



**higher education  
& training**

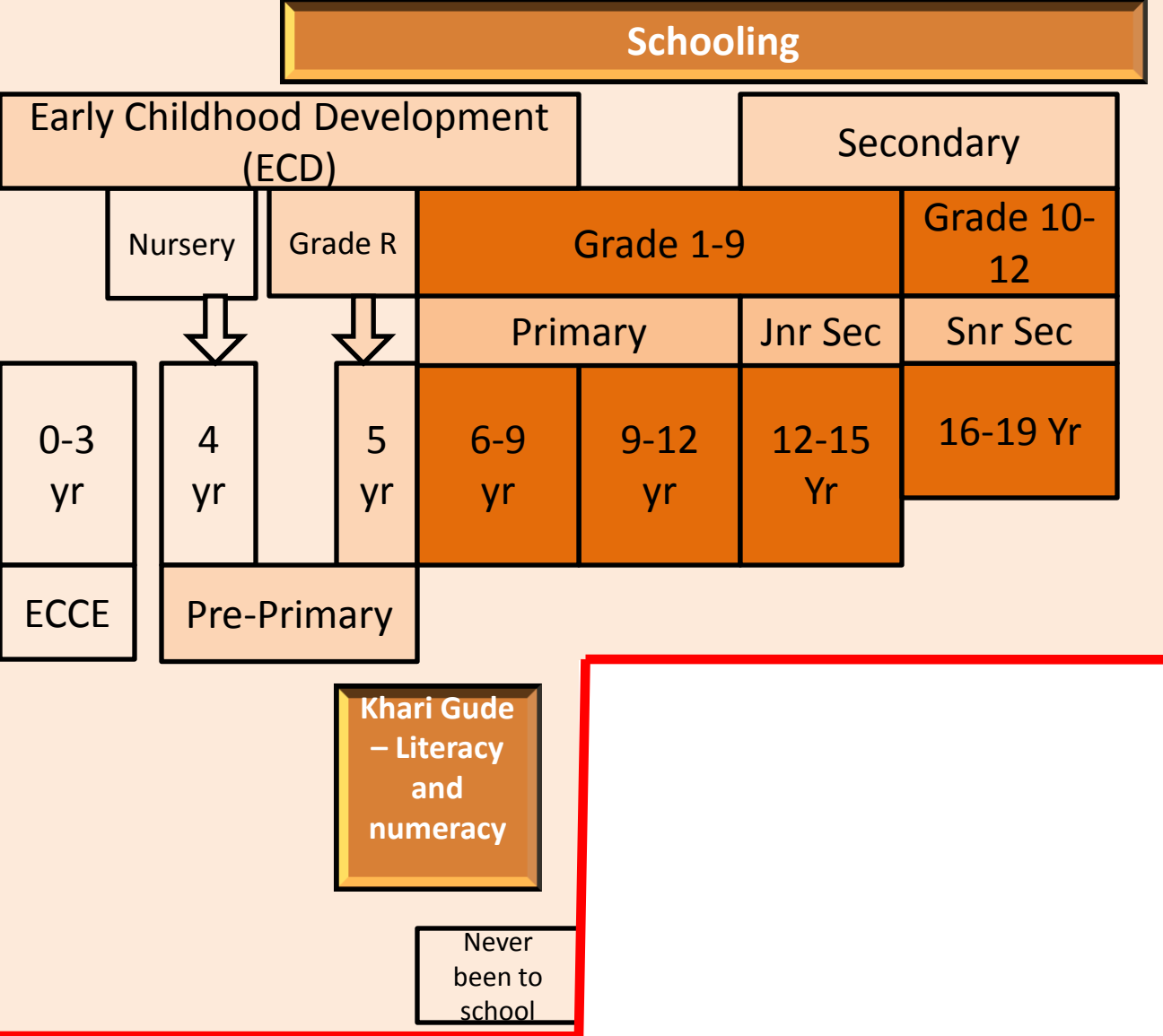
Department:  
Higher Education  
REPUBLIC OF SOUTH AFRICA

# **EDUCATION INFORMATION SYSTEM**

## **African Brains Innovation Africa Summit Cape Town**

**7<sup>TH</sup> October 2012**

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About 19 million in 0-19 year age group of which about 10 million are of school going age of which about 9.6 million in school

Compulsory school participation rate is about 98%

Senior Secondary participation rate is about 67% - 80% if with FET College participants

## Post Schooling

About 1 million in  
18-24 year age  
group

In University about  
18% participation  
rate

In 2007 2.8 million  
young South  
Africans were not  
in education,  
training or  
employment and  
growing by 500  
000 per annum

