

Working in Partnerships to Innovate



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Working in Partnerships to Innovate

2 case studies of partnerships

Berwick Technical Education Centre

- ❑ strong internal and external partnerships that support innovative and exciting engagement with young people

Controlled Environment Horticulture training facility

- ❑ supporting emerging skill needs through technology and innovative partnerships





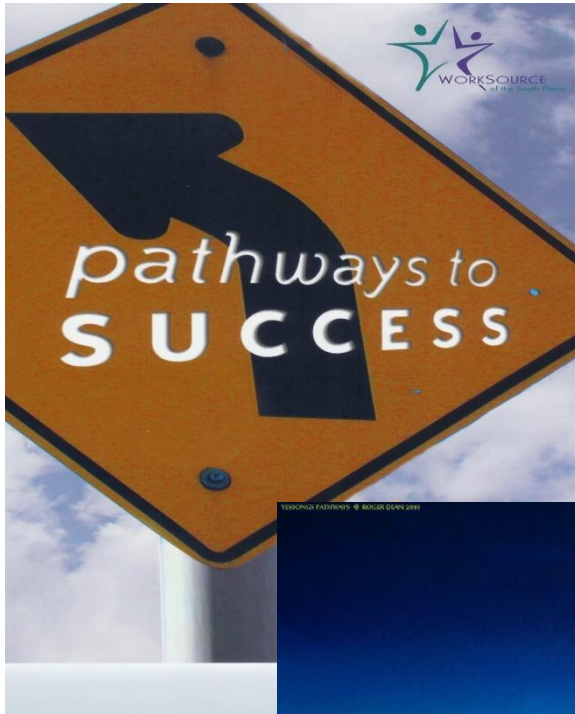


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Where to Next ?



When I grow up
I want to be a



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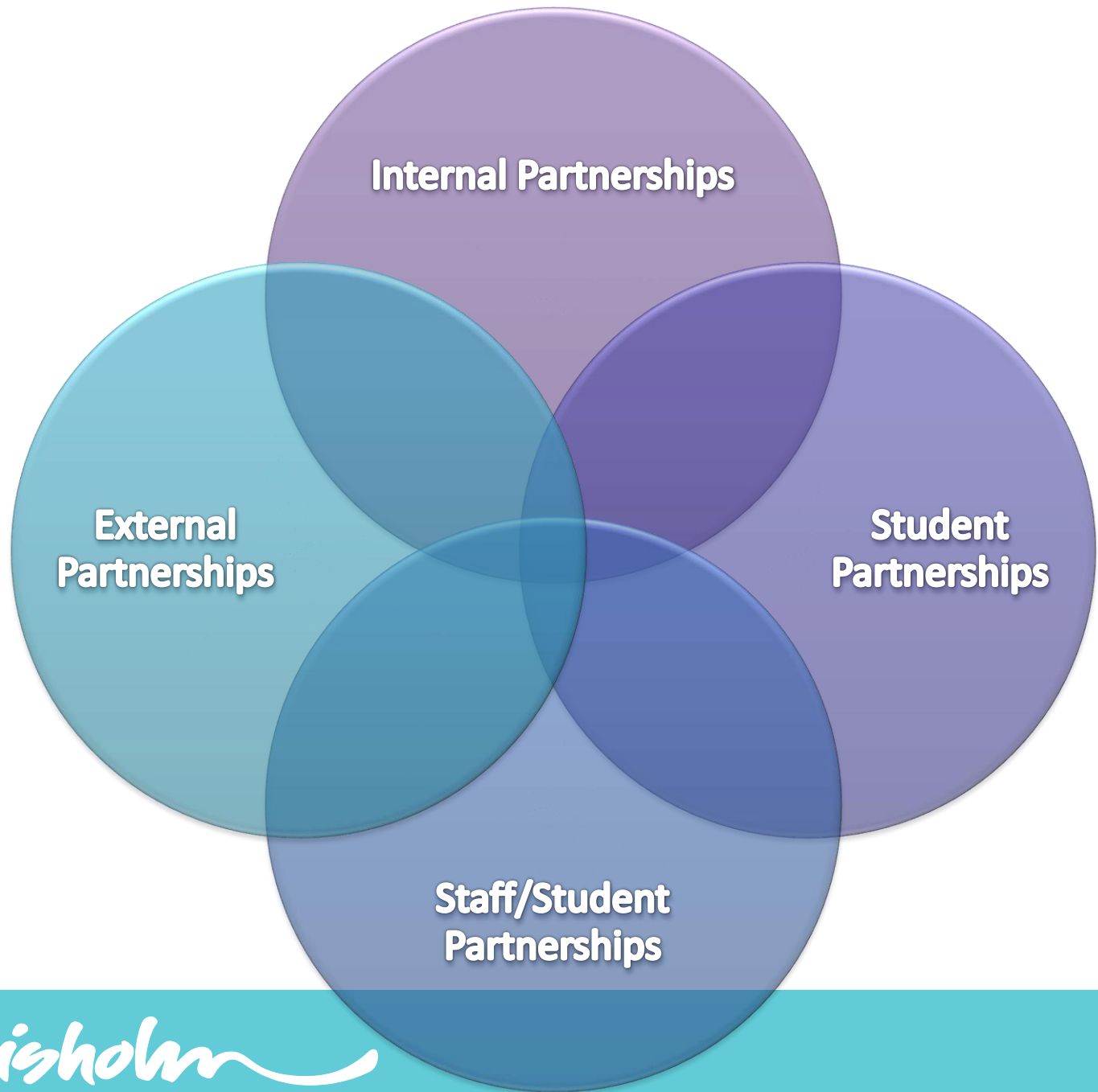
**SAFETY
FIRST**
REPORT ALL ACCIDENTS
NO MATTER HOW SMALL
TO YOUR FOREMAN



