

Finding the right fit in academia and industry collaboration

An-Najah National University



www.najah.edu



ANajahUni

Why IT-Bridge: Needs Assessment

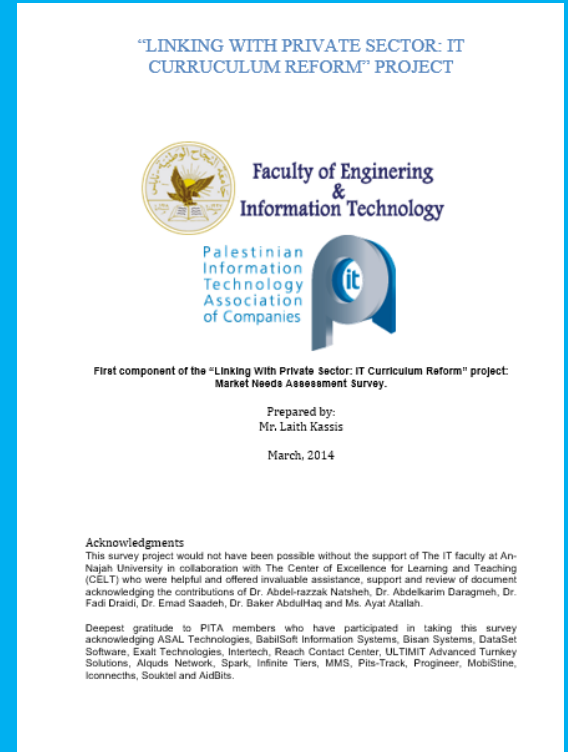
SW Development Manager:

“We find great difficulty in finding talent that suits our needs. We have to interview about 50 new graduates just to find 2 or 3 qualified employees. The CV will show that they have something [qualifications], but when you give them a test, large majorities don’t pass”

2013 IT trends Needs

- *Programming and Application Development*
- *Cloud/SaaS*
- *Virtualization*
- *Networking*
- *Mobile Applications and Device Management*

*“Most companies mentioned **networking** as the best source of finding talent”*



Getting Real in the World

- **More than social responsibility and feel-good moments.**
 - *More engaged in the shaping of curriculum and identifying the required skills sets for a particular industry.*
 - “Now, employers are saying, this is not just about doing good and giving back, it’s about making sure our industry can thrive and has access to a talent pipeline that will ensure our competitiveness,”
- A Syndicate Model “ Money is important”
 - **Reinventing University Roles in a Knowledge Economy**
- Promoting entrepreneurship “entrepreneurship education.”
- Promoting failure
- Try and buy: Commercializing innovations


“It goes beyond just counting degrees”

- *How did that student perform in the workplace?*
- *Did the university help the employer reduce its time to fill positions?*
- *Did the recent grads function adequately from the first day of employment, or did they require extra training?*

Industry



University



IMPOSSIBLE

?

- What is the current practice of the university-industry engagement related to students learning experience?
- What are the factors contributing to the effectiveness of the university-industry engagement?
- What are the prospects and challenges that the university-industry engagement faces?

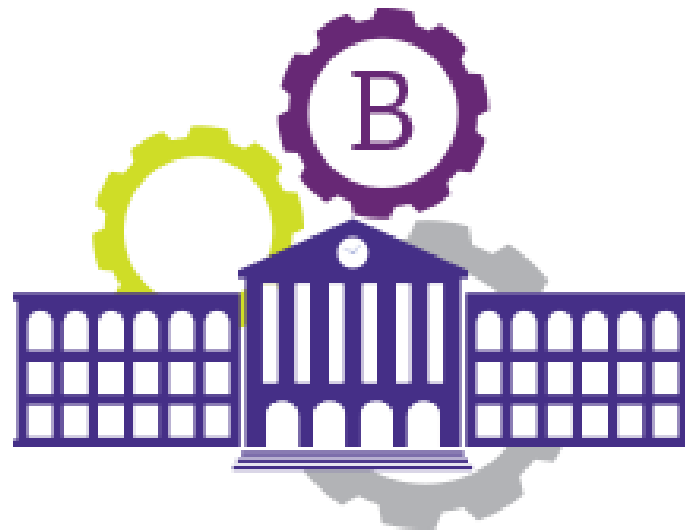
Getting Real in the World

Balancing Act

- The university must maintain its *academic freedom* while at the same time acting as a good steward of the money given to it by student
- The university should train students in fields where they can find jobs, *and for that, industry input is needed.*
- *Applied research and practical education is the current state of the world economy*