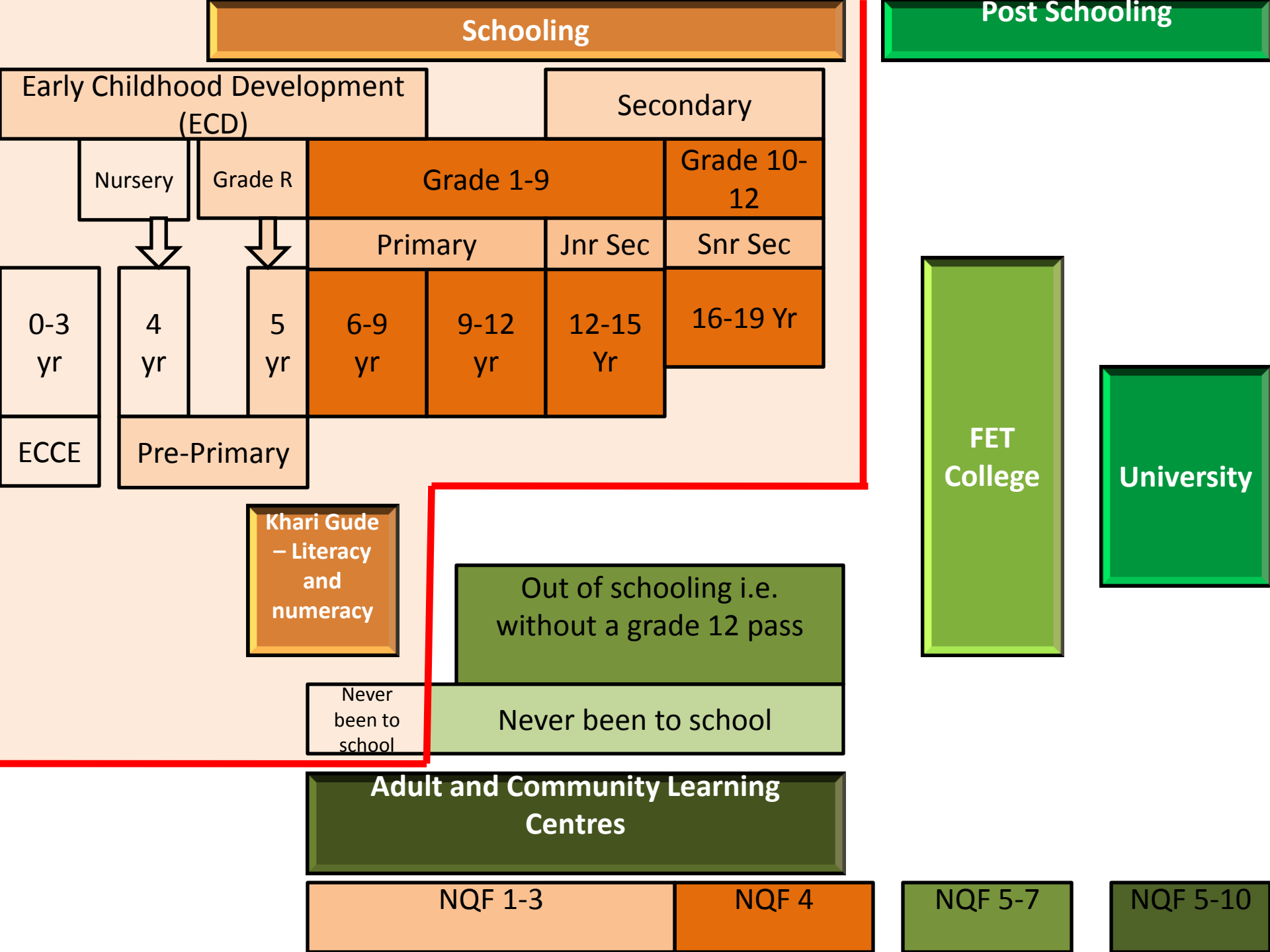
Out of schooling i.e.  
without a grade 12 pass