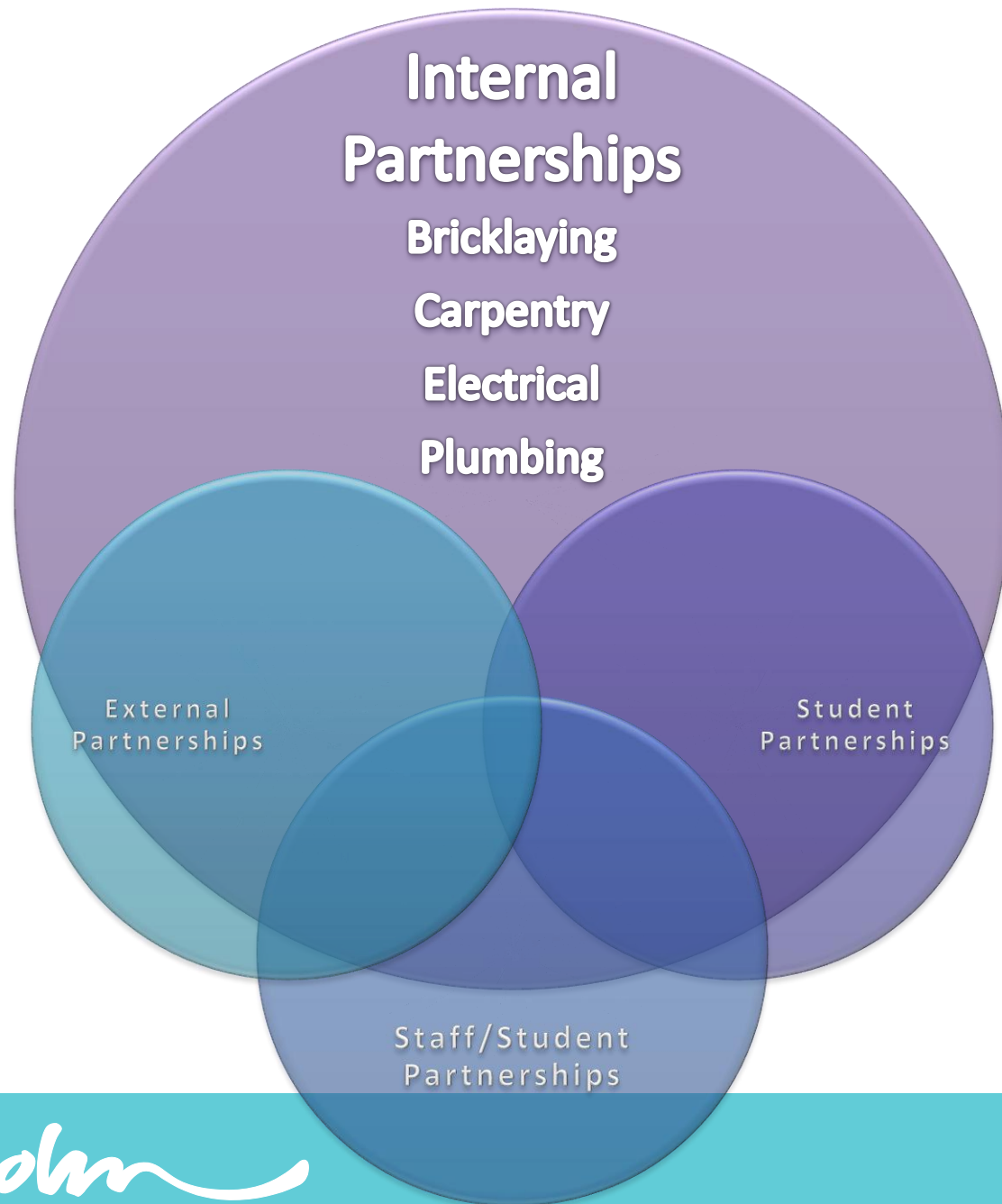
ALL
VISITORS
MUST
REPORT TO
SITE OFFICE

The Key Objectives

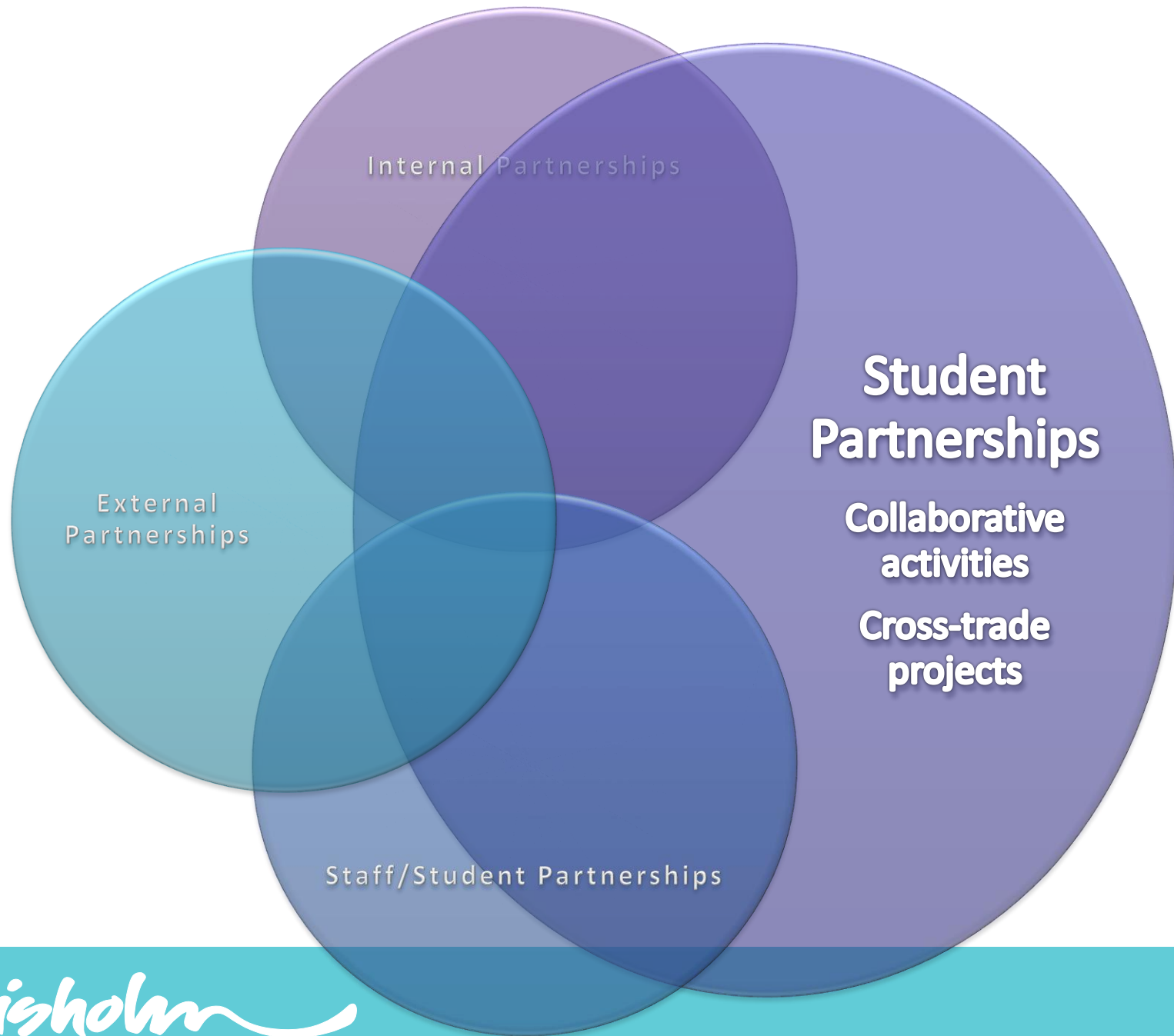
- An authentic approach to learning based on partnerships:
 - *Increased understanding of project management within the wider Building & Construction industry*
 - *Understanding of work-site OH&S requirements*
 - *Broader industry knowledge*
 - *Increased relevance to the workplace*
- Increased student engagement
- Improved employability skills
- Better outcomes



