NKU

Academic Program Review: Context and Principles

Academic Program Review Criteria Refinement Ad Hoc Working Group
July 1, 2021

This document lays out a set of principles that can inform the development of criteria for use in deciding holistically whether a given degree program should remain in NKU's portfolio. We see the criteria as ultimately being incorporated into a diagnostic tool that can be employed on campus as part of a continuous improvement process. This work is part of a broader effort to continually evaluate whether NKU is appropriately and optimally using its resources in a way consistent with its core values. Our recommendations complement but do not override policies and procedures in the current *Faculty Policies and Procedures Handbook*. In particular, we note that the *Handbook* lists academic planning as a matter over which faculty bodies have primary responsibility for making recommendations (Appendix B, Sec. B.1). We present this report to the Provost as purely a product of this working group; at this point it has not been circulated more broadly to the faculty or other administrative leaders for review.

Contents

Working Group Members

- Matthew Albritton, Director, School of the Arts
- Janel Bloch, Professor, English; Faculty Senate Budget Committee Chair
- Caryn Connelly, Chair, World Languages and Literatures
- Jarrod Druery, Assistant Professor, Education
- Ande Durojaiye, Interim Provost and Vice President for Academic Affairs
- Ginni Fair, Dean, College of Education
- John Farrar, Associate Professor, Chemistry and Biochemistry; Faculty Senate President
- Kathleen Fuegen, Associate Professor, Psychological Science
- Patrick Hare, Associate Professor, Chemistry and Biochemistry
- Kevin Kirby, Dean, College of Informatics
- Cecile Marczinski, Regents Professor, Psychological Science
- Catherine Neal, Chair, Accounting and Business Law
- Clare Pangello, Graduate Assistant, Undergraduate Academic Affairs; Student, MA I/O Psychology
- Dale Stephenson, Dean, College of Health and Human Services
- Jason Vest, Assistant Provost for Special Projects
- Hongmei Wang, Professor, Computer Science

1. Background and Context

Before 2020

During the past five years, the division of Academic Affairs at NKU has undertaken continuous cycles of program review. These include the annual program review process from the Kentucky Council on Postsecondary Education (CPE), which reviews sets of programs on a 5-year rotating cycle, but it also included NKU's continual internal analysis of program viability as enrollments fell and budgets were reduced. Additionally, program review has taken place as part of some programs' reaccreditation processes.

The CPE program review process has reviewed all existing programs at NKU, save those programs that were recently initiated. Academic program review builds on the annual student learning outcomes assessment by providing a formalized process to review each program every five years. Annual program review from CPE reviews select programs on a 5-year rotating cycle. NKU records and tracks these program reviews on a publicly accessible website.[1]

NKU's internal assessment applies to all programs in its academic portfolio. These annual program assessments of student learning outcomes are collected by the Associate Vice Provost for Assessment and receive feedback to improve the quality of assessment. Academic programs use the assessment process to collect and analyze data, which allows them to make necessary changes in programs and course delivery. NKU's recent reaffirmation with SACSCOC allowed us to ensure that program assessment was taking place meaningfully within every academic program on campus. Information on the findings of annual assessment are published on the NKU website.[2]

As an additional layer on top of these regular review and assessment cycles, the university has engaged in *ad hoc* budget reduction exercises in recent years. This has been triggered by continual budget contractions due to pension cost increases, state budget cuts, and declining undergraduate enrollments. This required that we evaluate all aspects of the university, including academics, to see where reductions might need to occur. We have conducted annual evaluations with the help of Institutional Research that look at enrollment trends, staffing levels, and regional job demand. These insights have helped us shift resources from less productive programs to those that are quickly growing, especially as our online and master's degrees have grown rapidly. This continual process of phasing out less productive programs and growing new and innovative ones means that we have not had to cut large numbers of programs or faculty positions in one year, though this has not spared NKU the large cuts in Academic Affairs staff that resulted from pension increases and budget cuts. However, as an institution, we have prioritized student instruction over staffing our offices and services.

Appendix A provides a table of degree programs that were closed between 2017 and 2020. Some closures were part of consolidations, some were transformations, and others were complete closures to redirect efforts from low-performing programs to new and different programs in higher demand.

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[1] https://inside.nku.edu/viceprovost/assessment/program_review.html.
[2] https://inside.nku.edu/viceprovost/assessment.html.

Recent Developments

At the initiation of the CPE as part of a state-wide effort, NKU Academic Affairs administrators met with Gray Associates for a two-day degree program analysis workshop on March 2 and 3 of 2020. Prior to the meeting, a large amount of data was supplied by Institutional Research, in coordination with colleges and programs, to ensure that Gray could supply the most accurate data for the workshop.