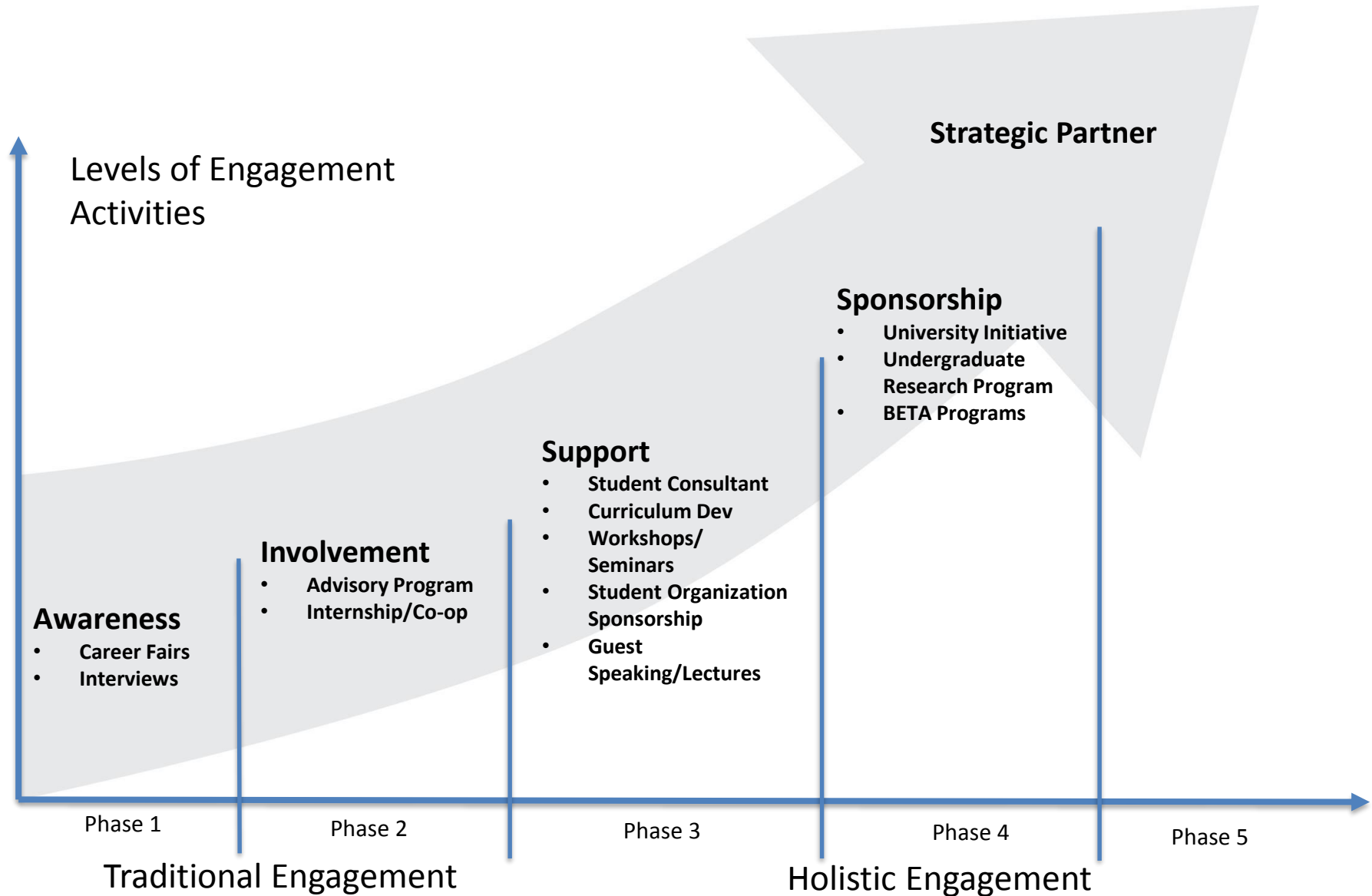
**CAP-Apprenticeship
Program**

**Partnerships and
Agreements**

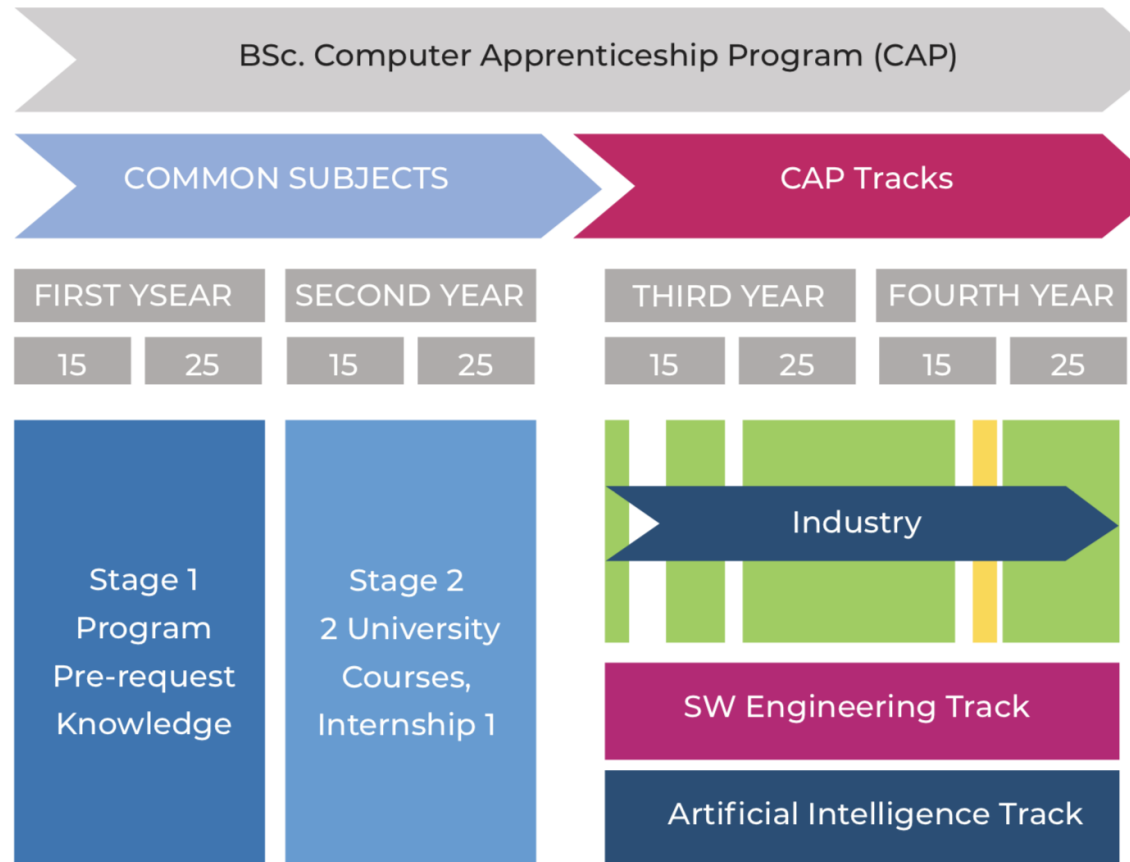


CAP Guidebook

**ANNU Polices &
Guidelines**



CAP-Apprenticeship Program





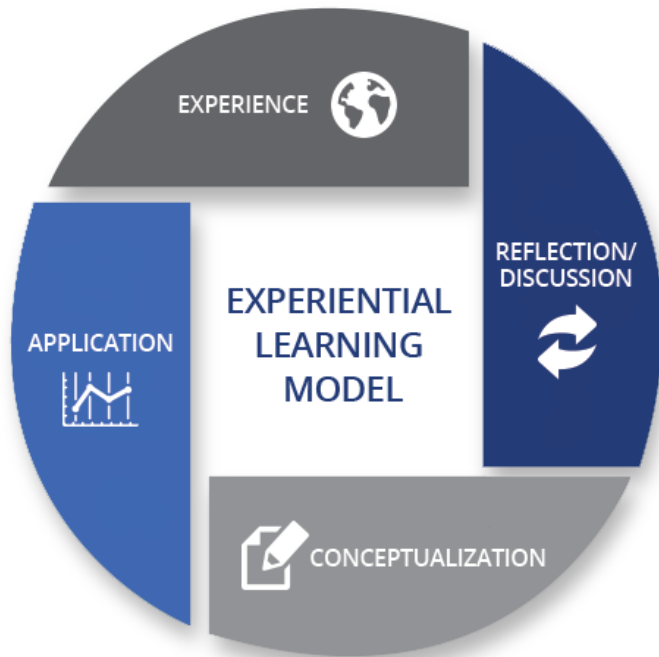
CAP-Apprenticeship Program



ISRA' SOFTWARE & COMOUTER
شركة إسراء للبرمجة والكمبيوتر



10 University-Industry Courses -Track



