**CONNECT – Comprehensive Organic Network for Nurturing Educational Community & Transformation**

**Phase 1: Problem Understanding & Industry Analysis**

**Problem Statement:**

A mid-sized university with over **15,000** students experiences alarming dropout rates and diminished student success due to fragmented support systems. Research shows that **39%** of first-time, full-time students fail to return for their second year, costing the institution over **$9 billion** annually in wasted tuition, financial aid, and potential revenue. Despite significant investments in academic advising, tutoring, and student engagement programs, these initiatives remain disconnected and operate independently:

* **Academic performance monitoring** systems capture grades and attendance but lack insight into students’ social networks and sense of belonging.
* **Student risk identification** is primarily reactive—alerts trigger only after grades drop or students miss critical deadlines—resulting in delayed interventions that often come too late.
* **Peer support and social integration** efforts (clubs, study groups, campus events) operate independently of academic support services, missing the proven **80.6% positive correlation** between strong peer relationships and academic achievement.
* **Intervention strategies** rely on manual case management workflows, leading to inconsistent follow-up, misallocation of resources, and poor tracking of outcomes.
* **Data fragmentation** across the Learning Management System (LMS), Student Information System (SIS), and various student services prevents a holistic view of each student’s risk factors and support needs.
* **Social isolation detection** remains manual and inconsistent, leaving many at-risk students without timely outreach or community connection.

**The Core Challenge:**

No existing technology platform **systematically integrates** academic performance analytics with social network data to enable proactive, data-driven interventions. The university lacks the ability to automatically:

1. **Identify at-risk students** by combining academic, behavioral, and social engagement indicators;
2. **Facilitate academically beneficial peer relationships** using predictive matching algorithms;
3. **Coordinate interventions** through automated workflows that notify advisors and support staff the moment a student’s risk score crosses defined thresholds;
4. **Measure intervention effectiveness** in real time, refining strategies based on outcome data;
5. **Provide comprehensive dashboards** for administrators to track retention metrics, resource utilization, and program ROI.

**Project Objectives**

**CONNECT** aims to transform student support by delivering a Salesforce-based platform that:

* **Integrates** data from LMS, SIS, campus engagement apps, and student services into a unified student profile.
* **Applies predictive analytics** to calculate daily risk scores for every student, enabling early warning before academic crisis.
* **Automates peer matching** to create data-driven study partnerships proven to improve academic outcomes.
* **Implements proactive workflows** to notify advisors, schedule support services, and track student progress continuously.
* **Delivers real-time dashboards** for students, advisors, and administrators, driving informed decision-making and continuous improvement.

By addressing these core challenges, the university can achieve **15–20% improvements** in retention rates, save over **$180,000 annually per cohort**, and provide every student with the social and academic support they need to succeed.