

FINAL REPORT OF THE WASC VISITING TEAM

EDUCATIONAL EFFECTIVENESS REVICT2 1 TyD.0015.-.Tj0 -c-.Tj-9.65

The evaluation team in conducting its review was able to evaluate the institution under the WASC Commission Standards and Core Commitments and therefore submits this Report to the Accrediting Commission for Senior Colleges and Universities of the Western Association of Schools and Colleges for action and to the institution for consideration.



## SECTION I. OVERVIEW AND CONTEXT

### A. Description of the Institution and Visit

Founded in 1905 as the College of Medical Evangelists, Loma Linda University (LLU) enrolls roughly 4,200 students on a main campus located 60 miles east of Los Angeles, in Loma Linda, California. The institution maintains two branch campuses in Canada and Saudi Arabia. As a Seventh-day Adventist University that focuses on the health sciences, the University has eight professionally-oriented Schools that offer 107 degree programs under the instruction of over 1,800 faculty, nearly 1,400 of whom are full time. Roughly three-qu



B. The Institution's Educational Effectiveness Review Report

The team unanimously found that the Educational Effectiveness Review report from LLU was aligned with the Institution Proposal as well as the institution's CPR report and recommendations cited in the Commission's Action Letter of March 12, 2009. The two stated themes explored in the CPR report – "Bible-based faith" and "normative culture" – were argued in the context of the Capacity and Preparatory Review as requiring an infrastructure of support that included the involvement of campus constituencies (the faculty, students, and

outcomes (USLOs), via the Wholeness Climate Survey and Wholeness Portal, and by virtue of the University Strategic Plan.

LLU's EER report document is well-written and describes the University's evidence of educational effectiveness in a manner that appropriately facilitated the team's inquiry during its visit. The report is organized into chapters that cover: 1) LLU's response to the CPR recommendations from the Commission ("Responsibility"), 2) institutional administrative infrastructure changes to promote sustainability ("Engagement and Sustainability"), 3) University-wide learning outcomes assessment ("Evidence of Educational Effectiveness University-Wide"), and 4) implementation of academic program review ("Evidence of Educational Effectiveness Within Academic Programs"). Forthcoming in its account of both institutional strengths and weaknesses, LLU has authored a document that served the team well during its preparation for the visit. As a consequence, the review materials served as a tool for the team as well as an opportunity for LLU to understand their continuous quality improvement efforts, their use of data-driven decision-making, and their faculty and staff engagement both in institutional processes (such as program review) and in the constructive reflection required for a self-study report (CFR 1.9).

### C. Response to Issues Raised in the Capacity and Preparatory Review

Three primary issues were raised in the CPR of 2008 and were noted in the Commission's Action Letter of March 12, 2009. LLU's EER report addresses them as follows:

*Central Support of Strategic Planning and Use of Data in Planning by Schools*

Issue:

Historically, the strategic planning process of LLU has been “compartmentalized” in relationship to the planning processes of the other corporate members of the Loma Linda University Adventist Health Sciences Center (LLUAHSC). As such, the University compiled School-specific plans into a single document in which “a synthesis of common interests and initiatives, along with individual School-specific strategies, took place that culminated in a University strategic plan” (p. 6, LLU EER Report). In light of this strategic planning process at LLU, the CPR team noted both the “collaboration and interdependency of the functional parts of the University” and “a unique opportunity to make all parts of the University come together with an integrated and strategic vision” (p. 16, CPR Team Report).

Institution’s Evidence and Conclusions:

A new corporation-wide strategic planning process was established in 2008-09, entitled Vision 2014, which unified the vision of all corporate entity strategic plans within LLUAHSC. This strategic planning process is supported centrally and has generated a University Strategic Plan that focuses on current educational activities at the School level and presents strategies and objectives for further development, such as an enhancement of research activities at LLU (CFR 4.1). The process is reported to have used data from assessment in decision-making (CFR 4.3), and highlights the “horizontal and vertical linkages within and across the entire LLUAHSC enterprise” (p. 6 LLU EER Report).



#### Analysis:

The team notes that alignment of the institution's mission with the planning process is ideal. There exists abundant evidence of the "transformative learning" prioritized by the University Strategic Plan, by way of such learning being assessed in both academic and co-curricular programs (CFR 4.3). Resources have been committed to generate student learning outcomes data to support School strategic planning and decision-making, with the appointment of Assessment Specialists who are embedded within the Schools (CFR 4.2). Further, to promote continuous quality improvement, an objective of the University Strategic Plan assigns responsibility for maintaining and reporting to the President, in a systematic manner, a dashboard-type statistical summary of data describing Schools and other areas (ample examples of such documents were presented in the LLU EER Report appendices) (CFR 4.3). While the new strategic planning process is in an early stage of implementation on campus, its goals are clear and informed by a wealth of mission-aligned activities that have been defined, stated at the School level as essential commitments for LLU's success, and reflected upon through a process of assessment, data collection, and reporting that is underway at the University.