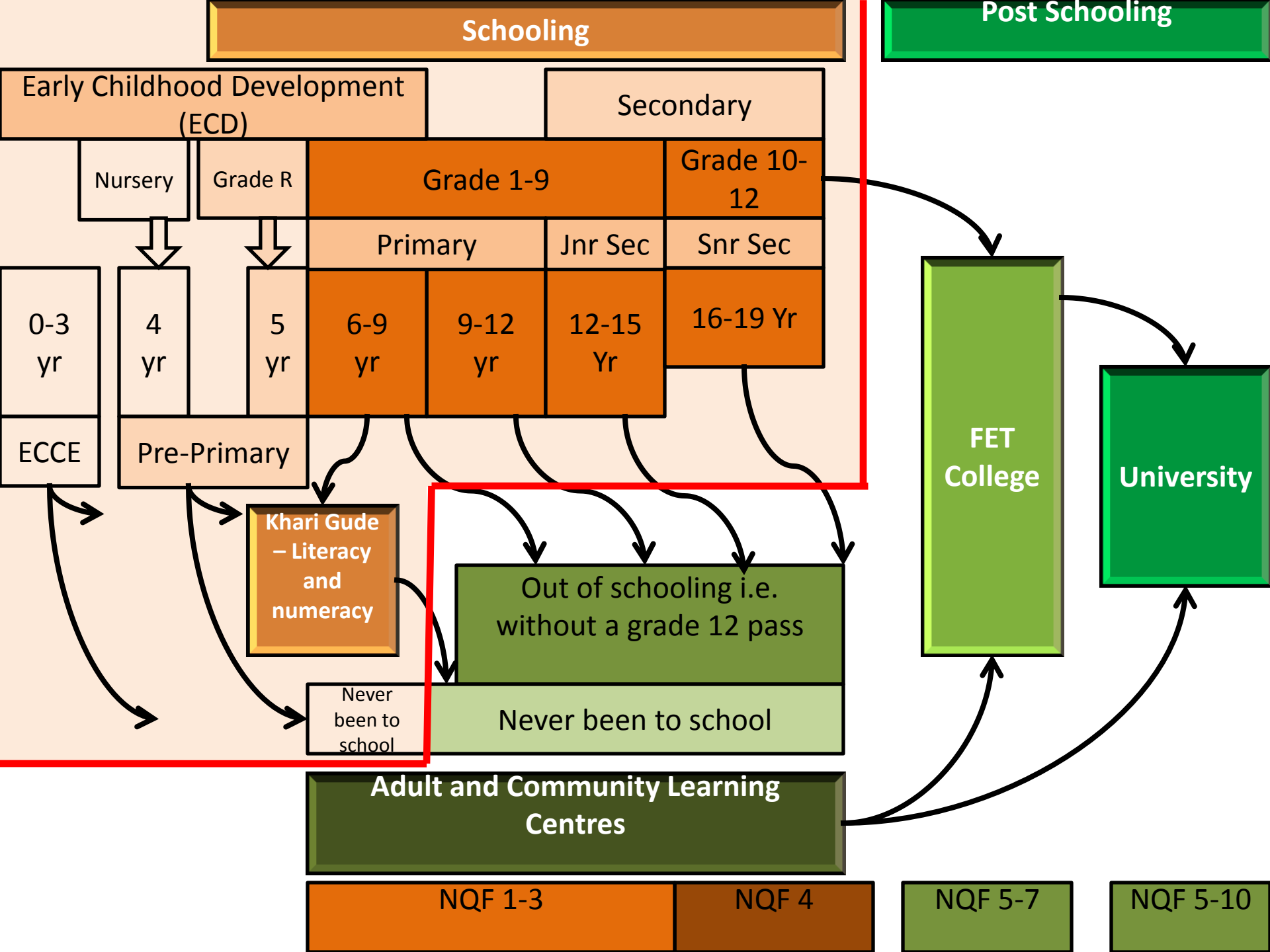
Never been to school

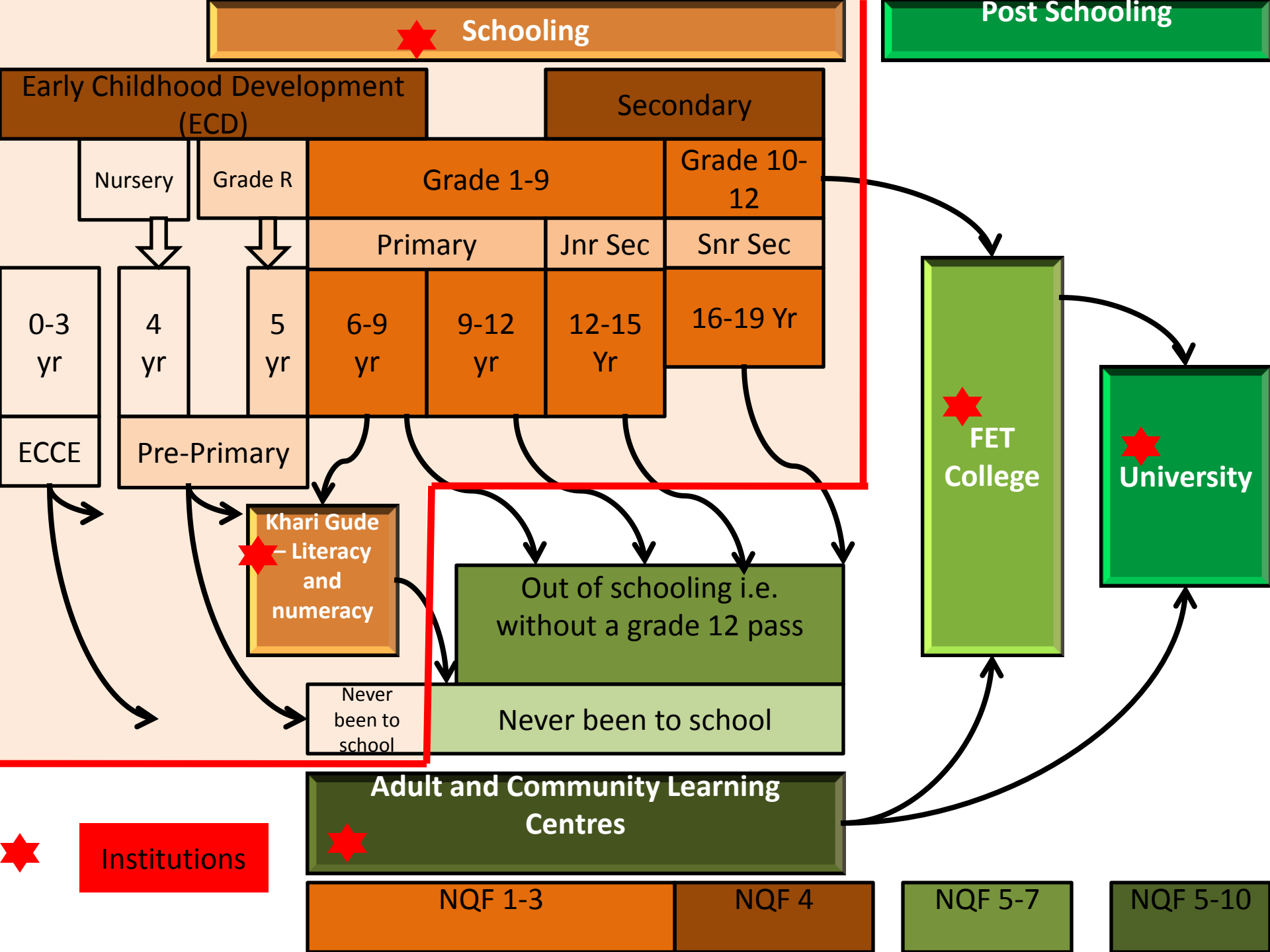
**Adult and Community Learning  
Centres**

**FET  
College**

**University**







# Noting

- History of lack of equity, access and quality for Blacks.
- Post 1994 significant increased access in Schooling and University levels.
- However in the aggregate quality did not improve.
- Provisioning of Education and Training between the School and University levels did not grow sufficiently.