Redesign Courses to UI Courses

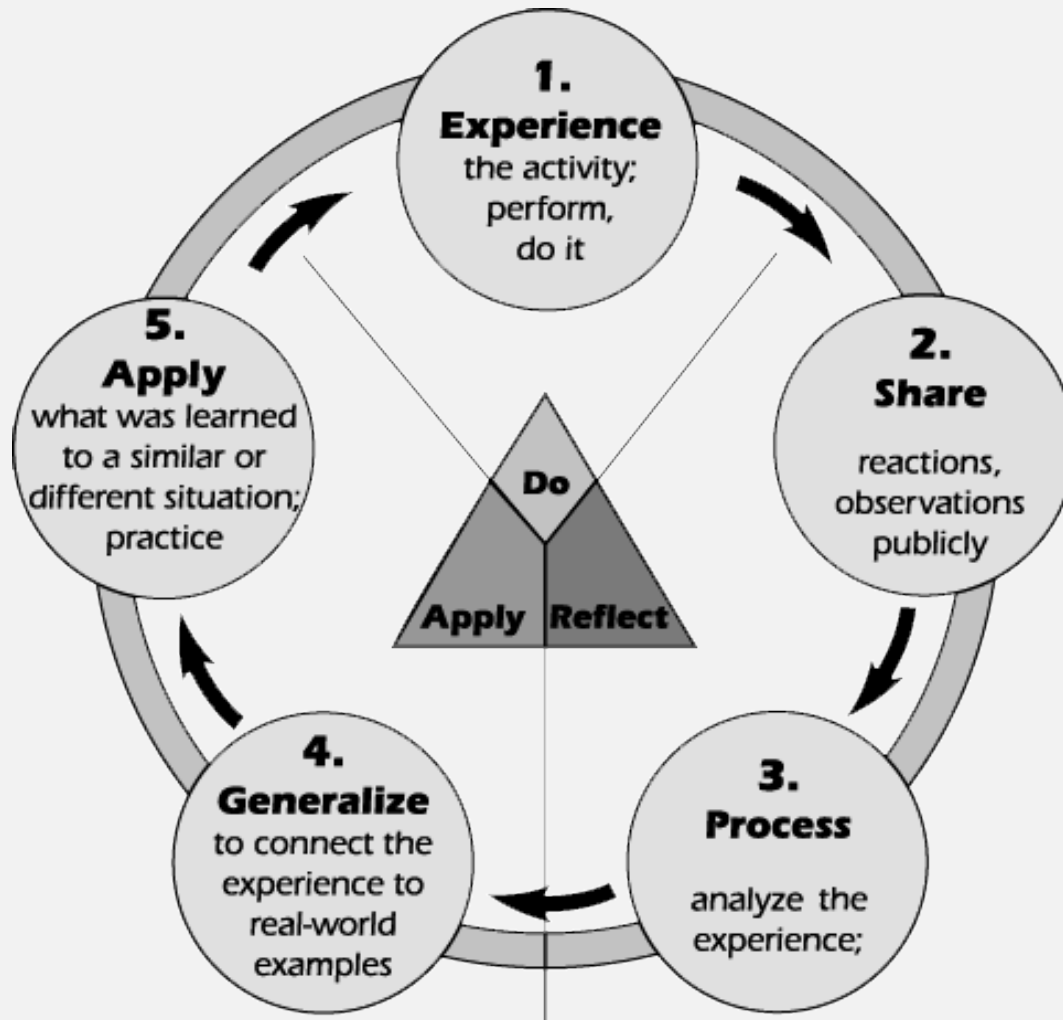
- Used learning pedagogy is Project and Problem based learning
- Knowledge + Practice = Professor+ Company Mentor
- **60 working hours in Company premises /UI course**
- New Assessment
- Team Work
- Focuses on Technical Competences
- Life Skills

Training directly linked to company environment

A photograph of two men in a workshop setting. One man is seated at a desk, holding a tablet, while the other stands behind him, working on a drone. The background shows various tools and equipment, suggesting a technical or engineering environment.

- Creating the right match between the degree program and the needs of businesses.
- Engaging learners in authentic business environments
- Providing personalized support