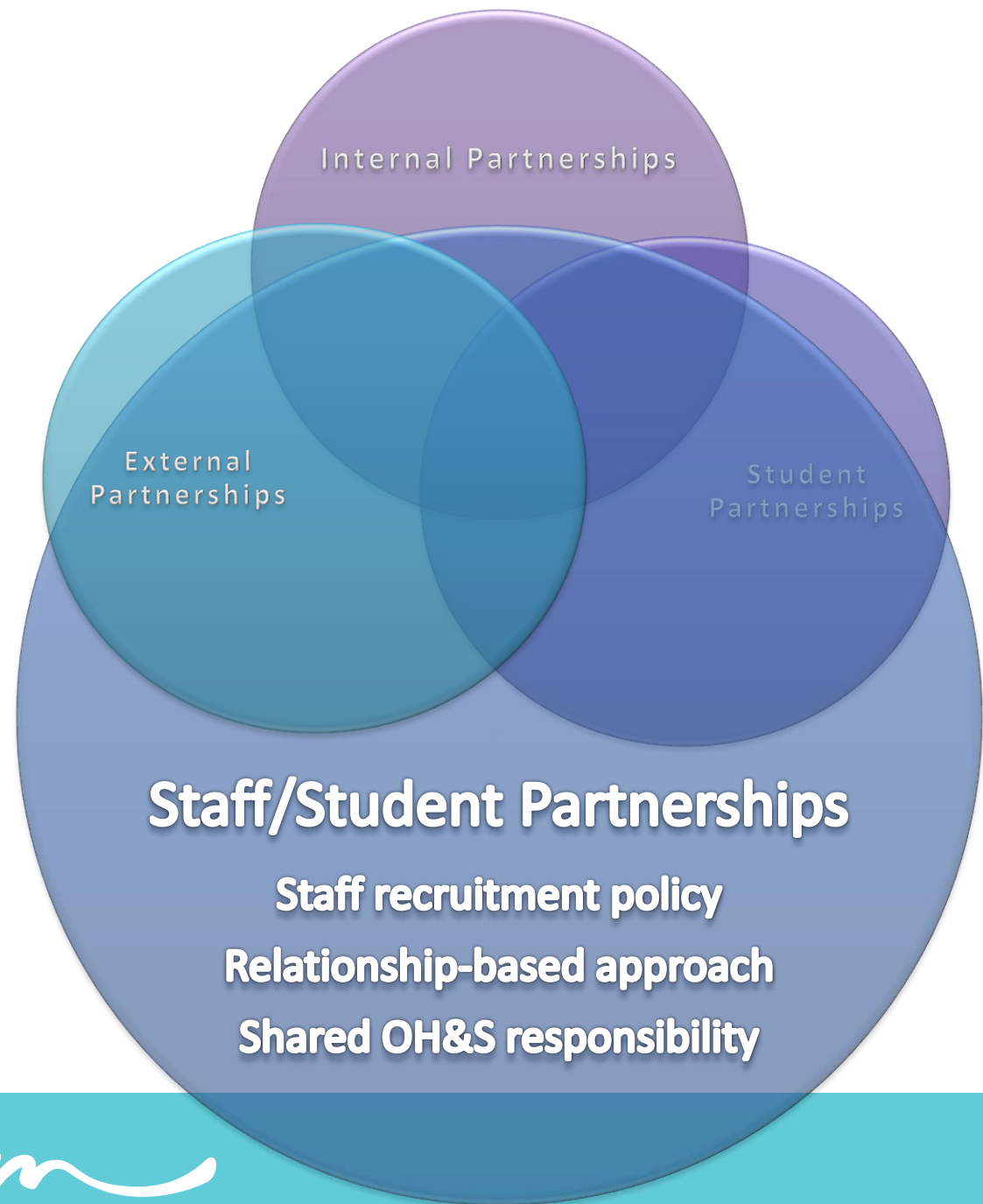
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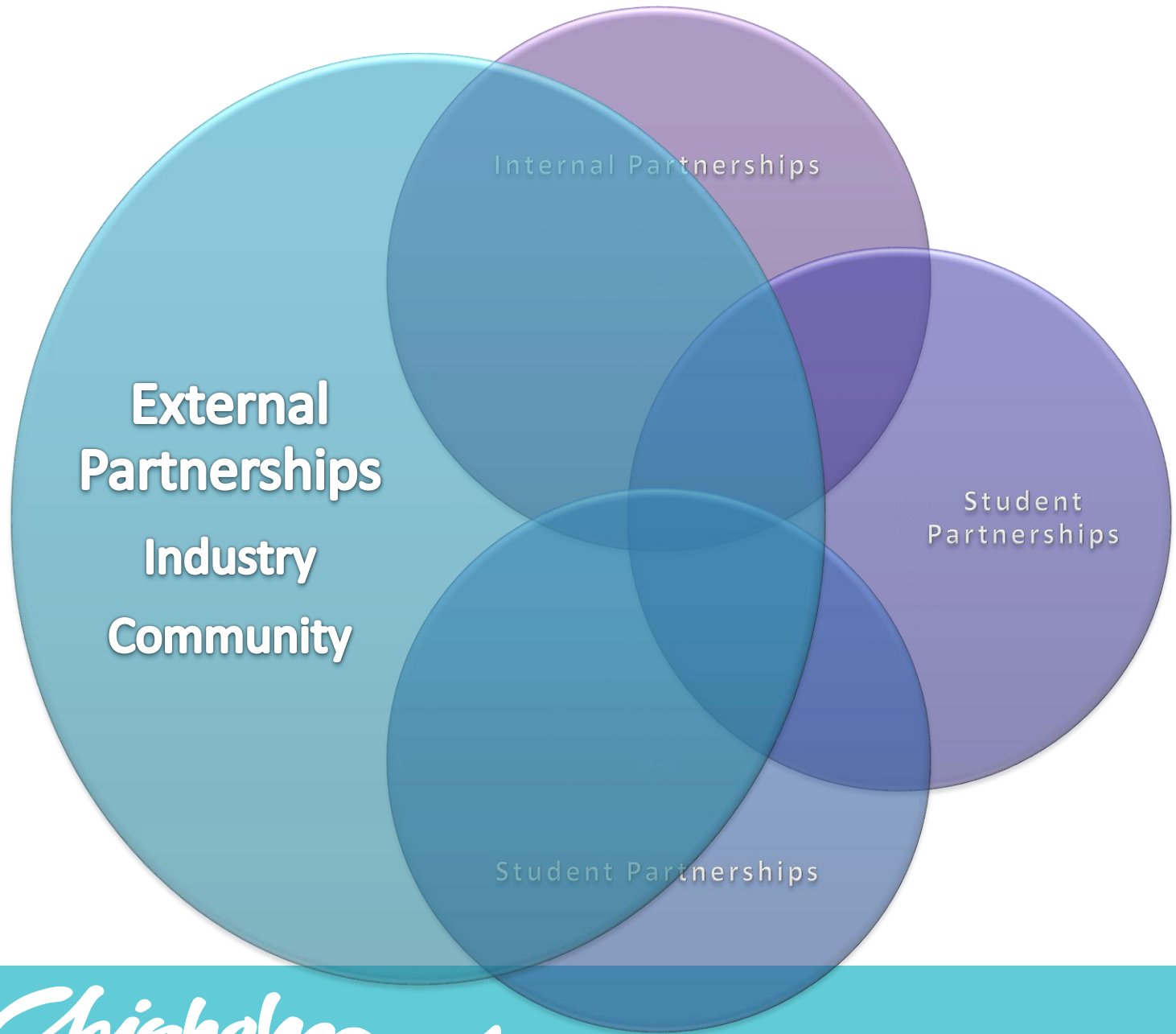