# 2007 CS: Not Employed, Not in Education Not severely disabled 18 – 24 age cohort

	18	19	20	21	22	23	24	Total
Unspecified	2,595	2,457	3,786	4,762	4,998	4,054	4,699	27,351
Primary or less	61,056	64,285	70,496	78,564	73,575	75,261	77,425	500,662
Secondary education less than Grade 10	51,192	59,643	73,194	79,050	83,367	81,502	80,649	508,597
Grade 10/Std 8 or higher but less than Grade 12	65,228	94,608	132,158	164,596	176,733	174,325	183,146	990,794
Grade 12/ NTCIII (no exemption)	47,447	65,190	89,292	99,797	100,711	96,139	100,080	598,657
Grade 12/Std 10 (with E)	10,226	13,526	14,778	14,259	16,910	13,869	14,766	98,335
Certificate with Gr 12	2,732	4,025	6,299	8,157	9,672	8,340	7,811	47,035
Diploma with Gr 12	388	1,151	2,464	3,461	6,103	5,733	5,995	25,294
Bachelors degree	188	322	430	1,774	1,460	2,831	2,347	9,352
BTech	6	126	192	312	78	654	414	1,780
Post grad diploma			244	405	400	581	867	2,498
Honours degree			60	220	383	694	337	1,695
Masters/PHD			48	77	110	135	50	420
Total	241,056	305,333	393,441	455,434	474,501	464,119	478,587	2,812,471



# Post 2007 interventions

- Education and Training one of five major priorities that the 2009 government administration was mandated to effect.
- Education and Training one of 10 objectives that this administration set itself for 2009-2014.
- These in turn led to 12 Outcomes of Government and the President assigned them to respective Ministers, who had to sign a performance agreement with the President, to establish implementation and to report to Cabinet quarterly on progress

# Major education changes

- In 2009 the Ministry and Department of Education split into Ministries and Departments of Basic Education and Higher Education and Training.
- Also in 2009 the training function moved from Minister Department of Labour to the Minister and Department of Higher Education and Training.
- Integration of Higher Education and Training towards a differentiated yet highly articulated quality system.

# Major education changes

- Focus on increasing supply of intermediary and high level skills.
- National Development Plan – proposes increase enrolment in Universities from 900 000 to 1 650 000 by 2030 and College from 700 000 to 2 000 000
- Education Green Paper increase enrolment in Universities to 1 500 000 and College to 4 000 000

# Problem Statement

- Skill deficits and bottlenecks, especially in priority and scarce skills, contribute to the structural constraints to our growth and development path.
- A skilled and capable workforce is critical for decent work; an inclusive economy; labour absorption; rural development; the reduction of inequalities and the need for a more diversified and knowledge intensive economy

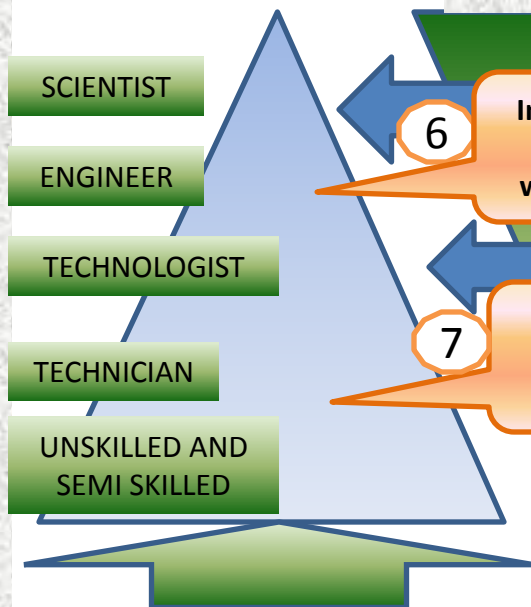
**None of the other outcomes can be achieved without adequate and appropriate skills**

# EMPLOYMENT

WORKPLACE SKILLS  
DEVELOPMENT TRAINING,  
EXPERIENCE

# INSTITUTIONAL EDUCATION AND TRAINING

OCCUPATIONS



SECTORS: LAW, EDUCATION,  
ENGINEERING, AGRICULTURE, FINANCE  
AND BANKING, SECURITY AND SAFETY,  
ETC

SHAPE THE FUTURE FOR SCIENCES AND TECHNOLOGY

RAISE THE LEARNING BASE

QUALITY/LEVEL

POST DOCTORAL

UNIVERSITY

COLLEGE

BASIC

6

Increasing numbers  
and quality of  
workplace learning

7

Promote  
employability and  
sustainable  
livelihoods

4+5

Expand  
Access to  
Youth  
specifically y  
and to all  
generally  
relevance of  
academic  
professional  
technical and  
vocational  
learning –  
(PIVOT)

10

Institutional and System  
shape and capacity

9

8

Expand R&D and  
Innovation capacity  
for socio-economic  
development

Raise the learning base: for  
DHET: Second Chance  
opportunities for those who  
do not qualify for other post  
school learning

Institutional/ Project  
Funding

Institutional support: ops sys, hrd,  
prog dev, student/learners support

International cooperation  
and migration

Partnerships

System planning and  
resourcing

Quality Assurance (SAQA,  
QCs)

Governance and  
Management

Policy Advisory bodies

Information

Research & M&E

3

Improved institutional efficiencies,  
capability and strengthened  
alignment in information, finance,  
governance and management in the  
post school system

1

Understand Skills needs (2)  
manage, plan and provide for  
learning

2

Communicate Skills needs through reliable  
information system to inform, steer and guide  
learning choices and (2) manage, plan and  
provide for learning



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# **OUTCOME 5: ASSIGNED TO THE MINISTER OF HIGHER EDUCATION AND TRAINING**

## **A SKILLED AND CAPABLE WORKFORCE TO SUPPORT AN INCLUSIVE GROWTH PATH**

## Details of outcome 5

Output 5.1 of the delivery agreement for Outcome 5 requires the development of **a credible mechanism for skills planning** that requires 3 strategic systems:

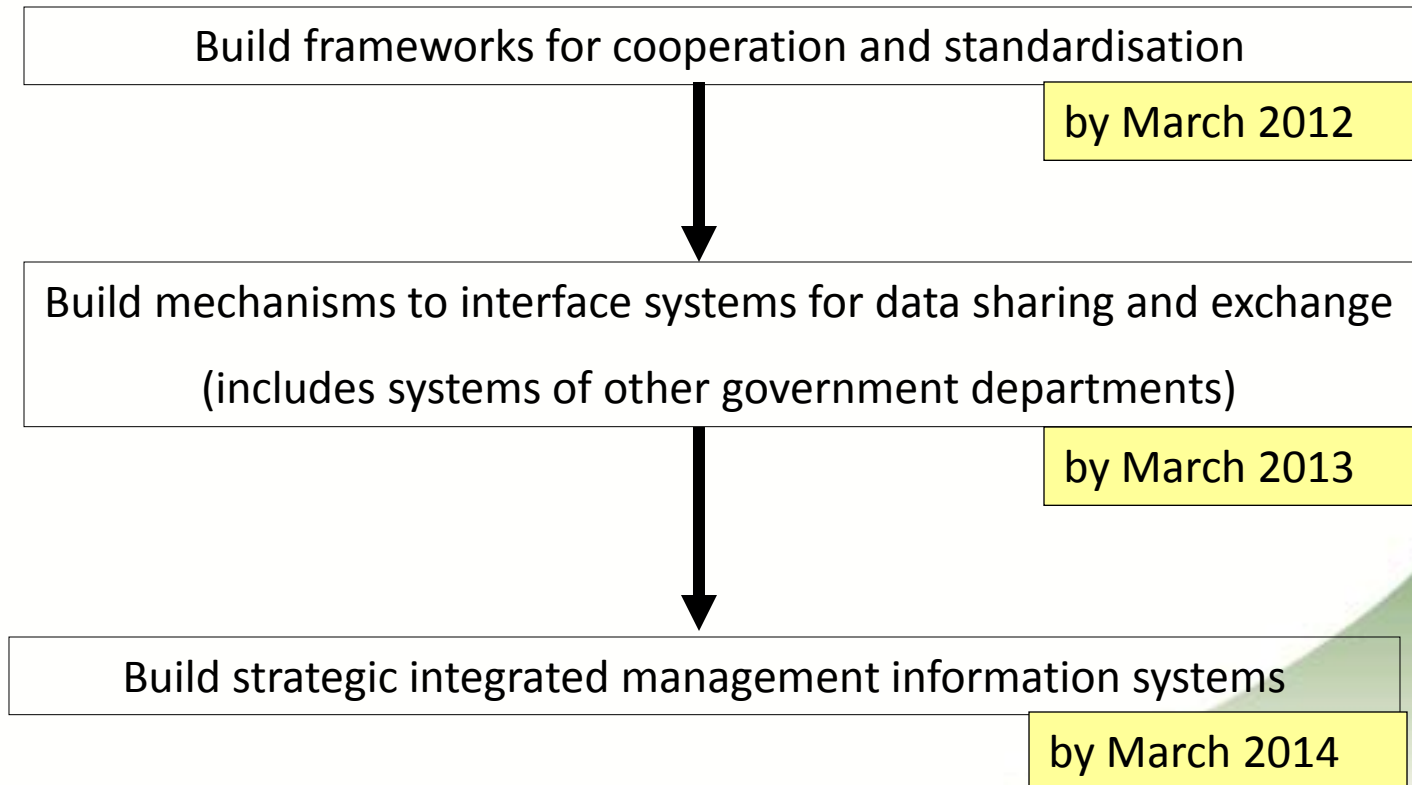
- a) The Higher Education and Training Management Information System
- b) A Labour Market Information System
- c) A Career Advice Information System

**These are provided via the interfacing of the 3 strategic systems.**

While each system has its own core functionality and purpose, the 3 systems will interface to provide the total solution envisaged as the mechanism for skills planning for the country.