VERBAL TO VISUAL



WITH DOUG NEILL



SKETCHNOTING FOR EXPERIENTIAL LEARNERS

LEARNING FROM YOUR OWN EXPERIENCES

COMMON LEARNING ENVIRONMENTS



BOOKS



LIVE EVENTS



VIDEOS & AUDIO

LEARNING FROM OTHERS

-1-	-2-
A+B	A+C
-3-	-4-
B+C	A+B+C

SKETCH OUT
— THEN —
CARRY OUT



ACTIVE EXPERIMENTATION



CONCRETE EXPERIENCE

KOLB'S LEARNING CYCLE

REFLECTIVE OBSERVATION



SKETCHNOTED JOURNAL

IN THE MOMENT AFTER THE FACT

ABSTRACT CONCEPTUALIZATION

THE MULTIPLIERS

ABC
TEXT



LAYOUT

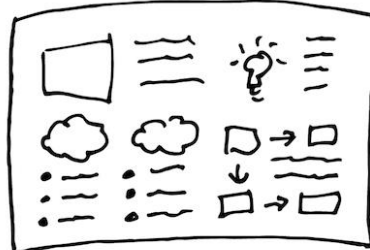


IMAGERY



COLOR

SKETCHNOTING



VISUAL SUMMARY

THE BENEFITS OF EXPERIENTIAL LEARNING

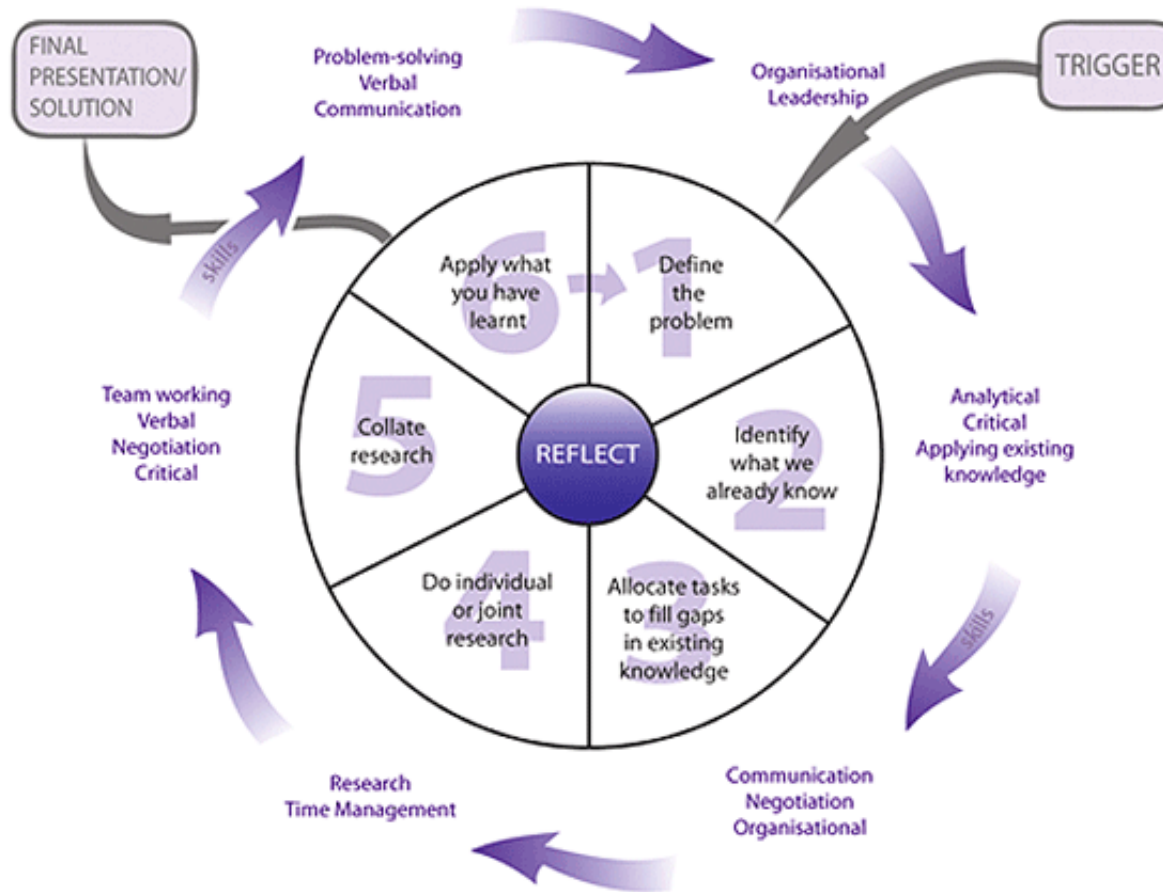


DEEPER INSIGHTS



LONG-LASTING LEARNING

PBL Process Diagram





Subject
practical advise

More options => more you can do

let them talk to you - listen

emotional help

Different Perspective
people

Listen & don't judge others
Allow others to
Cook themselves

Across
different
of the
world

Practical
decisions
based on
own will

Chose
Flexible
first

Trial &
Error

Stress
Sleepless
nights
Change schools

Call not
make my
thing, engage
as much as possible

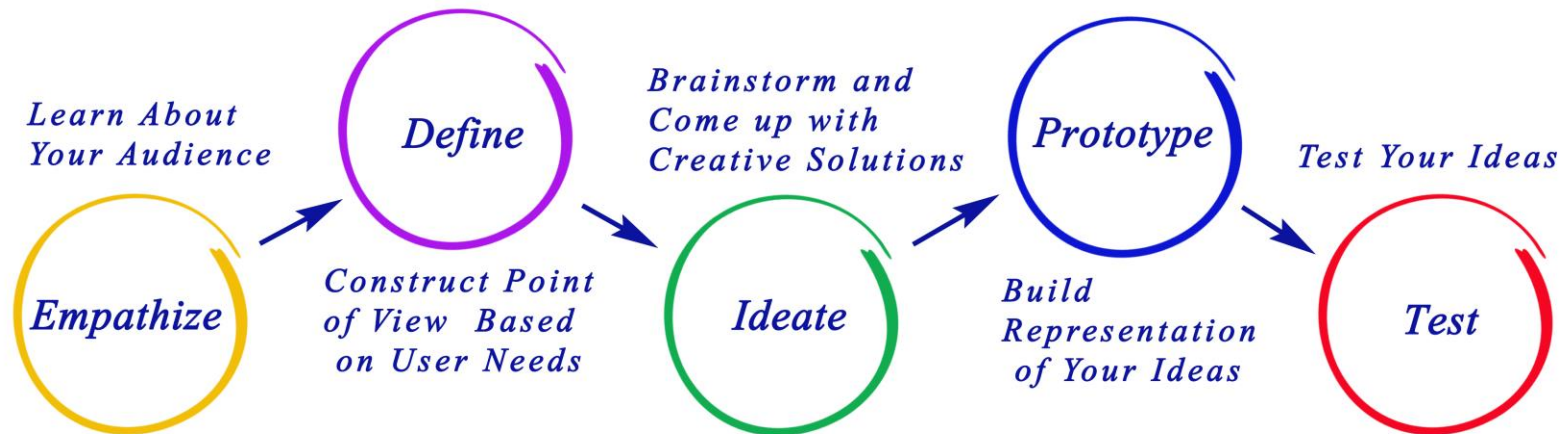
Practice
support

I'm all
