

## LITERATURE REVIEW

### INTRODUCTION

Several empirical studies have examined the use and effectiveness of Graduate Tracking Systems in higher education institutions.

Gaebel et al. (2012) analyzed graduate tracking practices across European universities and highlighted their role in quality assurance and curriculum improvement.

Schomburg (2016) studied tracer studies in higher education and found that graduate tracking data supports institutional planning and policy decision-making.

Maringe (2010) examined graduate employability in African universities and emphasized the importance of tracking graduates to align education with labor market demands.

Kamanzi et al. (2014) investigated graduate employment outcomes and demonstrated that tracking systems provide valuable feedback for program evaluation.

OECD (2019) reported that digital graduate tracking systems enhance data accuracy and support evidence-based reforms in higher education.

### EMPIRICAL STUDIES

#### **1. Gaebel et al., *Tracking learners and graduates' progression paths* (EUA report, 2012)**

**What it is:** A cross Europe survey/report that maps how higher education institutions approach graduate tracking and what technical or organizational choices they make.

**Methods:** Descriptive collected examples and practices from multiple institutions and countries focuses on models, aims, and basic technical setups rather than on one single empirical dataset.

**Key findings:** Institutions use tracer data mainly for QA, curriculum review, and accountability common challenges are low graduates response rates, lack of standard indicators across institutions and limited use of administrative records for follow up. The report highlights the need for institutional processes (not just a tool) to make tracer studies effective.

**Why it matters:** Establishes foundational concepts tracer studies are as much organizational as technical and success depends on embedding tracing into institutional procedures and policy use.

## **2. World Bank, *A comparative analysis of selected Graduate Tracer Studies* (Analytical Note, 2019)**

**What it is:** Comparative analysis of several national or institutional tracer studies, synthesizing features and trends across contexts.

**Methods:** Comparative review of existing tracer studies (methodologies, questionnaires, timing after graduation, indicators used).

### **Key findings:**

a. Many tracer studies vary widely in timing (from 6 months to several years after graduation) and in indicators used (employment status, relevance of skills, earnings)

b. Digital tools are increasingly used but are unevenly deployed.

c. Good practice includes mixed modes of contact (email, phone, employer contact) and standard core indicators so results are comparable.

**Why it matters:** Provides policy level lessons standardize core indicators, choose timing aligned to the labour market questions you want to answer, and combine digital data collection with active follow-up to reduce non-response bias.

### **3. Recent systems / case studies (example): *Graduates' Progression Tracking System (IJCNS paper, 2024)***

**What it is:** An applied engineering paper that presents a developed automated tracing system to capture graduate information annually (example of a system prototype or implementation).

**Methods:** System design and prototype (web-based and mobile components), usually tested with a sample of graduates or via simulated data; describes data flows, dashboards, and reporting features.

**Key findings:** Automated systems improve data collection speed and reporting; they help produce yearly indicators (employment rates, sector distribution, time to first job). Still authors report persistent problems keeping contact info current, ensuring data privacy, and achieving sufficiently high response rates without active outreach

**Why it matters:** Shows how modern tracer systems are implemented technically, and confirms earlier lessons good UX, data governance, and mixed mode outreach remain essential even when a system exists.