Overview
This document provides brief information on the John N. Gardner Institute’s Gateways to Completion (G2C®) process. It includes sections on:

- A Brief Description of the G2C Process
- The G2C Definition of Gateway Courses
- The G2C Measurable Goals
- Evidence of Strength of the Various Components of the G2C Process
- Leading Institutional-Level Indicators of Success / Outcomes to Date
- Information on G2C Participating Institutions to Date
- A List of G2C National Advisory Committee Members

A Brief Description of the G2C Process
Gateways to Completion (G2C) is a comprehensive process that mobilizes institutions – particularly their faculty and instructors – to substantially improve teaching, learning, and outcomes in gateway courses. The student success experts at the John N. Gardner Institute for Excellence in Undergraduate Education developed G2C with the added insight of a distinguished National Advisory Committee.

Specifically, the G2C process is designed to help institutions, and/or the systems/districts of which they are a part, collect and analyze data (using historic course performance analytics) to craft and implement a plan for enhancing student learning and success in high-enrollment courses that have historically resulted in high rates of Ds, Fs, Withdrawals, and Incompletes (high DFWI rates). Lack of success in these courses is correlated with altered higher education goals including, for many students, the failure to complete a degree or certificate. These unrealized aspirations can limit social mobility and create increased debt – debt which students may never be able to repay. This is especially true for students from low-income, first-generation, and underrepresented minority backgrounds.

The flexible G2C process and tools take into account various forms of instruction – face-to-face, blended, on-line – and are applicable to all institutional types – two-year, four-year, public, private, etc. G2C also provides a structured process and tools that help faculty and others use predictive analytics to intervene with at-risk students currently enrolled in their courses – the Evidence in Pedagogy and Curriculum (EPC) module. In addition, G2C includes a Teaching and Learning Academy (TLA) – a blended (face-to-face and online) community of practice, with virtual and in-person components, that helps faculty learn about and subsequently apply evidence-based pedagogies in their course redesign efforts.
Throughout the process, the Gardner Institute provides:

- Support from a senior Institute advisor who provides feedback on and guidance for all the work produced by the course-level committees
- General support from other staff on elements such as the Student Learning Gains (SLG) survey and the G2C technology platform
- Access and enhancements to the G2C on-line technology platform and tools including an in-depth set of disaggregated longitudinal course analytics (the Gateway Course Analytics Inventory – or GCAI)
- Process and practice webinars and meetings such as the G2C Community of Practice annual meetings and the Annual Gateway Course Experience Conference
- A predictive analytics process collaborative (the Evidence in Pedagogy and Curriculum module) that helps faculty/instructors apply and use analytics in their redesigned courses
- A face-to-face and virtual set of professional development experiences that help faculty learn about and subsequently employ evidence-based, active learning pedagogies in their course redesigns (the Teaching & Learning Academy)
- A broad Community of Practice with involvement from hundreds of faculty and staff from institutions involved in the G2C effort
- Research opportunities and opportunities for faculty to disseminate findings

A diagram outlining the actions and components associated with each of the three years of the G2C process follows.
The G2C Definition of Gateway Courses
The Gardner Institute believes that a pragmatic approach is best for institutions working to improve student learning and performance in high-enrollment, high-risk courses. Pragmatic approaches place context at the forefront. For this reason, the Gateways to Completion (G2C) process does not use a rigid definition of gateway courses that ignores context. Rather, for purposes of the G2C effort, the Gardner Institute defines gateway courses as courses that are:

1) **Foundational** in nature – foundational courses may be non-credit bearing developmental education courses and/or college credit-bearing courses;
2) **High-risk** – as measured by the rates at which D, F, W (for withdrawals) and I (for incomplete) grades are earned across sections of the course(s) considered for the G2C work; and,
3) **High-Enrollment** – as measured by the number of students enrolled across sections of the course(s) considered for the G2C work.