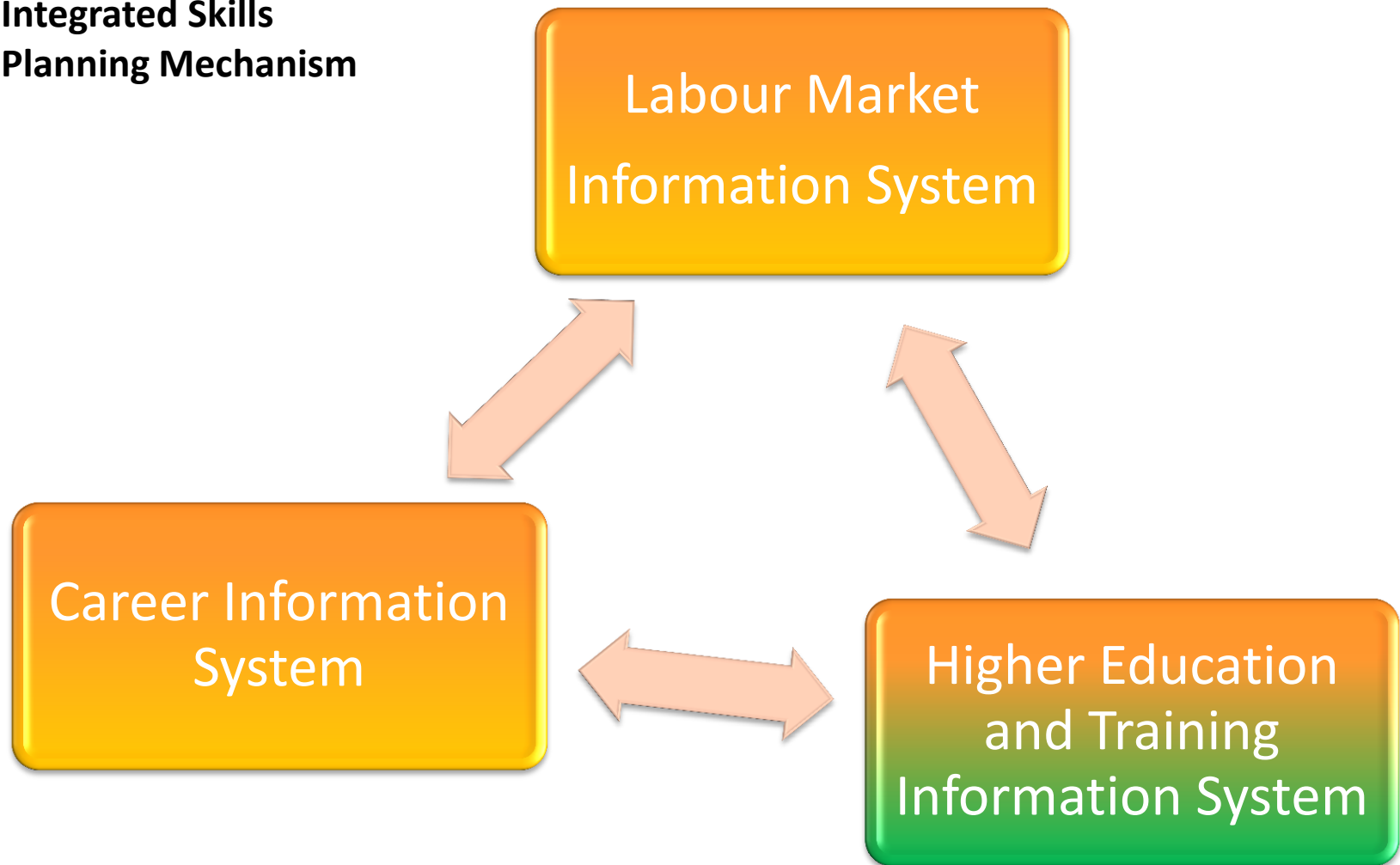
# Time frames

**Although the system will be “put together” incrementally the PME timeframes are as follows:**





**Integrated Skills  
Planning Mechanism**



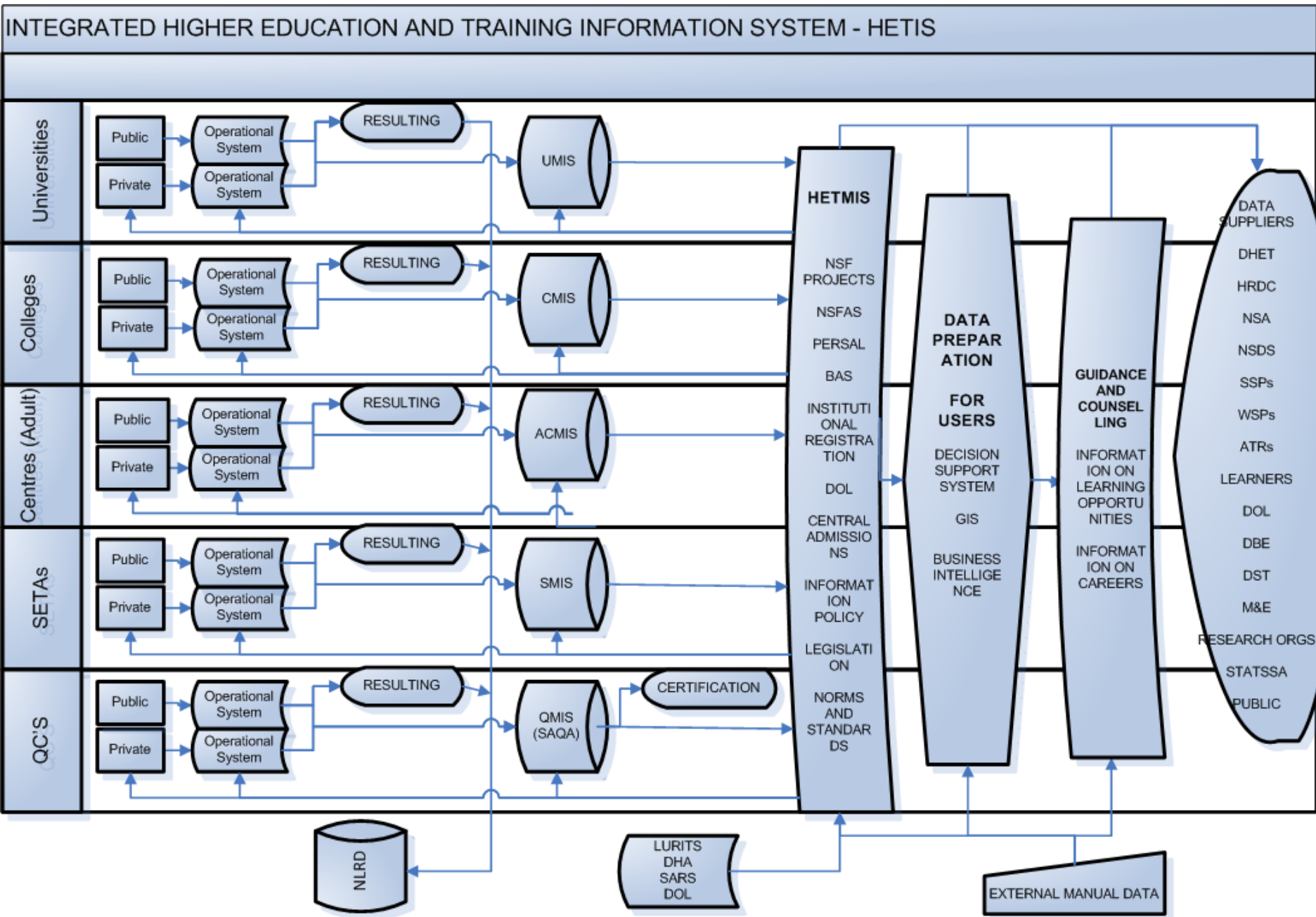
# HETMIS implementation plan

The HETMIS project has to contend with the fact that within the DHET supply side datasets, there are varying and unequal levels of data collection sophistication and methodologies and there is a lack of standards for interfacing or integrating data from the feeder systems to produce a consolidated view of the data via a single point of access.