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Innovation



**Regional
Partnerships**

**Staff/Student
Partnerships**

**Student
Partnerships**

**Internal
Partnerships**

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Innovation



OUTCOMES

Qualifications

- Higher certificate achievement
- 83% Pre-App. / 90.5% VCAL

Pathways

- Better pathways outcomes
- 95% secured employment or are participating in further training

Engagement

- Higher level of student satisfaction
- Very low attrition rate

Individual

- Superior job-readiness
- Greater industry awareness

Technical

- Extended skill set
- Improved 'whole-of-project' understanding

Opportunity

- Equity – young people attaining goals, who have struggled in other learning environments

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Challenges

Preparedness to move away from 'the traditional', taking industry into account in the philosophy and delivery

Developing an applied continuous assessment and delivery model

Strategic staff selection

Maintaining momentum

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What we have learnt

It can be done...

And it can be replicated

The results so far speak for themselves

Thank you

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Carl van Loon

Director Powerplants

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Commercial Hydroponic Industry Overview

(from “Protected Cropping Response to Inquiry into Sustainable Development of Agribusiness in Outer Suburban” – Graeme Smith)

- Fastest growing food & cut-flower producing sector in Australia
- Valued at \$1.3billion farm-gate value per annum
- Equivalent to 25% of total value of vegetable and flower production
- Combining all sectors (retail, service providers, research, etc), industry contributes around \$1.8billion to the national economy
- Employs over 10,000 people throughout Australia
- Indirect employment multiplier (est x 2) = 20,000+ jobs
- Industry expanding at 4 – 6% per annum



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Industry drivers:

- ✓ Increased Yield per hectare compared to Traditional Open Field Farming of up to 900%
- ✓ Higher Quality Produce – less blemishes due to disease & insect damage
- ✓ Better Flavour due to ripening on the Vine/plant in greenhouse
- ✓ Massive reduction in Water consumption (compare 470,000 litres per \$100 of Rice produced to 24,000 litres for \$100 of Wheat to *600 litres per \$100 of Hydro Tomatoes* produced!)
- ✓ Less Pesticide / Fungicide, no Herbicides required due to protected conditions
- ✓ Ability to recycle 100% of water used – no runoff to rivers or water table
- ✓ Crops can be grown intensively all year near Cities, reducing 'Food Miles'
- ✓ Reduced Risks due to Storm Damage, Food Safety, Pest & Disease, Water Availability

The main impediments to the Industry at the moment are Training and Finance

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Intended Purpose of Facility:

Fill Training shortfall in fast-growing Protected Cropping Industry

- No suitable facility existed in Australia prior to completion of this project.