over the place
Sofisticated
thinking

Elected and
one on one
open member
Focus path
of members

Ability
over things
Spirit

Design Thinking Process



TRAINING



GOAL

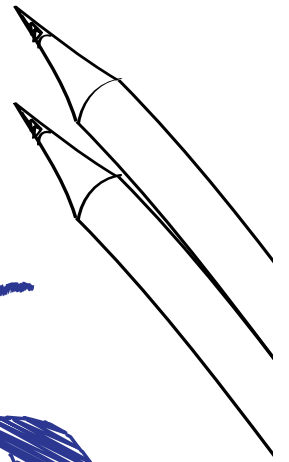
MENTOR



SKILL

DEVELOPMENT

Coaching



POTENTIAL

- EDUCATION ✓
- MOTIVATION ✓
- SUPPORT ✓



KNOWLEDGE



SOLUTION

THINKING

PROBLEMS

PLANNING

TEAMWORK

ACCOUNTING COMMUNICATION

ANALYSIS

ANALYSIS

SEARCHING PEOPLE

DATA

GROWTH

TEAM

SALES

DEVELOPMENT

INTEGRATED FUTURE

SALES

GLOBAL

SALES

STOCK MARKET

INNOVATION

CONCEPTS

PROFIT

CONNECT

IDEA

MOTIVATION

PROBLEMS

STRATEGY

BUSINESS

INTERNATIONAL

FUTURE

CONCEPTS

IDEA ONLINE

INVESTMENT

FUTURE

DATA

SALES

INTERNATIONAL

PROFIT

ADVICE

COMMUNICATION

ANALYSIS

SEARCHING

PEOPLE

DATA

GROWTH

TEAM

SALES

COOPERATION

PROFIT

CONCEPTS

TEAM

TEAMWORK

CONNECT

STOCK MARKET

STRATEGY

VISION

DATA

MARKETING

PEOPLE

VISION

SALES

DATA

IDEA

PEOPLE

SUCCESS

PLANS

ADVICE

GLOBAL

PLANNING

RESEARCH

TEAMWORK

SECURITY

PRODUCTIVITY

CONNECT

SHARES

ANALYSIS

MANAGEMENT

IDEA

DATA

TEAM

NETWORK

DATA

EXPERTISE

COMMUNICATION

MARKET

DATA

CONNECT

IDEA

PLANS

FINANCE

VISION

PEOPLE

SHARES

PEOPLE