In order to describe the DHET information landscape, the current datasets of the DHET can loosely be classified into:

- Higher Education data (Public and Private)
- Vocational Education and Training data (FET and AET, both Public and Private)
- Skills development data (enrolments in learnerships, apprenticeships, skills programmes, national skills fund projects)
- Quality Councils and Examinations qualification data housed within the NLRD and in the national examinations database.

These datasets vary in terms of data quality, data completeness, storage technologies, reporting capabilities, granularity and sophistication of the collection channel



# Main components and levels of the Education Management Information System

The high level system diagram on the next slide depicts the main system components that will be interfaced to form the integrated HETMIS. The MIS requires functional systems at each level of the MIS eco-system.

## **ENVIRONMENT SUBSYSTEMS**

Systems that run at the institutions or SETAs etc

## **INTEGRAL INTERNAL OPERATIONAL SUBSYSTEMS**

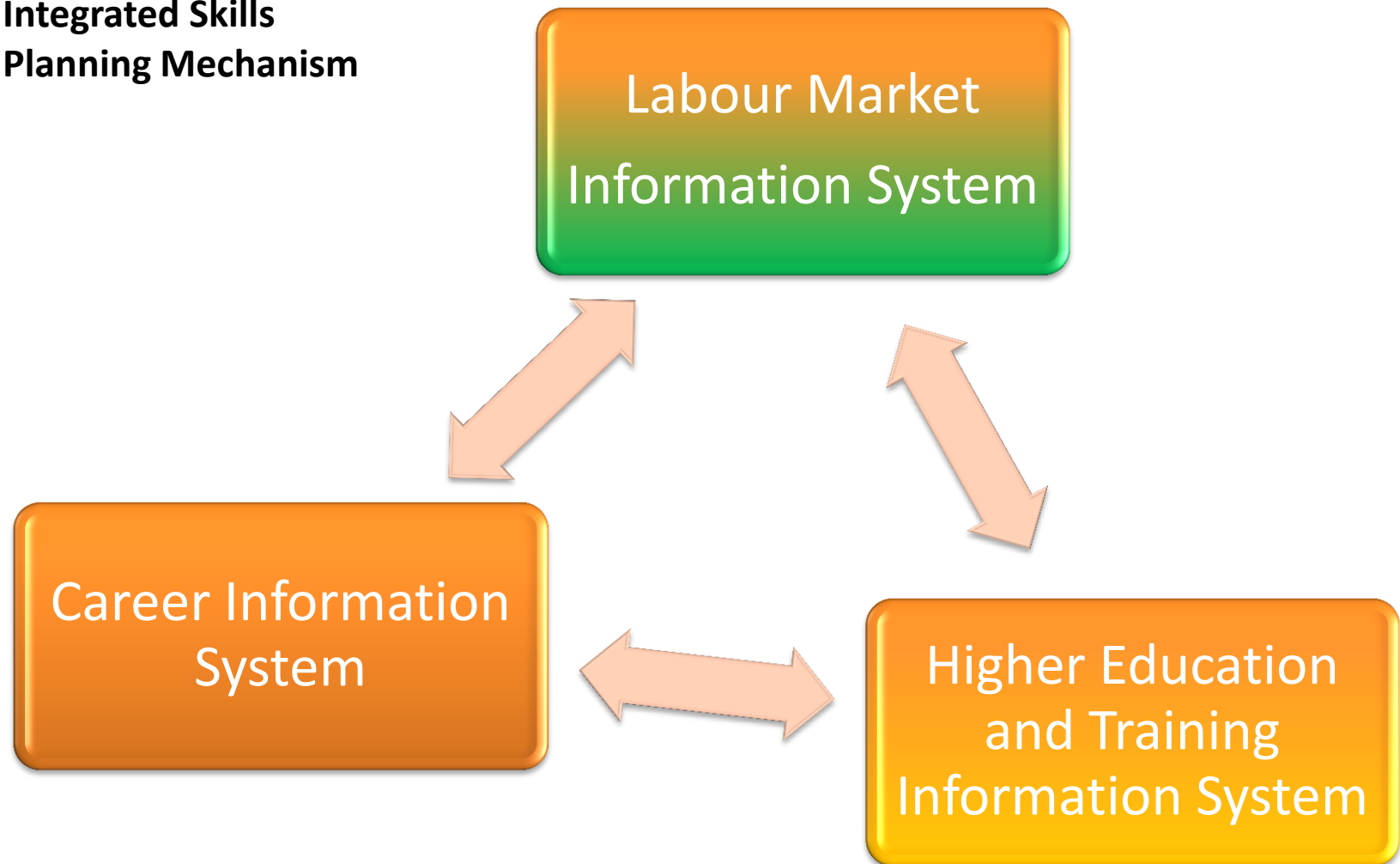
Systems that are used for operational purposes by DHET Directorates such skills development levy system

## **STRATEGIC REPORTING AREAS/SYSTEMS**

Systems that report on a whole sector such as HEMIS

**EXECUTIVE** reporting  
Integrated HETMIS

**Integrated Skills  
Planning Mechanism**



# Labour Market Information System

**The HSRC has been engaged to lead the research for the LMI system. The research will be conducted under the following themes:**