The workshop attendees reviewed all current undergraduate programs at NKU as Gray Associates walked attendees through the program ranking, scorecard, and program economics for each program. The attendees then broke out into small groups that took a deeper dive into the specifics of each program by disciplinary cluster. The team gathered again with recommendations from the small groups and finalized these recommendations for the deans to take to the faculty in their colleges and for further discussion at Academic Affairs Council.

Gray also walked the team through potential new programs for NKU, showing how the most promising among them might align with our mission. The result was a list of ten new programs that the respective deans would bring to their colleges for consideration. These included Operations Management, Hospitality Administration, Computer and Software Engineering, Mechanical and Industrial Engineering, Materials Sciences, International Economics, and Insurance.

At the end of the workshop, we had a full list of all current programs at NKU with program market scores for each, an initial recommendation for each program (*grow*, *sustain*, *fix*, *sunset*, or some variation thereon), plus the ten new program opportunities mentioned above.

Shortly after the March 2020 workshop, the COVID-19 pandemic hit and efforts to complete this program review process were delayed due to the urgency of decisions needed to sustain teaching and learning through the spring semester. The deans were retrained in August and September on the use of the Gray program evaluation system and program economics hub, and resources were provided to them to review and create their reports. Sessions were also held with various colleges and departments throughout the fall semester to help them understand the program scorecards and program economics produced by the Gray platform for each degree program. Every department and school at NKU reviewed their program market score, percentile, and notes from the March Gray workshop. Because of NKU's commitment to continual program refinement and avoidance of program bloat, there was only one program that was determined as a needed closure, which was the Geography major. This closure is due to continued low enrollment and the acknowledgement that a Geographic Information Systems major may be more relevant to our current economy and thus be a future target for addition. (GIS is currently a minor.)

In March of 2021, President Ashish Vaidya requested a strategic review of university operations. In an effort to facilitate "Box 2" initiatives[3] on campus the President tasked campus leaders to begin reviewing all university operations and services such as policies and procedures, academic programs and operational processes. Effective academic resource management requires us to be "mission-centric, but market savvy and margin-conscious as well."

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[3] "Abandon ideas, practices, and attitudes that could inhibit innovation." Vijay Govindarajan, *The Three Box Solution.*

On March 22, Interim Provost Ande Durojaiye assembled an "ad hoc working group" of faculty, chairs and deans to develop a holistic approach to academic program review. This group was asked to "look beyond the typical metrics used to evaluate programs and to explore the impact on our region and alignment with the mission as well." This report is the result of this latest effort.

We note that the landscape of program review is changing rapidly.

First, the CPE Council is currently (June 2021) reviewing a "Statewide Academic Program Review Policy." This policy mandates an annual institutional program review process with results summarized in a report to be submitted each July. According to the latest draft, it is the CPE that will review these reports and ascertain, among other things, whether programs meet the criteria for unnecessary duplication across the state and whether market and student demand is high or low.

Second, Provost Matt Cecil begins his appointment here on July 1 bringing considerable experience and expertise in program review from his prior institutions and has already discussed the data aspects of appropriate tools with NKU Institutional Research.

Accordingly, the most important step at this point is to articulate some *guiding principles* in advance of the development of a diagnostic tool. An appendix lists some specific suggestions for criteria to be included in a tool consistent with these principles.

2. Guiding Principles

A *diagnostic tool* should be designed to assist leaders in holistically gauging the "health" of degree programs. (The "health" metaphor has its limits but has proven useful.) Although especially valuable to program directors, these common diagnostics can be reviewed at various levels of the university to foster better planning and resource allocation, higher quality, and a more focused attention to mission.

Several principles ought to guide the university's development of this diagnostic.

a. **Our set of degree programs says who we are as a university.** The kind of opportunities we offer to students, and the kind of talent we offer to the world, should be a matter of universal agreement.

b. **A holistic approach is essential.** A set of degree programs that are each judged as healthy on their own does not mean that the portfolio is healthy. For example, the portfolio could still be too narrow, too off-mission, or ultimately constrain long-term growth. Programs that appear to be redundant, or programs whose absence would be detrimental, should be identifiable through this process.

c. **Holism goes beyond NKU.** The CPE is taking into account the state's collective portfolio. For example, if a certain major at NKU is only offered at one other Kentucky institution

(e.g. University of Kentucky), that can have significant implications.

d. **Common measures are essential but must be interpreted differentially.** The same set of individual measures ("vital signs") should be applied to each degree program. However, how these measures are evaluated must refer to the role the program plays at the university. This is not unlike ensuring that a sports team is optimal: one seeks to maximize different aspects of fitness for different positions (for example, a pitcher versus a designated hitter). Accordingly, programs will not be assigned a single bottom-line numerical health score.