Why an Industry Partnership worked:

Chisholm Benefits	Powerplants'/Hortworks' Benefits	Priva (Holland) Benefits	HFF / PCA Benefits
Opening for new training markets	Showcase for latest Products	Showcase for latest Products & Services	Training for Grower Members
Supports regional community skills needs for emerging employment	Training for Growers	Training for Growers	Improves linkage to Growers
Demonstrates practical commitment to sustainability	Training Facility for Technicians	Training for Technicians from S.E . Asia	Advances the Industry
Provides network of relationships	Ideal location for R&D	Shows commitment to Australian market	Ideal venue for Functions
Cost effective maintenance and renewal of systems	Provides inspiration to Industry		

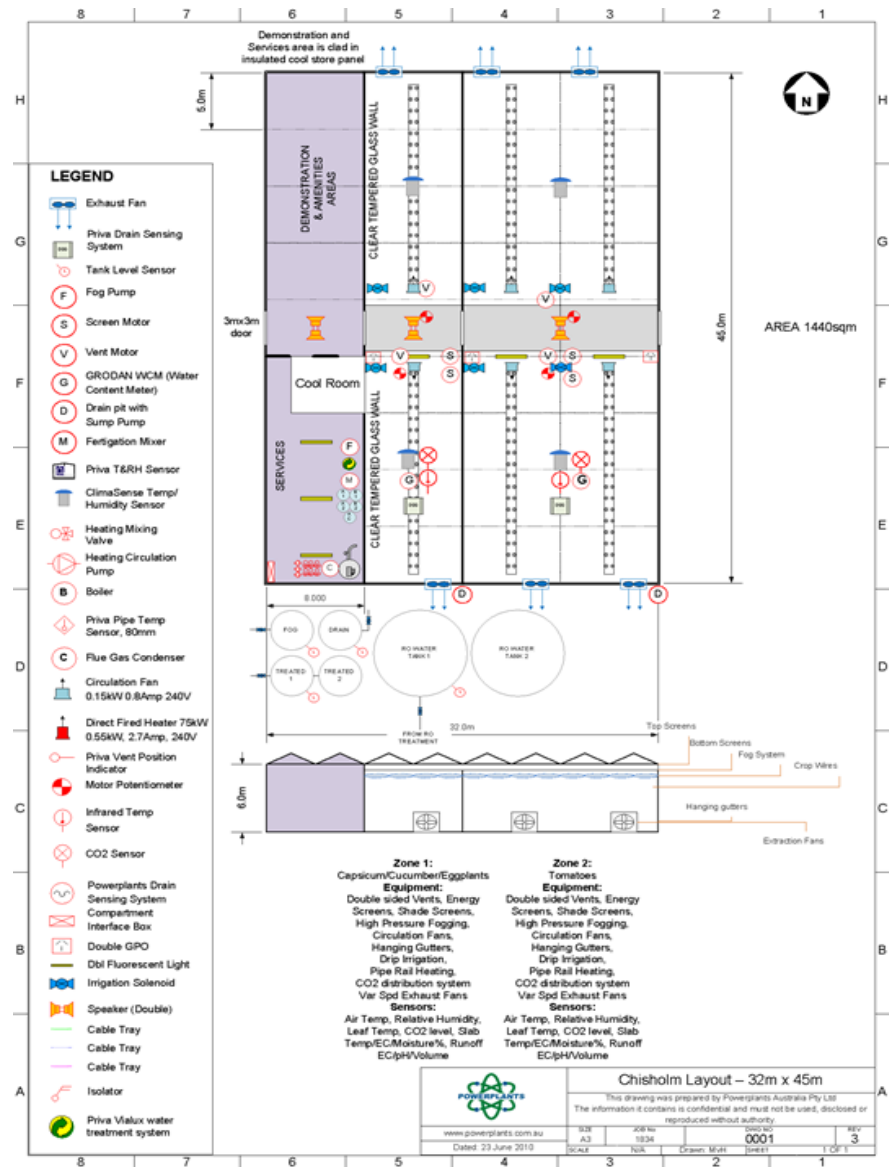
Layout of the Facility

Types of Crops that can be grown:

- Tomatoes
- Capsicum
- Chillies

After proposed Stage 2:

- Eggplant
- Cucumber
- Lettuce
- Herbs
- Asian Vegetables
- Strawberries
- Micro-greens



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Photos of the Project



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“Facilitating knowledge transfer” A new way of thinking



