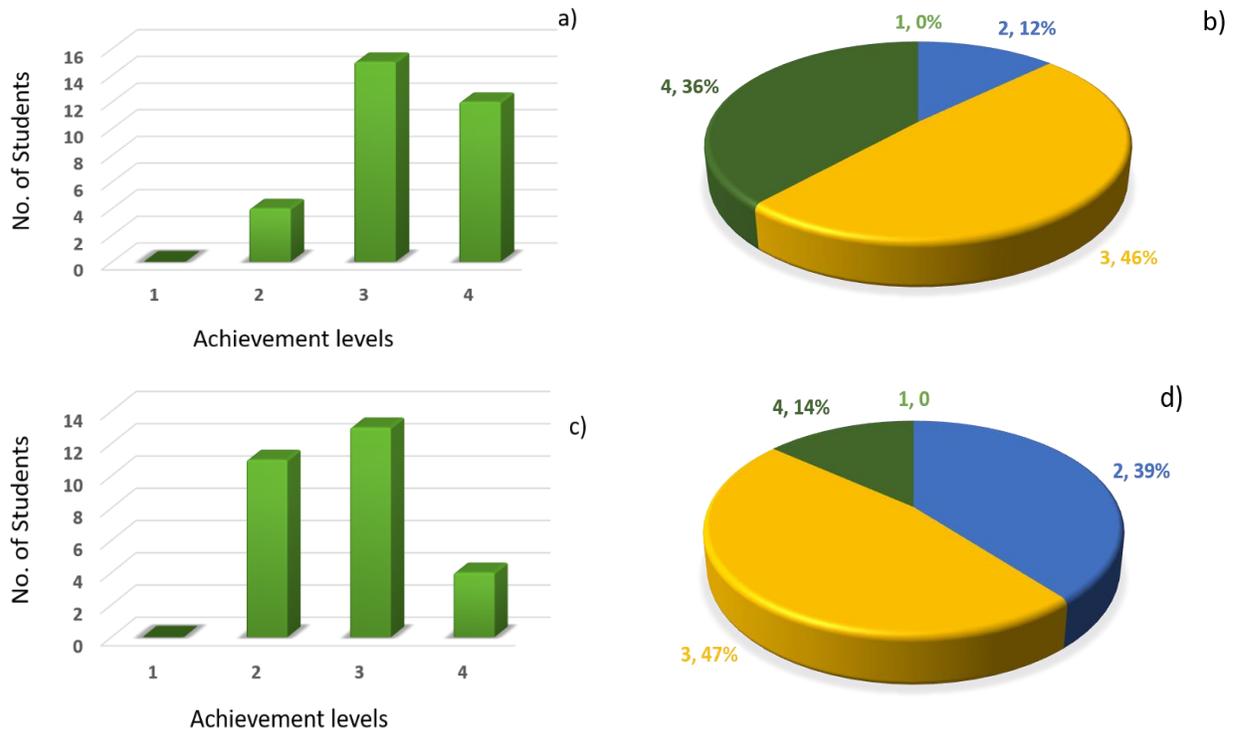


Figure 2: Students scores of Population Movements and the Social, Economic and Cultural Impacts assessment tools (a) and percent students distribution (b) whereas (c) is Students scores of in thematic map reading and interpretation assessment and (d) is its corresponding percent students distribution.

Thirty-one students participated in Population Movements and the Social, Economic and Cultural Impacts assessment, while 28 students involved in thematic map reading and interpretation. This is 66% and 60% of the total students enrolled for the course; respectively. According to the assessment data, the median achievement level for both assessment tools is level 3 (i.e., B). However, while only 12% of the students scored the assessment level below median in the Population Movements and the Social, Economic and Cultural Impacts assessment; 39% of the students scored below the median for in thematic map reading and interpretation (Figure 3a,b,c,&d). Similarly, while only 14% of the students obtained the assessment level above the median (i.e., A) in thematic map reading and interpretation (Figure 2d); 36% of the students scored the assessment level score above the median for the assessment tool of Population Movements and the Social,

Economic and Cultural Impacts (i.e., A) (Figure 2a). None student scored the achievement level 1 (i.e., D).

Although, the absence of a student at assessment level 1 (Figure 2a&c), for both assessment tools, is an encouraging achievement; the data also indicates the students' strength in understanding of issues of population movement, social, economic and cultural impacts better than thematic map reading and interpretations. For instance, more than twice as many students scored the assessment level 4 for Population Movements and the Social, Economic and Cultural Impacts assessment vis-à-vis the thematic map reading and interpretation. Additionally, the number of students that scored the achievement level 2 (i.e., C) is 69% lower for assessment tool of Population Movements and the Social, Economic and Cultural Impacts vis-à-vis the thematic map reading and interpretation, again indicating the need for enhanced students engagement and learning of thematic map reading and interpretation in this course.

Decision-making Using Findings

The Geography Program will continue to embed map skills and cartographic practice into all areas of instruction. Students require regular consistent practice to develop their basic map reading and interpretation skills. Instructors must consciously and regularly use maps in all topical areas of instruction and repeatedly require students to analyze and interpret maps. Instructors will continue to introduce the major themes from the courses early on, and return to them regularly, reinforcing concepts and ideas that are attached to the information. Major geographic ideas will be incorporated more smoothly into discussion of regions where that principal is most appropriate, to add additional context for students.

The assessment results will be shared with all GEOG 1000 and GEOG 1100 instructors and their suggestions for improvement, as well as comments on the results, will be solicited. We will consider what can be done to ensure that students reach the highest achievement levels and all general education outcomes are met. This has administered written assignments as part of the general education assessment for GEOG 1100 where previously a pre-/ post-test was only administered, and we will continue to use these instruments and amend them if necessary.

Demonstrating Improved Learning

For each assessment (written assignment and pre-/post-test), student scores in Fall 2016 were comparable or better (especially in the results of post-test assessment) than those in previous years. It could be an indication that the instructional practices appear to be helping to reinforce knowledge and skills.

Publicizing Student Learning

The assessment report is published to LiveText as part of the overall CSU Assessment initiative. Results are shared with faculty and adjunct instructors and are posted to the program website. Assessment meetings are held in the Geography program each semester and minutes are circulated.

Accomplishments and Challenges

A standardized grading rubric was created to use in map skills and thematic map interpretation assessment assignments in Fall 2012. This continued to be somewhat helpful for providing for more uniformity in grading and easier reporting of assessment measures for Fall 2016.

The main challenge is inconsistencies arise from the differences associated with online vs face-to-face instruction. It could be possible that the face-to-face students, who administrated the tests in the class have lower luxury of time as well as flexibility seeking other references to answer the questions. Online learning students often do these tests in a relaxed time and place of choosing. On the other hands, online learning students may not enjoy the same level of instructors' engagement and monitoring of their learning progresses.

Minutes of Department/Program Meeting

To be submitted at a later date.