FUTURE

BUSINESS

DEVELOPMENT

PLANS

DATA

PLANNING

NETWORK

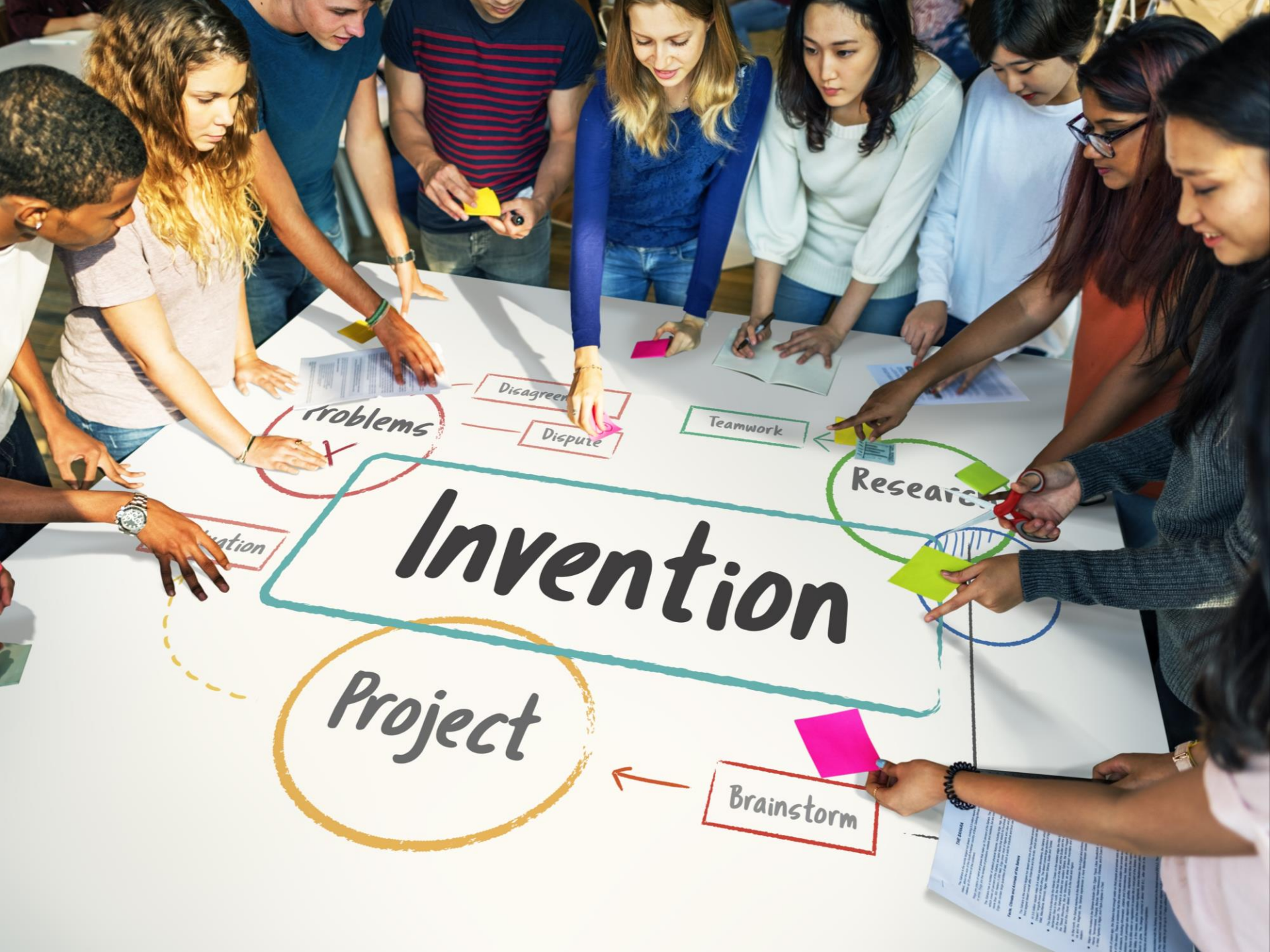
GROWTH

BUSINESS

IDEA

PLANS

CONCEPTS



Invention

Project

Problems

Research

Disagree

Dispute

Teamwork

Brainstorm

ation



Internship



Internship Objectives

Objectives for years 1 &2

- Discovering IT Industry in Palestine
- Preparation for job requirements (CV, motivation letter)
- Becoming familiar with the industry culture and various types of professional practices

Objectives for years 2 & 3

- Understanding the company and its technical modes of operation
- Developing the skills and applying knowledge to solve practical problems
- Demonstrating the skills of a junior employee in IT industry
- Working in a project mode
- Spending a period of pre-employment for companies

Multi-faceted Relationships



Level 1

Transaction

Level 2

Collaboration

memorandum of understanding

Level 3

Alliance

Examples: IT-Apprenticeship MOU

Level 1: Transaction

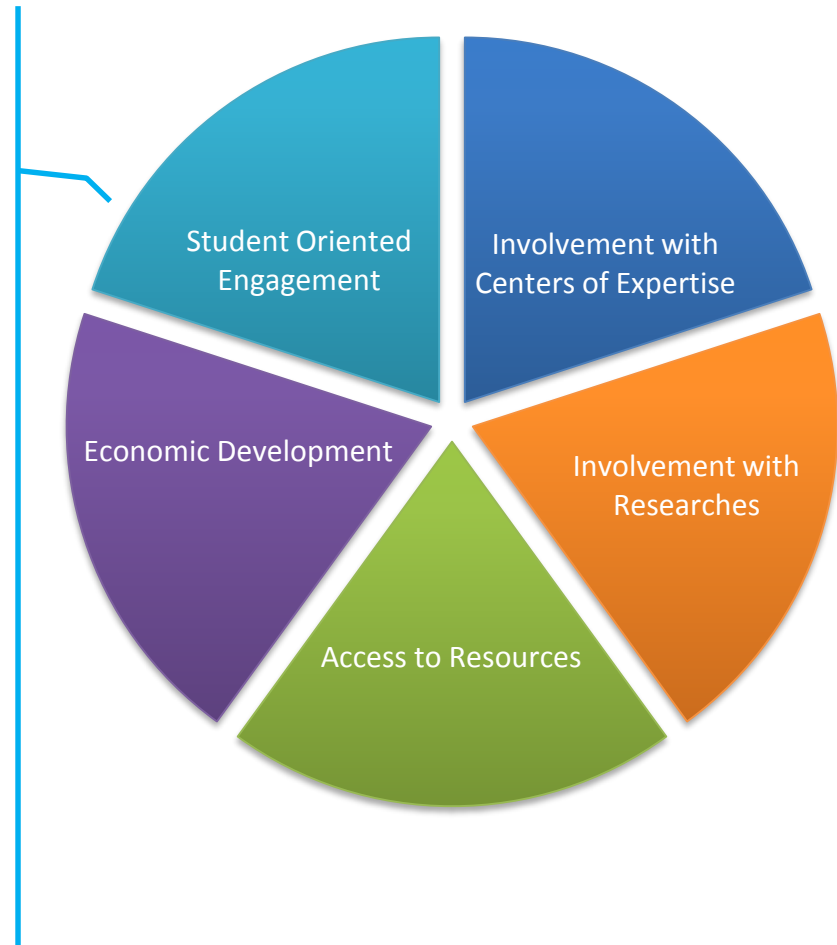
- Career Fairs
- Job Interviews
- company seminars on career options
- student organizations/club sponsorships
- student poster sessions
- innovation challenge/competition