The G2C Measurable Goals
Ten measurable goals guide the work of institutions that take part in the G2C process. Through their work in the G2C process, institutions will strive to:

1) Improve student learning as measured by the responses to the Student Assessment of Learning Gains survey results (or results from a comparable instrument) as well as other germane content and learning outcome measures for students who are enrolled in the courses that are considered in the G2C process
2) Improve teaching, specifically through the continuously improved and scaled use of evidence-based active learning pedagogies acquired and refined through involvement in the Teaching and Learning Academy, as measured by result from the Student Assessment of Learning Gains survey as well as other institutionally or initiative-appropriate tools for students enrolled in courses that are considered in the G2C process
3) Increase the use of “early and often” feedback in gateway courses, specifically through the use of principles and (where appropriate) tools provided through the Analytics in Pedagogy and Curriculum initiative, as demonstrated by more frequent and timely provision of feedback and guidance to and, in correlation therewith, better outcomes for students enrolled in courses that are considered in the G2C process
4) Increase student success in high-enrollment courses as measured by the grades of students who are enrolled in the courses considered in the G2C process
5) Increase student degree / certificate progress as measured by retention rates for students who are enrolled in the courses that are considered in the G2C process
6) Increase student success as measured by graduation / program completion rates for students who are enrolled in the courses that are considered in the G2C process
7) Foster an enhanced institutional understanding about in-class and out-of-class gateway course teaching, support, policies, assessment/evaluation practices, embedded supports, and other efforts as measured by evaluation outcomes that connect these practices with improved learning and success in the courses that are considered in the G2C process

8) Engage in and promote a culture of continuous improvement as measured by the following: a) intentional linkages between the G2C process and institutional reaffirmation of accreditation quality improvement projects; b) intentional linkages between the G2C process and institutional strategic planning processes; c) general education reform; and d) other comparable efforts

9) Work with the Gardner Institute to shape and reflect the body of scholarship on gateway course success as measured by publications, presentations, and other germane scholarly output and

10) Provide feedback to the Gardner Institute to enable continuous improvement of the Gateways to Completion process

Evidence of Strength of the Various Components of the G2C Process
The three major components of the G2C process include: 1) Analytics facilitated via the Gateway Course Success Analytics Inventory, a Predictive Analytics student risk prediction model, and the Evidence in Pedagogy and Curriculum module; 2) Active Learning / Engaging Pedagogies facilitated through a Teaching and Learning Academy; and 3) a Self-Study process that helps faculty apply evidence to action. A table outlining the various forms of evidence for the strength of these components follows.
<table>
<thead>
<tr>
<th>G2C Component</th>
<th>Source(s) for Evidence of Strength</th>
<th>Brief Summary of Evidence</th>
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<tbody>
<tr>
<td>Active Learning (via the G2C Teaching &amp; Learning Academy)</td>
<td>Freeman S., Eddy S.L., McDonough M., Smith M.K., Okoroafor N., Jordt H. &amp; Wenderoth M.P. (2014). “Active learning increases student performance in science, engineering, and mathematics. Proceedings of the National Academy of Science (PNAS), 111: 8410-8415.</td>
<td>This 2014 study is the largest and most comprehensive meta-analysis of undergraduate STEM education published to date. It examined the frequency of use and types of active-learning methodologies described in 225 published analyses of active learning. The empirical results support active learning as the preferred, validated teaching practice in traditional classrooms. The use of active learning in undergraduate courses would raise average grades by a half a letter and decrease failure rates by 55% over the rates observed under the traditional lecture format. The authors use the statistical comparisons to compute the potential impacts on the lives of the students taking STEM courses. For the 29,300 students reported for the lecture treatments across all students, the average difference in failure rates (21.8% in active learning vs. 33.8% with lecture) suggests that 3,516 fewer students would have failed if enrolled in an active-learning course. This and other beneficial impacts of active learning on students led the authors to state, “If the experiments analyzed here had been conducted as randomized controlled trials of medical interventions, they may have been stopped for benefit.” Active learning strategies are major components of the G2C Teaching &amp; Learning Academy.</td>
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<td>Applying Evidence to Action (via the G2C Course Transformation Planning &amp; Plan Implementation Process)</td>
<td>Drake, B. M. (2011). Foundations of Excellence in the First College Year 2010 retention analysis. West Lafayette, IN, <a href="http://www.jngi.org/wordpress/wp-content/uploads/2011/12/RetentionAnalysisExSummaryPDF.pdf">http://www.jngi.org/wordpress/wp-content/uploads/2011/12/RetentionAnalysisExSummaryPDF.pdf</a></td>
<td>This evaluation shows a 5.62 percentage point increase in first-to-second year IPEDS retention rates for institutions that generate and then implement evidence-based plans for student success via the Foundations of Excellence (FoE) process. This study also shows that the Gardner Institute is able to generate solid return on institutional time and resource investments. In addition, the Gardner Institute staff drew heavily on lessons learned from and processes associated with FoE to create G2C.</td>
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Leading Institutional-Level Indicators of Success / Outcomes to Date