#### The LLUAHSC Research Strategic Plan and Its Implications

The LLUAHSC Research Strategic Plan is cited in LLU's EER report as "an example of entity-specific planning" (p. 14, LLU EER Report), and as such it becomes relevant to any discussion of central support for strategic planning. To assess how well the plan can forward the University's ambitious aims, the visiting team examined how the institution's governance could

best foster LLU's success with its research initiatives. The visiting team interviewed the leadership of the Board of Trustees and considered this governance body's pursuit of advancing the Research Strategic Plan.

CFR 1.3 states: "The institution's leadership creates and sustains a leadership system at all levels that is marked by high performance, appropriate responsibility and accountability." At LLU, there is a process of evaluation of University leadership, and the President of LLU is evaluated by the Board of Trustees (CFR 3.9). There appears, however, to be no systematic process through which the Board of Trustees is reviewed to determine whether membership of the Board adequately represents all aspects of LLU's operations. Further, there do not seem to have been development opportunities provided to all members of the Board to grow with the University, especially as it copes with new policies and procedures such as the heightened requirements of assessment of student learning outcomes. As a consequence of Board review or self-study, representation on the Board is likely to include new members who are particularly experienced with academic research operations at health sciences institutions. The visiting team recommends that LLU's leadership work collaboratively with the Board's leadership to ensure that the Board is poised to support research at the institution as best it can. This would include a strategic process of Board evaluation and development (CFRs 3.8, 4.4, 4.6).

*Augmentation of Institutional Research to Support Strategic Planning and Quality Assurance*

Issue:

The institutional research function at LLU, at the time of the CPR visit, was described by the visiting team as requiring resources to gain the capacity to undertake data collection and analysis necessary to support strategic planning and quality assurance on campus. A “decentralized” model for institutional research had been in operation for many years, with the Schools providing their own individual descriptive reports, largely for professional accreditation activities; however, by 2008, with the need for the implementation of student learning outcomes assessment across all majors, LLU had formed its then-titled Office of Assessment and Institutional Learning to support all corners of campus with assessment and institutional research. With so many demands placed on a unit consisting of a half-time director, an institutional researcher, and a full-time administrative assistant, augmentation of institutional research at LLU was recommended, to ensure data could be available for continuous quality improvement and best practices in management. Central data resources needed to be developed to standardize assessment processes across Schools and to prepare data for standard reports including WASC exhibits. Given the inability of the transactional data syTw[hud]l the inabilrof

Institution's Evidence and Conclusions:

In LLU's EER report, the institution describes three major courses of action that serve as

appointments are being reviewed, as well as the systems for pro

guidance of the IR Committee, momentum has built toward such success, and continued resource support is critical to fulfill these ambitions.

*Support and Enhancement of the Office of Assessment*

Issue:

At the time of the CPR visit, LLU had begun its process to implement assessment practices to support educational effectiveness by creating the Office of Assessment and Institutional Research, at a minimum staffing level. The impressive effort of the staff in this area – and the scope of that with which the operation was charged – warranted the recommendation from the Commission for support and enhancement of the office “as it engages in assessment training, integrates assessment data from across the various schools, and supports its use for program improvement” (WASC Commission Action Letter, March 2009).

Institution’s Evidence and Conclusions:

The existing Office of Assessment and Institutional Research was renamed the Office of Educational Effectiveness (OEE), and the director became a full-time position. Assessment Specialists were appointed by the Deans in each respective School, and they were “charged to serve as liaisons to improve the linkage and communication between the OEE, central administration, committees, and programs in each School” (p. 8, LLU EER Report), as part of a “collaborative” model that prompted assessment of outcomes at the University, School, and program levels (CFRs 2.7, 4.2, 4.6).

An expanded committee structure under the Educational Effectiveness Committee (EEC) engaged more than 100 additional faculty members and administrators in the educational effectiveness assessment efforts at LLU (CFR 4.





## SECTION II. EVALUATION OF INSTITUTIONAL EDUCATIONAL EFFECTIVENESS UNDER THE STANDARDS

### A. Evidence of Educational Effectiveness University-Wide

#### *Introduction*

In the period between the 2008 CPR team report and LLU's October 2010 EER visit, a great deal of work was completed to establish formal structures and processes for assessing student learning and for reviewing programs. In addition, the institution was able to collect, document, and organize a substantial amount of evidence to show that units at every level of the organization are engaged in productive assessment practices, although at different stages of development. As one School's dean commented during the EER team visit, "assessment has become standard practice." LLU's development and implementation of a framework for demonstrating how units achieve educational effectiveness through substantial evaluation is described in LLU's EER report, which focuses on several key accomplishments in their journey: systematic academic program review processes (see Section II.B.); student learning outcomes assessment plans both University-wide and at the program level; and a plan for demonstrating how students and the campus community experience LLU's commitment to mission-focused learning.