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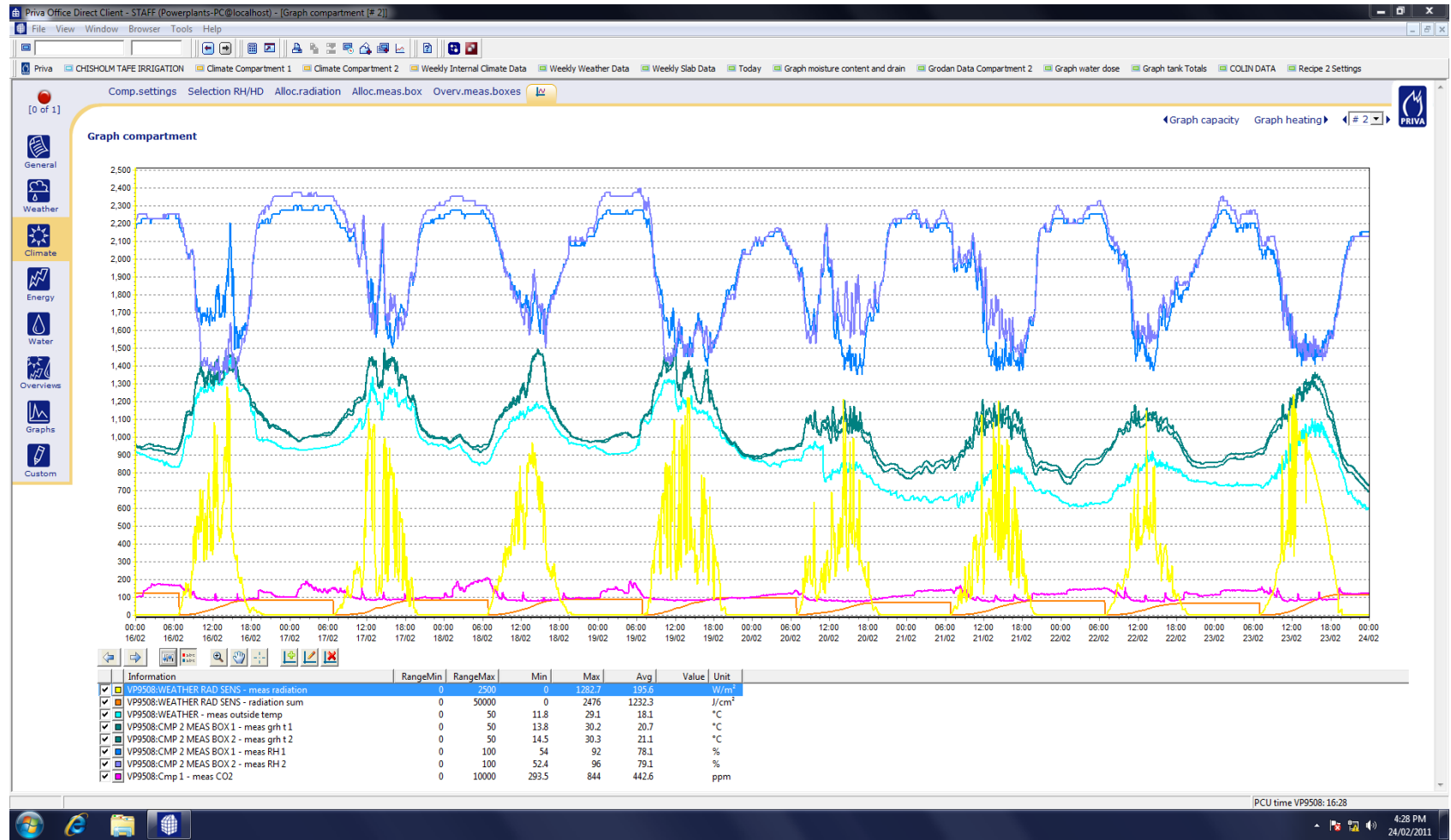


Career promotion - Technology



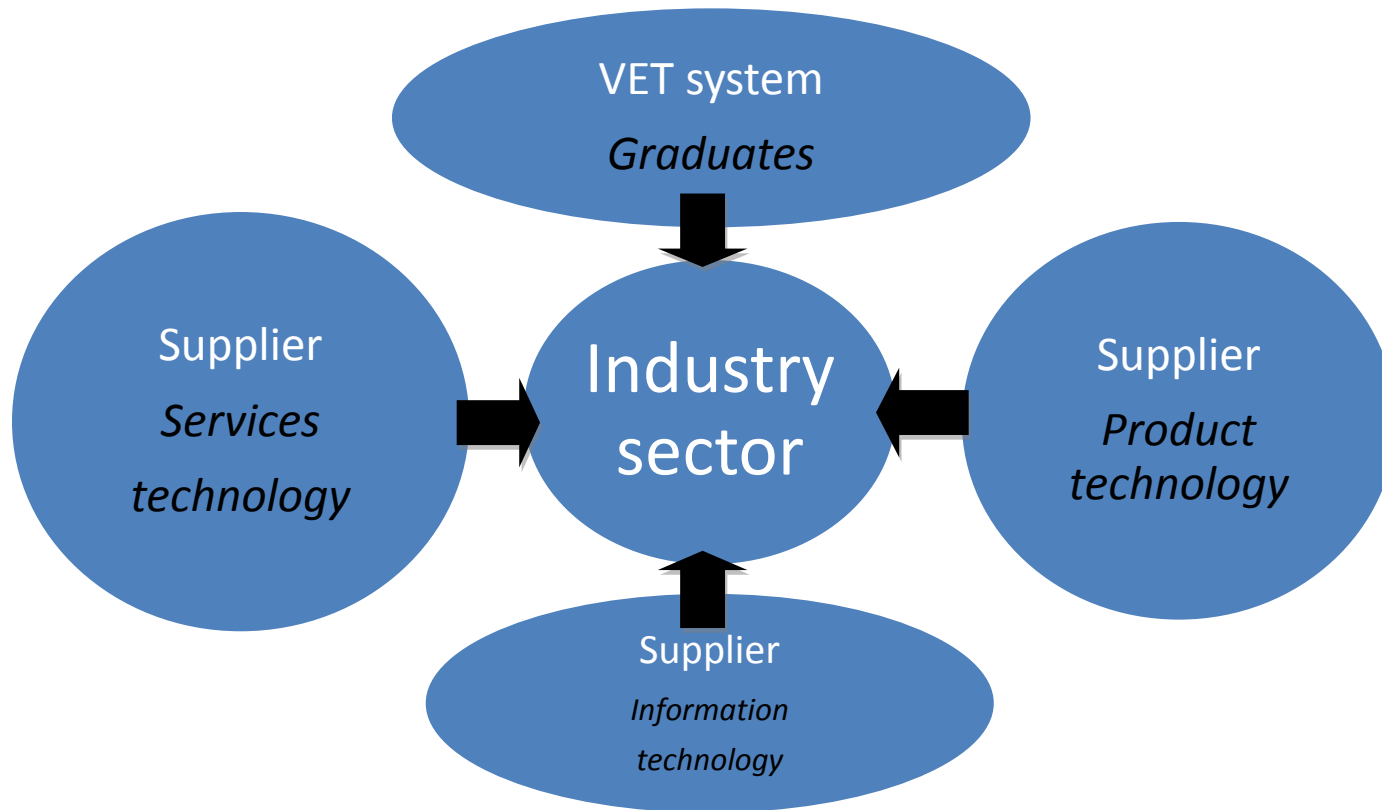
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Data Interpretation- vital skills