The 13 institutions in the G2C pilot cohort started their work in November 2013 and began implementing their course transformation action plans in the 2014-15 and 2015-16 academic years. Thus, the results being reported at this juncture are very preliminary. They are also very promising.

The following indicators of success have been collected from institution-specific analyses that examine outcomes associated with “G2C transformed” courses to date. Outcomes to date include:

- **Higher retention rates** for students in G2C courses compared to students in sections of the courses not transformed by G2C
- **Lower rates of academic probation** for students in G2C courses compared to students in sections of the courses not transformed by G2C
- **Higher levels of resiliency** (defined as being on academic probation but still returning to the institution) for students in G2C courses compared to students in sections of the courses not transformed by G2C
- **Higher course passing rates** (rates of A, B, and C grades) and lower rates of D, F, W, and I grades (DFWI rates) for students in G2C transformed courses compared to students in sections of the courses not transformed by G2C
- **Higher grade point averages** for students in G2C courses compared to students in sections of the courses not transformed by G2C
- **Better exam scores** for students in G2C transformed courses compared to students in sections of the courses not transformed by G2C

With support provided respectively from the Kresge and Lumina Foundations, the Evaluation Learning Research Center (ELRC) at Purdue University is currently conducting an external evaluation of the G2C process. During this analysis, ELRC will help the Gardner Institute learn how participation in G2C correlated with changes in:

- Student learning as measured by common end of term examinations / content mastery measures;
- Faculty perspectives and attitudes toward course redesign and the use of active learning and evidence-based pedagogies;
- Student grades and retention in general; and,
- Grades and retention for students from low-income, first-generation, and historically underrepresented race/ethnicity groups.
Information on G2C Participating Institutions to Date

Since fall 2013, a total of 93 institutions have applied for and been selected to work with the Gardner Institute on the G2C process. These institutions, which collectively enroll over 1.7 million undergraduates, include:

Abraham Baldwin Agricultural College*
Albany State University*
Allegheny College
American Public University System+
Arkansas Tech University
Ashford University
Atlanta Metropolitan State College*
Augusta University*
Bemidji State University
Bergen Community College
Brevard College**+
Campbell University**
Capital University+
Catawba College**
Central Community College
Chowan University**
Clayton State University*
Coker College
College of Coastal Georgia*
College of Micronesia – FSM
College of Saint Rose
Columbus State University*
Dalton State College*
East Georgia State College*
Eastern Michigan University***+
ECORE (University System of Georgia Online)*
Elizabeth City State University
Florida International University+
Fort Valley State University*
Georgia College & State University*
Georgia Gwinnett College*
Georgia Highlands College*
Georgia Institute of Technology*
Georgia Southern University*
Georgia Southwestern State University*
Georgia State University*
Gordon State College*
Greensboro College
Henry Ford College***
Houston Community College++
Kalamazoo Valley Community College***+
Kean University ++
Kennesaw State University*
Kettering University
Langston University
Lansing Community College***+
Life University
Lone Star College – North Harris
McMurry University
Metropolitan State University Denver
Middle Georgia State University*
Montana State University – Billings
New Jersey Institute of Technology
Nevada State College
North Carolina Central University
North Dakota State University
Northeastern University
Oakland University***+
Oklahoma State Univ. Institute of Technology
Oklahoma University-Tulsa
Prescott College
Purdue University Northwest ++
Qatar University
Rutgers University – Newark
Rogers State University
Roosevelt University ++
Saint John Fisher College
Savannah State University*
South Georgia State College++
Southern University
St. Francis College ++
Texas Southern University ++
Tulsa Community College
University of Central Arkansas
University of Colorado -Boulder
University of Houston Downtown++
University of Michigan Dearborn***+
University of North Georgia*
University of Illinois Chicago ++
University of Kansas
University of Kentucky
University of Rhode Island+
University of Southern Mississippi
University of Tulsa
University of West Georgia*+
Valdosta State University*
Washtenaw Community College***
Wayne State University***+
Western Michigan University***+
Western Nevada College
Wingate University
Waubonsee Community College ++