*University-Level Student Learning Outcomes*

Evidence:

In 2007, LLU's University-wide student learning outcomes (USLOs) were revised from 17 to 8 outcomes (CFR 3.8). The USLOs reinforce institutional values, such as wholeness and global diversity, as well as skills that are universally recognized as essential, such as technological proficiency (CFR 1.1). In conjunction with the OEE, the Student Learning Outcomes Committee developed new rubrics (adapting AAC&U models) for measuring each of the revised USLOs. While expectations for student achievement in many LLU professionally accredited degree programs have been established for some time, the practice of evaluating University-level learning expectations for all LLU students has been renewed. Integration of University (or other) learning outcomes into professional accreditation criteria had not been widespread until the launch of new institutional educational effectiveness policies and processes in 2008. A pilot project to collect data on USLOs took place in 2009-2010, the goal being to receive data on achievement of four USLOs: wholeness, critical thinking, oral communication, and written communication. Consideration was given for an application of the USLO rubric so that programs could "contextualize" assessment by adding criteria or using existing alternatives" (p. 23, LLU EER Report). In spite of limitations related to the electronic reporting of data, the SLO committee collected reports from 42 programs (approximately 40% of total programs), with at least one program report on identified USLOs from each School.

The LLU EER Report references selected program outcome data on the four USLOs measured. For example, the Doctor of Pharmacy program used the critical thinking assessment outcome to

understand why some students were performing below the desired percentile on a standardized critical thinking for health sciences test. Results from the standardized test were compared to an application of the USLO critical thinking rubric to a sample group from the student cohort in one of the program's elective courses. The comparison of data led the faculty of the School of Pharmacy to develop methods for embedding critical thinking assignments into the curriculum (CFR 2.10). Outcomes from the course modifications will be evaluated and shared. In addition, this pilot project is being discussed among faculty from several Schools, and widespread adoption of methods used to enhance students' critical thinking in health science is being explored (CFR 4.4).

Program level learning outcomes for a compelling majority of degree programs are published in the LLU Catalog 2010 – 2011 vol. 1 and on web pages (CFR 2.3), with widespread use of University-wide student learning outcomes in LLU degree programs and capstone activities evidenced in the addenda to the institution's EER report. Many examples of effective direct assessment of student learning were displayed in the evidence room, and the level of sophistication of the materials was exemplary. Moreover, faculty in interviews cited the utility of rubrics for measuring and identifying student learning achievement. Student work coupled with assessment and analysis demonstrated that faculty members have a clear understanding of how to use rubrics to evaluate student learning. Rubrics for evaluations of USLOs are either in use currently or on a timeline for development, depending on the USLO. Further, students were able to articulate this practice as a component of the education they receive, and could identify its permeation throughout their program of study as well as provide examples of how feedback has been used to improve learning (CFR 2.4). LLU has made impressive progress such that

systems and processes for evaluating effectiveness can be sustained and have become embedded into the culture and decision-making practices at the School level.

Although the Schools and programs have demonstrated use of individual reviews as part of their units' strategic planning process, there is little evidence of the reviews being used to develop operational plans and budgets. Several faculty and administrators reported their interest in taking the effectiveness information to this level, but no clear strategies are yet in place to make this transition.

An area mentioned in the LLU EER Report is General Studies. Approximately 25% of current students are undergraduates, and all undergraduates are transfer students completing degrees. Fifteen baccalaureate degrees are listed in the current Catalog. General Studies consists of five domains and 68 quarter units. Courses and unit requirements in each domain are outlined in the LLU Catalog 2010-2011 vol. 1. The General Education Committee (GEC; subcommittee of the University Academic Affairs Committee) was charged with establishment of GE requirements, review of new undergraduate programs, and evaluation of existing programs with respect to identifying courses that satisfy general education requirements. The GEC has focused primarily on monitoring requirements for baccalaureate level study – in particular, variances in transfer courses counted in GE areas, which the GEC can review and approve. To achieve consistency and accuracy in students' degree compliance reports, the GEC sponsored workshops for campus advisors to clarify requirements of each GE domain and how requirements can be met with LLU or transfer courses (CFRs 2.12, 2.14, 3.4). GEC members acknowledge the leadership of the GEC chair, a faculty member, in advocating and supporting General Studies (CFR 2.4). Program level learning outcomes for the GE component replicate seven of the eight USLOs, and the

eighth GE outcome (instead of technology) addresses the spiritual heritage of LLU, a course requirement that all graduate and undergraduate students must satisfy.

#### Analysis and Conclusions:

There is clear evidence that LLU faculty members are engaged seriously in developing methods for promoting, assessing, and achieving student learning. Rubrics have been adopted widely. A number of activities and projects are underway to improve student learning as a result of program-level as well as University-wide assessment. Although individual programs are at various stages in the development of assessment of learning outcomes, faculty recognize that creating a baseline across campus for undergraduate and graduate learning outcomes is important, as is linking assessment to budgeting and planning (CFR 4.1). It is key that the efforts to assess USLOs inform central planning processes and remain scaled to a reasonable level for ongoing impact and sustainability. This is an important connection yet to be made at LLU, and

recommended that in future WASC reports LLU provide more data on colleges attended and GE courses taken by transfer students. Moreover, expansion of GE articulation agreements may be useful in clarifying requirements for transfer students (CFR 2.14).