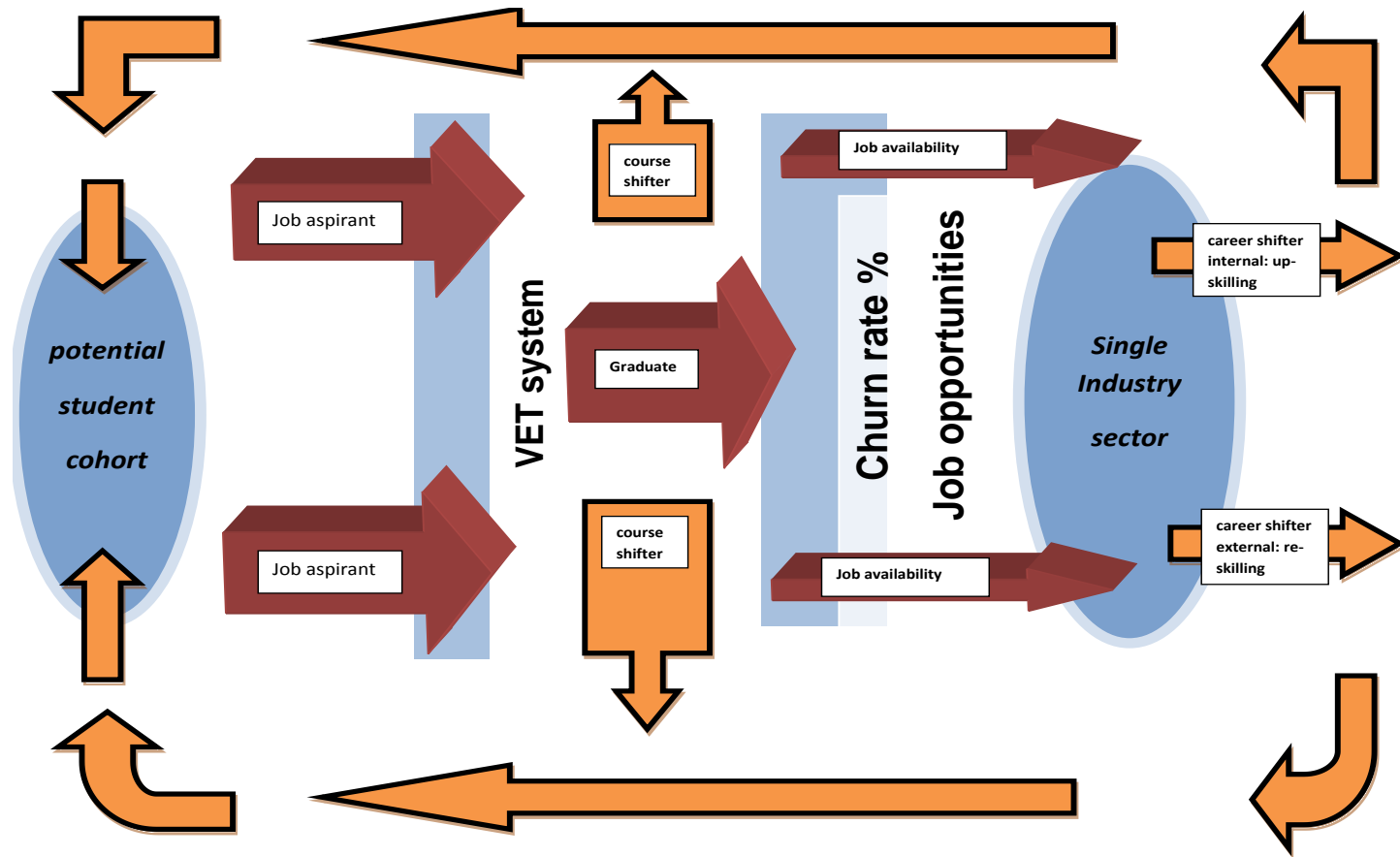


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Traditional knowledge transfer



Traditional VET skills pathway model



Employment opportunities within growth sectors

as there is Sector growth = more jobs = more graduates

- ☐ How can the VET sector influence Industry sector growth?
- ☐ How important is knowledge / technology transfer to Industry sector?
- ☐ Where and how does the Industry sector actually get currency in knowledge and technology?

Controlled Environment Production Horticulture – an emerging sector

Our “State of the Art” facility was designed and built by industry.

We have commenced to run and managed on Industry production scheduling, as near to live work as possible – challenging

It is a living applied research facility with suppliers of products / services / information “training” sector enterprises involved in new approaches, products and technologies.

– this will allow us a varied approach to the role, manner and influence of the training sector