Level 2: Collaboration

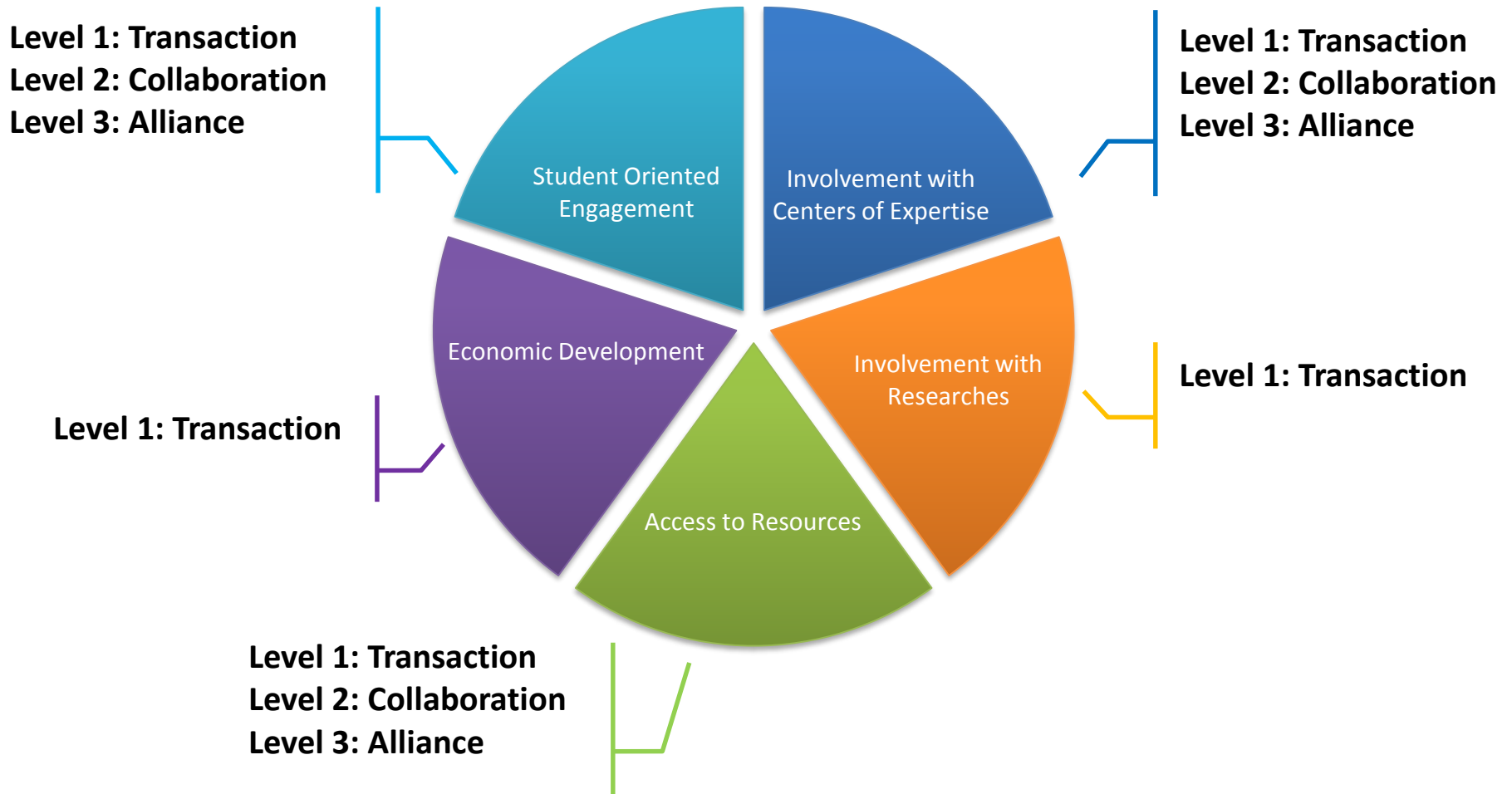
- course teaching, class projects
- curriculum Development / accreditation support
- Internships

Level 3: Alliance

- student consultancy
- student mentorships by company employees
- co-ops
- research topic sponsorships



Examples: IT-Apprenticeship MOU




Intellectual Property Policy

Technology Transfer, SPIN OFFS

New Policies & Guidelines

Professional Internship
Program

Specialist Lecturer



IMPOSSIBLE



Inspire Change & improve the
quality of learning

Thank you



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