### *Co-Curricular Activities*

Evidence:

Appreciation of educational effectiveness University-wide at LLU must include recognition of “mission-focused/transformational learning.” This is a key theme in LLU’s CPR and EER reports, and it is embedded in the institution’s curricular and co-curricular activities. Mission-focused learning (MFL) may be understood as a faith-based concept that informs LLU’s teaching and learning commitment to service and wholeness. MFL is woven into several University-level outcomes, and campus leadership has allocated resources to support and evaluate opportunities and experiences that encourage students and other stakeholders to identify with this special theme (CFRs 4.1, 4.3).

The new School of Religion and its Division of Humanities have produced curricular (new religion courses) and co-curricular activities to enhance a scholarly and creative campus climate. The learning environment is being enriched by film and lecture/discussion series (e.g. “Film & Faith”), which explore representations of health and or spirituality in works of art. Assessment

website (open to the general public), an interactive resource aimed at developing an individual's well-being, lifelong learning, and spiritual capacity. Also, the current Wholeness Climate

application of learned skills toward innovation and taking responsibility for others” (p. 10, LLU EER Report). It is being assessed for effectiveness and is part of strategic planning. LLU has an opportunity to become an exemplary model in the region with respect to the impact on student success of its blending of curricular and co-curricular learning.

### *Human Resources for Sustaining Educational Effectiveness*

During the team’s site visit, some faculty and many staff members mentioned the lack of professional development and recognition opportunities provided by the University and the need for a career ladder and a reward structure. Such programs in the Schools have been implemented at different paces, but faculty and staff development and recognition University-wide, orchestrated by central leadership, have not yet occurred fully at LLU. There seem to be adequate training and support for technology application – e.g., on the use of Blackboard®, for example – which suggests an initial effort at professional development. Nevertheless, some medical and health professionals who are hired to teach voiced concern that they have received little or no training in instructional techniques or in the assessment of student learning, and many staff members who support them shared this concern. Students would be well served if the faculty had training available to them in how students learn, in the use of instructional methods for active learning, and in other forms of pedagogy. The visiting team recommends that in addition to faculty development opportunities in their disciplines, faculty members should be provided opportunities for learning about pedagogy and the assessment of student learning outcomes, particularly in light of LLU’s embrace of educational effectiveness initiatives such as the USLOs and the assessment now expected to enhance co-curricular programs (CFRs 3.1, 3.4).



It is important to note that both faculty *and* staff display a passion for working with the University's students and a deep willingness to go the extra mile to ensure student success. Students acknowledge the value of this effort to help them outside of the classroom and to engage them in research and other professional activities in the majority of programs. Staff, however, felt that there was no systematic process to recognize and to reward this kind of institutional service activity at all levels. To sustain high quality faculty and staff who are oriented towards these goals, it is critical that the University establish performance evaluation methods, incentives, and rewards for individuals and groups whose activities enhance scholarship, teaching, assessment, and co-curricular learning (CFRs 2.8, 2.9, 3.3).

## B. Evidence of Educational Effectiveness Within Academic Programs

### *Evidence of Concurrent Accreditation*

LLU distinguishes itself with the breadth and depth of its academic program offerings in the health sciences, and as a consequence maintains separate professional or programmatic accreditation for many of its degree programs. Participating in so many professional accreditation exercises – on the order of several dozen, counting both specialties and specific degree programs – speaks to LLU's deep commitment to ensure that a high quality education is received by its students in all of these endeavors. In Appendix F of LLU's EER Report – the WASC exhibit Table 8.1, LLU's Inventory of Concurrent Accreditation and Key Performance Indicators – the University provides evidence not only of the current accreditation status of each professionally-accredited program but also of data collected and reported by the programs to demonstrate educational effectiveness. Assembling such extensive documentation of

accreditation status and performance indicators is a considerable feat. This appendix in LLU's report ranks as an exceptionally thorough treatment of critical elements of the University's educational effectiveness presentation and warrants special mention; it served as a foundational document for the team's orientation to LLU's in-depth self-study effort at the academic program level. The educational outcomes that are reported as performance indicators in this appendix are impressive and stand out among ample comparative and benchmarked data (CFRs 2.1, 2.3, 2.4, 2.6, 2.7, 2.10, 4.8).

*Degree-Level Academic Program Review*

EER site visit, that these professional development efforts were a catalyst for assessment to become an integrated part of LLU and a reference point for establishing its value.

As outlined in the Program Review Guide, when a program review self-study is completed, it is sent to an external review committee. Committee members for the external review are suggested

indicating that overall the initial phase of the review was daunting, but both the ability to “contextualize” student-learning outcomes for the specific program and the help of liaisons from the PRC made the process manageable. One common observation from among the faculty was that what they thought might be easy-to-collect student outcome data was, in fact, difficult to secure. Faculty indicated that it was clear that following up on graduates regarding their employment and their academic success was essential, and the efforts required to do so served as a short-term reinforcement for a commitment to establish a process to collect assessment data in the long term (CFRs 2.10, 4.5, 4.6, 4.8).