* As part of the University System of Georgia Gateways to Completion Project (USG G2C)
** As part of the North Carolina Independent Colleges and Universities Gateways to Completion Project (NCICU G2C) funded in part by the Council of Independent Colleges
*** As part of the Michigan Gateways to Completion Project (MI G2C) sponsored by the Kresge Foundation
++ As part of the History Gateways project, in collaboration with the American Historical Association, funded in part by the Andrew W. Mellon Foundation.
List of G2C National Advisory Committee Members
The G2C process has been designed and is being continuously improved with the assistance of a National Advisory Committee. This committee includes a variety of members from all walks of higher education life including:

<table>
<thead>
<tr>
<th>G2C National Advisory Committee</th>
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<tbody>
<tr>
<td>Lou Albert – Arizona State University</td>
<td>Christine Keller – Assoc. of Institutional Research</td>
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<tr>
<td>Linda Baer – Civitas Learning</td>
<td>Jillian Kinzie – Indiana Univ. Center for Postsecondary Research &amp; NSSE Institute</td>
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<tr>
<td>Trudy Bers – Oakton Community College</td>
<td>Robert Kubat – Pennsylvania State University</td>
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<tr>
<td>Hunter Boylan – National Center for Developmental Education</td>
<td>Tricia Leggett – Zane State College</td>
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<tr>
<td>Linda Braddy – Tarrant County College</td>
<td>Julie Little – EDUCAUSE</td>
</tr>
<tr>
<td>John Campbell – West Virginia University</td>
<td>Jean MacGregor – Washington Center</td>
</tr>
<tr>
<td>Julia Brookins – American Historical Association</td>
<td>George Mehaffy – AASCU</td>
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<tr>
<td>Jeff Cornett – Ivy Tech Community College</td>
<td>Jerry Odom – University of South Carolina</td>
</tr>
<tr>
<td>Brent Drake – University of Nevada Las Vegas</td>
<td>Karan Powell – American Public University System</td>
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<tr>
<td>Johanna Dvorak – University of Wisconsin Milwaukee &amp; NCLCA</td>
<td>Lynn Priddy – National American University</td>
</tr>
<tr>
<td>Maribeth Ehasz – University of Central Florida</td>
<td>Elaine Seymour – University of Colorado at Boulder</td>
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<tr>
<td>Scott Evenbeck – Stella &amp; Charles Guttman Community College (CUNY)</td>
<td>Marion Stone – American Academy of Family Physicians</td>
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<tr>
<td>Susan Gabriel – Comm. College of Baltimore County</td>
<td>Emily Swafford – American Historical Association</td>
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<tr>
<td>Trinidad Gonzales – South Texas College</td>
<td>Uri Treisman – University of Texas at Austin</td>
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<tr>
<td>Bob Guell – Indiana State University</td>
<td>Ross Peterson Veatch – Goshen College</td>
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<td>Casey Green – The Campus Computing Project</td>
<td>Kaye Walter – Bergen Community College</td>
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<tr>
<td>Jeanne Higbee – University of Minnesota</td>
<td>Cynthia Wilson – League for Innovation in the Community College</td>
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For more information on Gateways to Completion, contact the John N. Gardner Institute for Excellence in Undergraduate Education at info@jngi.org.