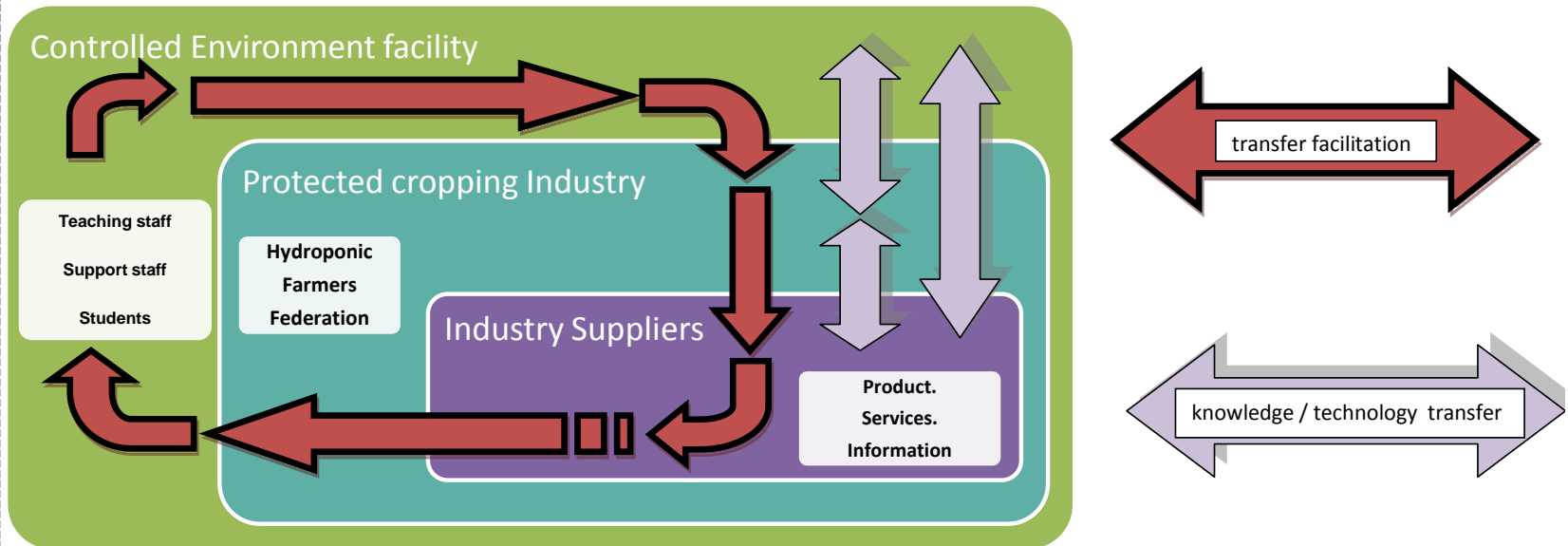
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MOU with PRIVA Industry Training Group

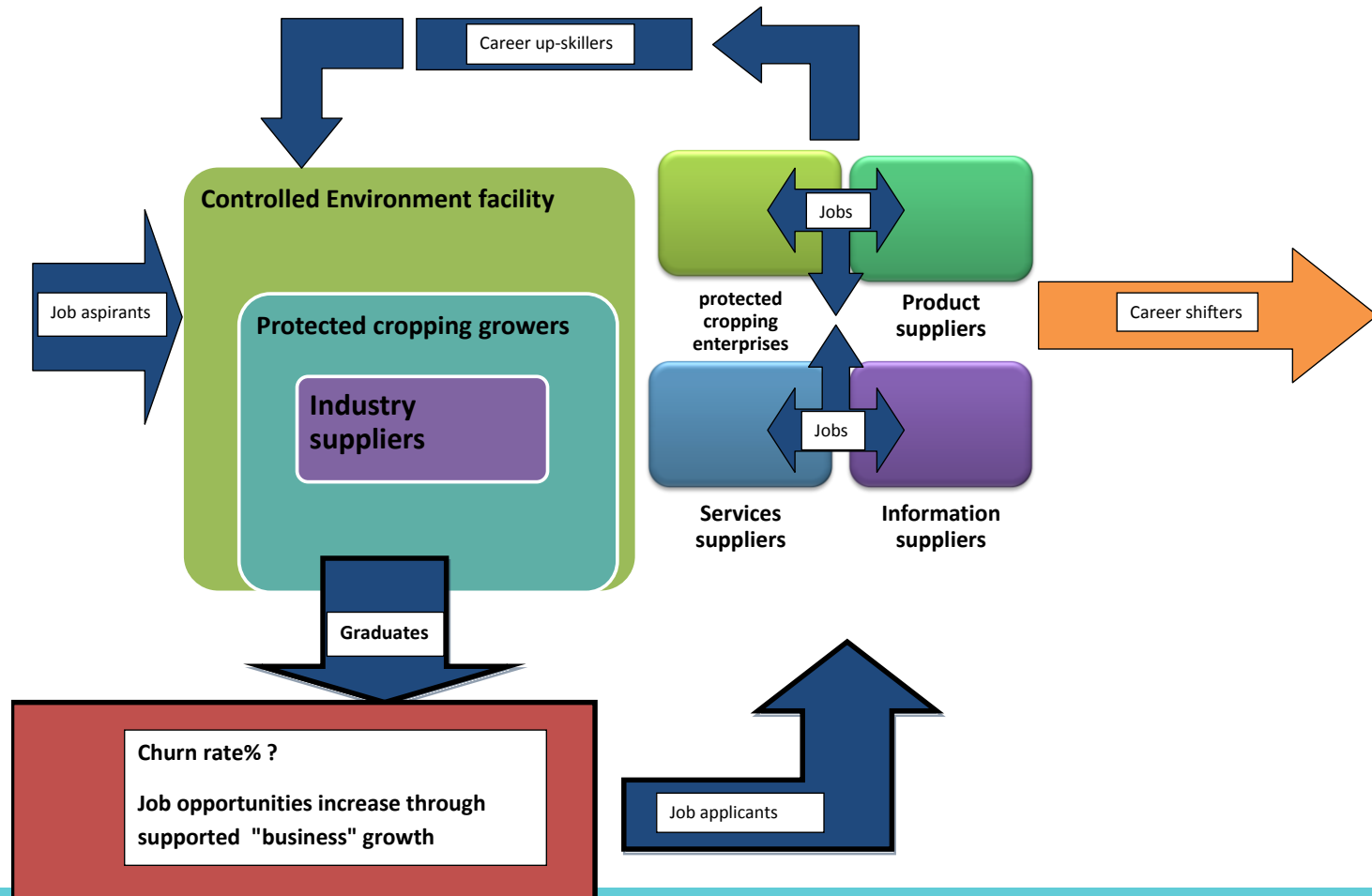


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New transfer model



New pathway model



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Your Comments and Questions

What are the key characteristics that determine “*innovation*” through effective partnerships ?

What messages that may be applicable for my Institute?

And

What will I action on return to my organisation based on the ideas presented ?

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