Technological resources have been developed to support the growing culture of assessment at LLU. LiveText, a web-based learning system, is being implemented to enable student learning data to develop more fully, to be better organized, and to be managed more effectively. The system offers an enhanced ability both to monitor students’ achievements and to store student learning data to enable assessment of the Schools’ curricular effectiveness. The School of Allied Health Professions created a pilot portfolio system, and while some initial difficulties were reported, efforts are being made to address them. According to members of the Portfolio Committee, portfolios have been embraced as an assessment tool in selected programs in other

and programs use the information from their program reviews and Annual Program Reports for decision-making, and a sustained process remains in place to provide ongoing feedback on quality of outcomes, plans, assessment study, and benchmarking results and impact. Faculty cited examples of how evaluation findings have altered programs. For instance, projects have

### C. Student Success

The general consensus at LLU indicates that graduation and retention rates are valuable as an important measure of educational effectiveness. These statistics are required as part of the program review process, have historically been a component of the various independent professional accreditations held by the institution, and serve prominently on “dashboard” and CQI statistical presentations. Such calculated measures of student success remain unavailable from a single source on campus; they have been calculated locally, at the School or program level, and the level of detail across campus in terms of disaggregation of the rates remains relatively shallow, most likely a consequence of the professional accreditation standards not requiring, for example, separate rates reported for individual demographic groups. With the recent focus on institutional research performed at the University, there is a movement toward central data resources measuring student success. The institutional research analyst in the OEE reports undergraduate graduation rates by ethnicity, which indicates the possibility for such disaggregation of professional degree program student success data in the future (CFR 1.2).

Many degree programs at the undergraduate level at LLU are so small, a calculated percentage graduation rate per se is not as valuable a descriptor as a narrative account of why perhaps one or two of the five students were unable to complete a specific degree program from a selected cohort within a given time frame. A review of enrollment trends by program indicates that all but three of the institution’s 14 bachelor’s programs that are currently enrolling students could qualify for this small program status; only one of these small programs enrolls what may be more than 10 students per cohort. Larger programs, such as Medicine, report overall graduation rates that are relatively stable over time and as such do not warrant consideration for the development

of retention intervention plans. Efficiencies in enrollment management methods across campus eventually may be sought through experimentation and comparison of eventual outcomes, or perhaps a peer analysis will identify how a program's graduation rate falls short of reasonable comparisons to peer programs serving similar students. Comparisons with peers on graduation rate statistics constitute part of the professional program accreditation process in some Schools, with program-specific visiting teams able to make ad hoc comparisons between LLU and what the team perceives as its peers. Peer comparisons among the very small undergraduate academic programs that are not professionally accredited would be difficult, given the nature of LLU's program offerings.

With so many distinct degree programs at LLU, there are concentrations of students with similar backgrounds who have been drawn to particular degree programs and are being well served. Program directors and key faculty understand that attention also must be paid to the challenges faced by non-traditional students, given how many enroll at LLU, and rendering the performance of these students in the statistics of retention and graduation must also be considered when accounting for their success. Further exploration of how best to describe student success accurately and meaningfully is being undertaken by the institutional researcher and the Institutional Research Committee, and these efforts are encouraged by the visiting team (CFR 4.5).

#### *Retention and Graduation Rate Enhancement*

Anecdotal evidence of the institution's genuine effort to retain students is abundant. Tutorial programs – both via student peers and via paid tutors – address academic preparation issues and

student skill deficits in many discipline areas, at both the graduate and undergraduate level. For example, an academic performance review system in the School of Dentistry identifies students who may require intervention to succeed academically in those degree programs. In meetings with the visiting team, students reported no feelings of being stigmatized when they were



could be estimated from average entering cohort sizes and average numbers of degrees awarded per year.

Between the CPR and EER visits, increased technical resources for institutional research enabled an overall graduation rate to be calculated for several cohorts of entering bachelor's students.

Given how the institution's bachelor's programs are all designed for entry beyond the freshman year of study – i.e., only transfer students are accepted at this level at LLU – the rates have been calculated for a three-year completion, or completion in one and a half times the students' expected number of years of study. Student success at LLU, as reported by this measure, is comparable to or higher than the success of transfer cohorts at similar institutions (average three-year graduation rate for entering cohorts from 2005, 2006, and 2007: 80.7%). As mentioned above, these graduation rates for all students in bachelor's programs have been disaggregated by ethnicity, and the variance among groups demonstrates patterns similar to what is found in ethnic group cohorts elsewhere, with under-represented minority groups exhibiting lower graduation rates than white or Asian students, for example (CFR 2.10). To broaden the array of available reports and to support a greater understanding of student success, the institutional researcher has also created retention rate reports (CFRs 1.2, 4.5). The central data warehouse has served its purpose well by enabling queries and analysis that have led to these statistics (CFR 3.7). As the analytical tool to support the institutional research operation, the warehouse's maintenance and development anticipate a time when the OEE can support LLU's Schools more completely with the data and analyses needed for their professional accreditations and their program-level planning demands. With the clarity of the term "degree program" attained at LLU – and 107 programs meeting the established description – graduation rates, time-to-degree statistics, and



educational effectiveness, demonstrated through a rigorous, sustainable plan for on-going institutional and programmatic strategic planning and assessment, and continued enhancement of student performance.