Theme 1: Labour market analysis framework, data and information systems

Theme 2: Skills forecasting: the supply and demand model

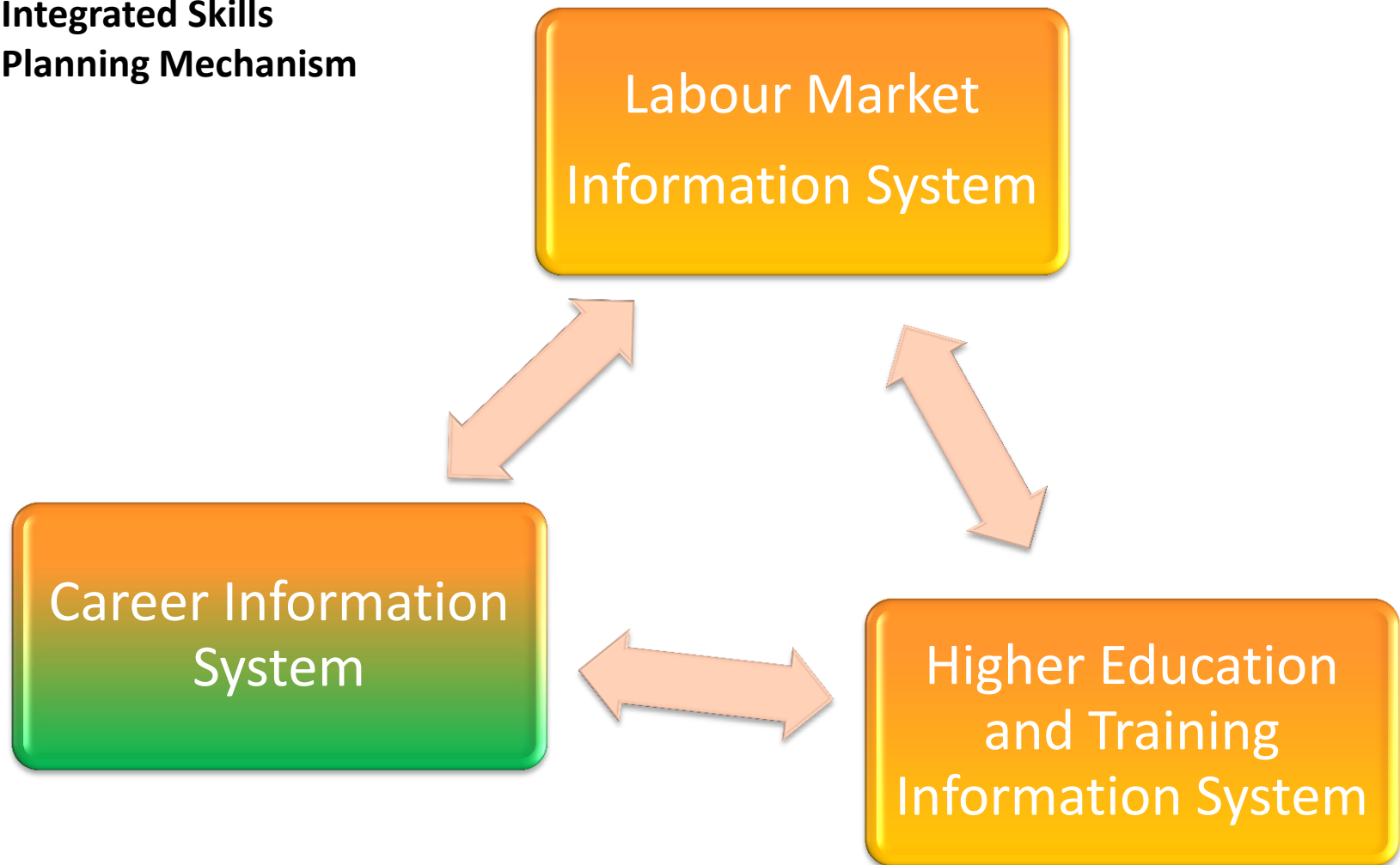
Theme 3: Sectoral analysis

Theme 4: Reconfiguring the post school sector

Theme 5: Pathways thro' education and training and into the workplace

Theme 6: Understanding changing artisanal milieus and identities

**Integrated Skills  
Planning Mechanism**



**National Career  
Advice Services – A  
flagship project of  
the Ministry of  
Higher Education  
and Training**

Research  
projects to  
align  
services

Career  
advice  
framework

Policy

Legislation

Source and  
develop  
intermediaries

Festivals  
and  
Exhibitions

Radio Campaign

Print Media

Walk-in  
Centres

Telephone  
Helpline

Knowledge  
Base

Case  
Database

Telephone  
and office  
technology

IT  
Systems

Website  
Mobisite

Social  
networking

Learning  
Pathways

Learning  
Directory

ePortfolios



# OPEN LEARNING AND EDUCATION RESOURCES

## DRAFT CONCEPT

- Open learning and open education resources to increase access and life long learning.
- Access to materials will be free.
- Use the power of ICTs for e-learning.
- Computer managed learning and computer assisted instruction.
- Offering learner support services.
- Offering an assessment and evaluation system for recognition of learning.
- Providing qualification and non qualification programmes
- Investment in infrastructure at institutional and central level
- Best practices in the creation and provision of open materials
- Calls for huge investment in materials development and infrastructure

## References

- Human Resource Development Strategy of South Africa 2009
- <http://www.info.gov.za/view/DownloadFileAction?id=117580>
- Strategic plan 2009-2014 Department of Higher Education and Training
- <http://www.info.gov.za/view/DownloadFileAction?id=122494>
- National Skills Development Strategy
- <http://www.info.gov.za/view/DownloadFileAction?id=163950>
- Green Paper on Post School Education and Training – Department of Higher Education Training
- <http://www.info.gov.za/view/DownloadFileAction?id=157779>

# References

- Performance Monitoring and Evaluation delivery agreement for Outcome 5
- <http://www.poa.gov.za/Documents/Outcome%20Delivery%20Agreements/Outcome%205%20Skills.pdf>
- National Development Plan
- <http://www.npconline.co.za/MediaLib/Downloads/Downloads/Executive%20Summary-NDP%202030%20-%20Our%20future%20-%20make%20it%20work.pdf>
- National Skills Accord
- <http://www.dhet.gov.za/LinkClick.aspx?fileticket=%2b6uwXt0SDek%3d&tabid=93&mid=501>



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**THANK YOU**