e. **Quantitative and qualitative measures need each other.** Access to a concise set of pertinent data helps ensure objective decision making. Access to concise narratives helps ensure that the data is meaningful. Narratives should not be justifications or defenses; they are meant to be illuminating explanations.

f. **Applying a diagnostic tool does not yield a full program review.** The quantitative and qualitative information here must be focused and concise. By contrast, program reviews typically consist of lengthy presentations of program history, SLOs, budgets, and goals.

g. **Employ a broad notion of cost.** The cost of running a program is not completely captured in dollars. For example, there is also the *opportunity cost* of faculty effort and attention that could be applied to other priorities and initiatives.

h. **The diagnostic tool is designed for continual use.** We do not envision NKU building a tool merely for a "one and done" program review process; a valuable diagnostic tool will be used for continuous improvement over time. The tool itself may evolve with time and experience. Use of the tool should not be unduly time-consuming; it should make use of information sources that are readily accessible.

We conclude by stating that no diagnostic tool can perfectly embody these principles or in any way serve to "automate" program review. In the end, human judgment and vision are essential to ensure that NKU's programs effectively serve our students and our region now and into the future.

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Appendix A
NKU Degree Program Closures Since 2017

Degree Programs Closed Since Fall 2017		
College	**Program**	**Notes**
Chase Law / Informatics	JD / Master of Health Informatics	These dual degrees were not truly integrated, and enrollment was always in the single digits. The MHI degree transitioned to an accelerated online format. Each separate degree continues on its own, with no courses discontinued.
Chase Law / Informatics	JD / Master of Business Informatics	
Informatics	MS in Computer Science	Advisory board feedback indicated such broad Master's degrees were declining in importance as a credential in tech fields; enrollment stalled at under 30 students. The programs were "sunset" beginning in 2019, and effort was redirected into higher growth potential programs.
Informatics	MS in Computer information Technology	
Business	MS in Executive Leadership and Organizational Change	Replaced by the Master of Business Leadership and Innovation.
Business	AAS in Construction Technology	
Arts and Sciences	Applied Photography, BA and BFA	Combined into new Photography BS.
Arts and Sciences	BFA in Stage Management	Combined into one BFA degree with stage management included.
Arts and Sciences	Theatre Design or Technology BFA	
Arts and Sciences	BS in Electronics Engineering Technology	Replaced by BS in Electrical & Electronics Engineering Technology.
Health and Human Services	BS in Athletic Training	Transitioning to an MS in Athletic Training per accreditation requirements for an MS for entry of practice. "Teach-out" to continue for the next two years.

Appendix B
Criteria for Possible Inclusion in a Diagnostic Tool

Quantitative Criteria

These are sets of individual numbers that are reported from shared data sources, such as the NKU Office of Institutional Research. They are *not* combined into a single number that purports to represent the health of a program.

Enrollment Related

i. Five-year enrollment numbers (Fall semester census data), disaggregated for URM, First Generation, and Low Income.

ii. Five-year graduation numbers, disaggregated for URM, First Generation, and Low Income.

iii. Graduation rates after students have earned 60 credit hours.

iv. Average class section fill percentage for upper level courses in the major.

Academics Related

v. Curriculum complexity measures (required credit hours; prerequisite tree depth).

vi. DFW rates in core courses.

vii. SCH in major courses from students not in the major.

viii. Indicators of participation levels in High Impact Practices.

ix. Indicators of faculty and student involvement in research and creative activity.

Market Related

x. Measure of employer demand.

xi. Measure of successful graduate placement.

Cost and Efficiency Related

xii. Program contribution ($).

xiii. Instructional capacity gaps; costs of instruction and program administration.

Qualitative Criteria

The items of qualitative information are not meant to be extended narratives; these are short text pieces that capture distinct and specific aspects of the program under review. As part of the overall review process, we also recommend a lengthier narrative, perhaps 1-2pp, be attached to the completed diagnostic

    i.   Alignment with NKU's mission and Strategic Framework.

    ii.   Indicators of regional, state, or national prominence; uniqueness; accreditations.

    iii.   Indicators of alignment with regional workforce development demands.

    iv.   Contribution to the differentiation of NKU as an institution.

    v.   Interdependence, non-duplication, and synergies with other NKU degree programs, minors, and general education.

    vi.   Role in the recruitment pipeline (e.g. School-Based Scholars; Kenton County Young Scholars Academy).

    vii.   Amenability to change as market needs evolve.

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