The EER Goals and Outcomes (p. 1, LLU EER Report) demonstrate a strong commitment to learning and improvement, especially with regard to the “well-established and new structures and processes that have been designed to sustain continuous quality improvement” and through their “environment that seeks wisdom through Mission-focused Learning.” In their report, LLU reflected on their assessment journey, now embedded in their normative culture, and although the institution is at different stages of development in different programs, significant progress is being made. It is becoming clear that most constituents are committed to growing and developing the University-wide strategic planning process to be data rich, collaborative, and sustainable (CFRs 1.1, 1.2, 2.10, 2.11, 4.1, 4.2, 4.3, 4.4, 4.5, 4.8). In their own words, “The cumulative educational effectiveness of LLU has emerged from eight semi-independent academic entities (i.e., the Schools) linked together by bridges of understanding and cooperation” (p. 4, LLU EER Report).

Much progress has been made in the organizational commitment to learning and improvement throughout the stages of the WASC review. For example, the CPR revealed data problems. Progress has been made on many of them. The quality and reliability of the data warehouse has greatly improved, primarily as a result of increased data reconciliation between and among Banner, the institutional research database and the independent databases maintained in the Schools. Development of a more robust centralized data warehouse has been assisted by the efforts of a task force established in response to the CPR self-study. The task force, composed of

academic managers, faculty, and IT specialists, has identified the need for common definitions, standardized query protocols across the campus, the integration of School-specific individualized databases, and full access to Banner for the institutional research staff (CFRs 3.7, 4.5).

Data quality and accuracy are foundational to generating information and reports that are necessary for planning and decision-making. LLU has focused on improving data quality, access, and comparability between systems. Good progress has been made in this area as is evident in the comprehensive documentation and data tables used for this accreditation review and for strategic planning activities. “The new committee structure has played a vital role in... enabling the University to remain engaged in meaningful sharing of assessment results that will ultimately affect University strategic planning” (p. 5, LLU EER Report) (CFRs 4.1, 4.2, 4.3).

There continue to be data challenges. The problem is most evident within graduate non-block programs that provide individualized academic concentrations, specializations, and tracks that are guided by graduate committees and professional standards. These highly individualized academic learning environments challenge the Banner system, but as this is understood, systems to rectify such issues are in process.

LLU continues to seek solutions to the problems generated by the needs of the semi-independent professional programs that require support for vastly diverse data requirements. These needs have led LLU to utilize individual School-developed databases that have not been connected to the central system. The move toward a unified central system has helped LLU develop capacities that allow using the necessary central data to meet the data requirements of the many programs. Thus, serving all the data needs in one central location should reduce the number of

non-central databases. LLU recently purchased the Pentaho Business Intelligence Suite to provide additional capabilities that will help in the effort to meet the Schools' diverse reporting needs in a central system (CFR 3.7).

In addition, LLU has made significant progress in establishing institutionally shared data and academic program definitions, which has been furthered by the move towards more similar assessment requirements among all professional and regional accrediting bodies. LLU's confidence in data consistencies in the future comes primarily from a campus-wide commitment to focus on data in the LLUAHSC integrated approach to strategic planning. LLU appears ready to provide systemic and systematic evidence to document that learning objectives are being met, that planning and resources are dedicated to continuous improvement of the educational experience, and that the institution is engaged as a learning community poised to fulfill its ambitions (CFRs 4.1, 4.2, 4.3).

The EER report effectively presented considerable educational and religious philosophy and definitions that illuminated LLU's plans regarding becoming a learning organization, in addition to delineating progress toward meeting the WASC issues as detailed in the CPR Review. At the time of the EER, there was a concerted effort to have an aligned student outcomes assessment program consistent across all programs with the results being considered by faculty for program

information gets incorporated into planning and assessment activities across the institution. The

leaders. Program reviews have been initiated for programs that do not undergo regular accreditation reviews, incorporating assessment results at the course, program, and institutional levels, as well as for co-curricular activities and other University departments. The results of these studies are being used to make improvements at all levels of the organization and to aid in the distribution of institutional resources. Finally, it is evident that leadership at all levels of the learning process is engaged in the quality improvement/assurance processes (CFRs 1.2, 1.3, 2.3, 2.4, 2.7, 2.10, 2.11, 3.8, 3.11, 4.1, 4.2, 4.3, 4.4, 4.6).

Faculty and University administration reported to the team, throughout the visit, the aspirational goal of advancing LLU as a comprehensive academic health sciences system and strengthening the support for faculty engagement in scholarly research and professional activities. Faculty members' engagement in research and scholarly activities to remain current in their fields is ingrained across the academic endeavor (CFR 3.2). It is particularly crucial for those disciplines accredited by separate professional entities. A mature academic research enterprise, however, is an area that is generally slow to grow in academic institutions without strategic infusions of resources, including specialized facilities and equipment, start-up funds, a seasoned research administrative operation, and faculty who are experienced in the grant enterprise. For LLU to exploit its progress and to achieve success as an integrated health sciences center, an institutional commitment to this area will be essential. As is expected in academic organizations, organizational relationships are evolving, and one prime example for furthering the development of research may be the synergy between the academic enterprise at LLU and the research laboratory found in the LLU medical centers. A program of research from bench science to clinic is surely a possibility. The unification of resources called for by the LLUAHSC Research

Strategic Plan should leverage the expertise of the current faculty and enhance faculty expertise where strategically necessary.

In addition, students currently engaged in research activities stated that these activities are some of the highlights of their educational program. Expanding research efforts for both faculty and students will require committed resources. For example, faculty articulated in meetings with the visiting team very specific instances of technological support needed to enhance campus research activities – in particular, website updates and web pages developed to articulate research policy, grant application requirements, and other particulars that must be communicated to students for their successful pursuit of extramural funding. At the time of the visit, there was concern among faculty about the backlog of website development requests that could advance scholarly activities and promote co-curricular opportunities (CFR 3.7).



Educational Effectiveness Review – stimulated the progress it has made; however, the deep commitment of the faculty and staff to LLU’s core values provides the richest resources for the institution’s continuing commitment to educational effectiveness assessment and data-driven decision-making.

The following commendations and recommendations stem from evidence and analysis reported by the team following its Capacity and Preparatory Review visit as well as its Educational Effectiveness Review visit.

#### COMMENDATIONS:

Faculty, administration, and staff have – heroically and in mach speed – developed and begun the implementation of University-wide assessment and program review processes to help ensure the educational effectiveness of LLU’s programs and the systematic sharing of assessment data among stakeholders (CFRs 2.7, 4.3, 4.4, 4.6).

An extensive and active organization facilitates educational effectiveness at LLU, including the Office of Educational Effectiveness. Numerous active and insightful committees have worked diligently over the past two years to develop program reviews, student learning outcome measures, and institutional databases, and to incorporate these into the fabric of the University. The communication of best practices across programs through this committee structure is exceptional. These processes have resulted in an enhanced collaborati

The University offers excellent opportunities for student clinical experiences that provide interprofessional service learning and extracurricular academic linkages (CFRs 1.5, 2.9).

Transformative service-based education is a core value of students, faculty, and staff (CFRs 1.5, 2.9, 4.7).

The faculty work across disciplines to ensure programmatic and educational excellence (CFRs 3.11, 4.6, 4.7).

The faculty and staff of LLU are dedicated to ensuring the success of their students (CFRs 1.2, 2.5, 2.10, 2.13).

#### RECOMMENDATIONS:

The team recommends that LLU consider developing a systematic approach to faculty, staff, and administrator evaluation, with adequate professional development opportunities and the implementation of a reward structure institution-wide (CFRs 2.8, 2.9).

The team recognizes that excellent research occurs at LLU and applauds these basic science and clinical projects. For LLU to fulfill its mission as a premiere academic health sciences university, the team recommends that LLU consider operationalizing the commitment to research on campus and providing sufficient resources including protected faculty time and a reward structure that encourages faculty and student engagement in research activities (CFRs 2.8, 2.9, 3.3, 3.4).

The team recommends that LLU consider engaging in a review of the institution's technology resources and its website to improve their functionality and effectiveness for both internal and external constituencies (CFRs 3.6, 3.7).

As LLU continues strategically to grow, attention to centralized functions, redundancies, and areas that are best managed across Schools is essential. The team recognizes LLU's significant progress in establishing an educational effectiveness structure and recommends that LLU continue to mature its institutional research function on campus toward its goal of supporting all analyses to inform strategic planning and budgeting (CFRs 2.10, 4.4, 4.5, 4.6).

As LLU continues in its mission to become the premiere academic Adventist Health Sciences Center with strong educational and research components, the team recommends that LLU consider encouraging its governing board to engage in self-review to ensure that its composition has appropriate academic expertise among its members for effective oversight of the academic and research enterprise of the institution (CFRs 1.3, 4.6, 4.8).

The team recommends that LLU consider institutionalizing the intra-School communication and collaboration among members of the campus community that have evolved from

## APPENDIX A

### LOMA LINDA UNIVERSITY – RIYADH, SAUDI ARABIA CAMPUS

Currently, Loma Linda University (LLU) operates a satellite campus in Riyadh, Saudi Arabia (LLU-SA), where two degree programs are offered (BS in Respiratory Therapy and AS in Medical Radiography). The LLU-SA facilities were visited by a member of the EER visiting team (accompanied by WASC staff) on October 17-18, 2010, as part of the home institution's EER review.

#### Administration and Student Support Services

The LLU-SA degree programs are administered in Saudi Arabia with the cooperation and support of the main campus in Loma Linda, California. Registration, student records, and other enrollment service functions are managed with the central data systems of the main LLU campus. The language of instruction is English, with English proficiency being one requirement for admission into either program.

In addition to electronic system connections with the main campus, a high-quality video streaming system permits the LLU-SA programs to connect with the main campus for instruction, meetings, and other needs (CFR 3.7).

According to the Saudi program officials, program directors at LLU, and available reports, the LLU-SA programs are self-sustaining and adequately funded for long-term stability and continuity. Records indicate financial independence in the past two years (CFR 3.5).

## Respiratory Therapy (RT)

### History

LLU's strong professional relationship with the Saudi Arabian medical community began in the 1970's with LLU's participation in the heart transplantation program that began in the Kingdom at that time. The Respiratory Therapy program emerged in 1987 from the recognition that inadequate respiratory care was a primary contributor to high patient mortality and morbidity after successful surgical outcomes following heart transplantation. The program operated as an Associate of Science degree until 2001 at the Prince Sultan Cardiac Center in Riyadh, when it was discontinued for administrative reasons. Approximately 75 students had graduated from the AS program by that time. In 2006, the program was renewed as a Bachelor of Science degree and administered in conjunction with the Dallah Foundation and Hospital. The LLU-SA program in RT holds full accreditation from respiratory therapy accrediting bodies based in the United States (CoARC and CAAHED) and Saudi Arabia (Saudi Commission for Health Specialties).

## Program Summary

The RT program at LLU-SA is a completion program in which students complete two years of prerequisite and general education courses prior to entering the LLU-SA program. The RT program at LLU-SA is identical in content and length to the program at the LLU main campus in California, consisting of 112 credit hours in two years of didactic and clinical instruction. The didactic portion is administered primarily at the program's facilities at the National Institute for Specialized Health Training (the Institute) in collaboration with Dallah Hospital Complex and Foundation by full- and part-time LLU faculty. The Institute includes classrooms, laboratories, study rooms, and faculty/administrative offices. Clinical training occurs at three state-of-the-art facilities: King Faisal Specialist Hospital and Research Centre (KFSHRC), King Fahad National Guard Hospital, and King Abdulaziz Medical City. The instructional staff includes over 14 full-time and numerous hospital staff at the three facilities. Currently 42 students (32 male, 10 female) are enrolled in years 3 and 4 of the LLU-RT program. In the first two years of the BS program, 22 students graduated—all have passed the NBRT certification and are employed.

## Educational Effectiveness

Many measurable outcomes indicate a highly effective educational process in the RT program, including high graduation rates (>94%), low attrition rates (<10%), high board (NBRT and CRT) pass rates (>95%), high employment rates (100% for last three cohorts, 90% employed after 10 years post-graduation), and significant impact of alumni on the RT profession (> 90% of Respiratory Technologist in SA are LLU graduates) (CFRs 1.2, 2.6, 2.10).

## Medical Radiography (MR)

### History

The Associate of Science degree program in MR at LLU-SA was established in 2009 in response to requests by officials at KFSHRC to provide a reliable source of well-trained radiographers.

The first students entered the program in January of 2010.

### Program Summary

The LLU-SA program in MR is identical in content and length to the MR program at the home LLU campus and consists of 60 course hours of instruction. The didactic portion of the program occurs in modern, well-equipped classrooms at the KFSHRC facility; clinical training occurs within state-of-the-art facilities in the clinical departments at KFSHRC. Didactic instruction of the MR students is provided by a full-time director and approximately 2.5 FTE of part-time faculty. The current first-semester class consists of 6 male and 6 female students.

Given the planning, structure, facilities, and faculty of the MR program, it is reasonable to expect the MR program will be successful in its intended purpose to provide well-trained medical radiology professionals (CFRs 2.1, 3.1, 3.2, 3.8, 4.1, 4.2).

**COMMENDATIONS:**

Facilities

Both LLU-SA programs are administered in well-equipped teaching facilities, and clinical training components are conducted at world-class clinical sites in three state-of-the art medical facilities (CFR 3.6).

Success

The RT program clearly meets its stated objectives and demonstrates its success in many ways: high graduation and board-pass rates, high degree of individual alumni successes, and extensive contribution of alumni to the profession in Saudi Arabia. In addition, the LLU-SA program is highly regarded by the medical community.



Connectivity

RECOMMENDATIONS:

The following recommendations are offered to assist the LLU-SA programs in their continued success. The team recommends that LLU consider:

Promoting the continued development of training programs to assist clinical preceptors (CFR 3.4);

Assuring that any growth in the number of programs in Saudi Arabia align with the strategic plans of the main campus and institution as a whole (CFRs 4.1, 4.2, 4.4);

Assuring that Saudi Arabia programs are fully integrated with program review activities of the main campus in an appropriate manner (CFR 2.7);

Creating a formal alumni organization that would help to connect alumni with the institution (CFR 2.13).